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L. KÓNYA

FURTHER IMPROVEMENT OF THE SYSTEM OF ENTERPRISE INCOME AND WAGE REGULATION*

The author discusses the experiences gained since the introduction of the new system of economic management in 1968, with particular respect to trends in labour management and productivity. In this context he analyzes the system of enterprise income and wage regulation.

The system of income and wage regulation introduced on January 1st 1971 continues to be built on profit interest, however, in order to increase incentives, the progression of the tax on the sharing fund which serves to increase personal incomes, has been reduced. A new element is that the possibility for increasing the wage level is also made dependent on the trend in the per employee enterprise wages + profits indicator.

The development of enterprise income and wage regulation has been one of the key problems of the work going on for over a year now to improve the system of economic regulators. This is partly explained by the central role of income regulation within the regulation system, and partly by the problems emerging from experience as well as by the complexity of the issue.

In evaluating the experience of the Hungarian reform in the system of economic management, it can be concluded that the fundamental principles of the reform are correct, that the new management methods have stood the test, and this is primarily reflected in economic achievements. Thus, there is no need for any fundamental changes, and only certain regulators, including foremostly income and wage regulation, must be modified in order to aid the full assertion of the reform, to enforce the fundamental principles of the reform more consistently.

The entire regulating system, including income and wage regulation** by necessity, carry the marks of transition. In the interests of smooth transition — that is, in order to maintain stability of the price and the employment levels — comparatively massive state supports and broad-scale exemptions

* Since the writing of the article, at the end of 1970, the reforms advocated in it have been carried through. The present and future tenses have been yet retained. — For the previous reform measures in this field see Bibliography. *Ed. Note.*

** By income regulation the system is meant whereby the state regulates (influences) the formation of incomes and their distribution between the state, on the one hand, and the enterprise funds, on the other, as well as the rules relating to the utilization of incomes.

from payments due to the national budget have been used to bridge over the profitability problems of enterprises, to a greater extent even than justified. In order to prevent a large-scale differentiation between enterprise and personal incomes, factors working towards equalization were given substantial role in income regulation, e.g. the very steep progressive tax. All these features aided in bridging over the uncertainty of the transition, and in improving the equilibrium position of the national economy. However, following the transition, in addition to national economic equilibrium, and its further strengthening, by necessity, the qualitative aspects of economy, technological development and improvement of efficiency and structure, must come to the forefront. In fact, it can be said of the period of the 4th Five-Year Plan, that equilibrium and improving efficiency have become factors which strictly assume the existence of and reciprocally aid each other. The major reserves for economic growth are to be found in the improvement of efficiency, and in the intensive methods of development, which, however, can only be realized if accompanied by suitable equilibrium.

A part of the contradictions appearing in the economy stems from the fact that long-range financial interest on the part of enterprise collectives and enterprise management has not yet materialized and, for this reason, personal and enterprise short-term interests frequently conflict with the long-term interests of society. The applied system of profit interest reinforced the short-term interests. The enterprises do not take sufficient risk in the interests of technological development, and they have not yet been forced by competition to take them, since, for the time being, competition exists only in a narrow scope, and is developing rather slowly. The system of financial incentives for management is unsatisfactory. In addition to the profits of the current year, many other factors affecting the future of enterprise economy should be taken into consideration.

Since the present price and subsidy system, in many fields, unjustifiably recognizes also uneconomic activities, profits do not sufficiently reflect efficiency. The entire management and control system, including government preferences, must work towards strengthening medium and long-term interest. The necessity for this exists particularly regarding accumulation and technological development.

This means that income and wage regulations must be improved for essentially three reasons;

— to reduce the number of elements functioning temporarily for the period of transition,

— to make use of the positive and negative experience gained to date, while

— to take into consideration the requirements raised by the 4th five-year plan particularly from the quality aspect.

Along with the improvement of the indirect means of management, I would like to emphasize the great role and importance of the direct means of management, too. Certain ministries remained comparatively passive observers of economic processes in the first years of the reform, and have only become active in recent times. The correct methods of management under the new circumstances must be searched for, too. This situation is related to the incorrect concept that the system of regulators and the automatism of the market can wholly replace the work of the guiding bodies. The controlling agencies have the right to intervene, if necessary, in enterprise activities with direct orders. The past two years have proven that, along with the automatism of the regulators, the conscious, direct guiding activities of the state bodies are absolutely necessary. In the first years, problems were caused by the very fact that certain enterprise managers and ministerial officials made too much of a fetish of automatic regulators, and did not act according to their own common sense even when it was clear as day that national economic interests were being infringed on.

Productivity, manpower management

It is well known that there are serious methodological difficulties in the planning and measurement of productivity, particularly regarding the indicator of gross output per worker. Without going into a detailed study of the problem, we can establish that this indicator cannot be used for measuring changes in productivity, either on national economic or on enterprise level, without careful, detailed analysis, and without being complemented with others. A change in the volume of material per unit of output, whether it takes place through savings in material, or changes in the product pattern, or the degree of cooperation, has a serious effect on this indicator. In the final analysis, the interest of society is not to increase gross output per person employed but to increase the per capita national income in a composition corresponding to demands. This latter indicator provides a comparatively good reflection of the dynamic trends in the productivity of live labour, primarily on national economic level, but with suitable analysis, on enterprise level too. On enterprise level price changes and changes in the composition of production may appear with substantially greater weight than on the national economic level where there is greater probability for the different effects to become levelled out entirely or partially. It is also suited for analyzing the effects of structural shifts among the individual branches, but it is not suited for comparing directly the productivity levels from the indices of the individual branches, sub-branches, and enterprises. In order to do this, deep-reaching analysis is needed, for it requires to study the effects of deviating prices, state subsidies and of the varying organic composition of capital invested which is a highly complex problem. I

would like to underline that the study of the productivity of live labour is most essential, but even an approximatively complex picture of productivity can only be obtained if we also take the reasons behind growth into consideration, and complete special studies, with special emphasis on the role of capital input, and its efficiency. This is the reason why, alongside national income per person employed, the value of fixed assets per person employed and the capital intensity of generating national income should also be studied.

Major indicators of productivity, percentages

	Average of 1966—70	1968	1969	1970	Average of 4th Five-Year Plan
Total of national economy: national income generated in the productive sectors per person employed (MPS)	5.4	3.8	5.4	3.2	5.4
Socialist industry: national income per person employed	5.1	2.3	1.6	8.0	5.2
Gross output per person employed	3.7	1.0	0.0	7.0	4.1
Gross output per man-hour	6.0	5.0	6.0	7.0	5.0

In the past two years the total national income per person employed has increased at a comparatively acceptable rate, but in industry growth has slowed down. This was one of the great problems of development in 1968–1969. Data of 1970 are encouraging however, for the growth rate of industrial production accelerated in comparison with the two preceding years, while the rate of increase in employment slowed down. For the whole of 1970 the figures show a roughly 8 per cent rise in the national income with a mininum increase in employment.

Many reasons, both positive and negative factors contributed to the trends of productivity in industry and, in the final analysis, the results of the first two years are negative. The regulators as a whole, particularly those affecting income and wages played a great role in this.

The upswing of rural industrial location is a positive phenomenon, for it coincides with the country's economic policy goals, despite the fact that rurally located industry has — at least transitorily — an unfavourable effect on the total productivity level. This is caused by the lower levels in the vocational training of the local labour force, and their lack of practice.

A general experience is that the degree to which staffs are increased is not only (and frequently, not even primarily) determined by the needs of produc-

tion, for social and demographic factors also play important roles. After limits on employment were removed, and particularly since the regulators also aided them (this will be discussed later), the enterprises made endeavours to meet their earlier unsatisfied demands for increasing employment.

A factor influencing the trend in the gross output per person employed was that while the pattern of production better adjusted to demand, it shifted towards greater labour intensity, which slowed down the growth of the gross output. This is indicated by the drop in the relative material consumption.

The reduction in weekly working hours also played a large role in productivity trends. In certain enterprises the reduction in working hours caused a drop or stagnation in per capita productivity. Production per man-hour increased substantially. (See Table on p 6.)

The analysis showed that the methods applied in wage regulation reflected the endeavours of the state for full employment in a slightly distorted form. The situation can be partly explained by the fact that prior to the introduction of the new mechanism, we were unable to calculate with reliable accuracy, using the mathematical methods available, the very complex and manifold — often contradictory — factors influencing enterprise behaviour, their intensity, and the practical parameters for weighting these factors. The trends emerging or to be realized (e.g. full employment) could be determined by our logical methods comparatively well, and we were not disappointed by them either. But the size within the trends (e.g. the size of staff increases) could, in general, only be estimated within rather crude, broad limits. Effectivity studies of the mechanism have made progress since then, but they are still taking their first steps only and, among other things, this is the reason for the comparatively frequent changes of regulators, which have harmful effects from the viewpoint of the stability of enterprise economy.

It can be concluded that, in the final analysis, the given labour force situation, and the unfavourable trends accompanying it, were not caused by the behaviour of the workers, but primarily by deficiencies in the regulatory system. This concretely shows that in the regulatory system development was based mainly on an extensive increase in employment, and less on increasing productivity. The system of income and wage regulation did not make it possible for enterprise decisions to evaluate the increase in factors of production — labour and assets — according to uniform principles.

The method of average wage regulation fulfilled on the whole its fundamental function of controlling the creation of purchasing power and of preventing the emergence of disproportions in wages between enterprises, although its negative role in the labour economy had a negative effect on the volume of purchasing power and on relative wages as well. The average wage regulation applied made greater than justified distinction within live labour

inputs: to increase staffs was too cheap and to increase average wages too expensive for enterprises.

The average wage regulation provided enterprises with a certain possibility of manipulation since, by employing workers with lower than average wages, the average wages of the enterprises could be reduced; through this, without debiting the sharing fund — that is without payment of the progressive profit tax — they gained opportunities for increasing wages quite cheaply. This is why enterprises were induced to employ workers with lower than average wages, even when they could not be efficiently employed. It was for the most part under the effect of this phenomenon that an almost general shortage of labour, unjustified by the country's economic growth, came about. Taking the country's productivity level into consideration, this shortage can be considered as fictitious and, according to certain calculations, at the given technological level the magnitude of "overstaffing" in industry is at present such that about one hundred thousand persons are unnecessarily employed by the enterprises. At the same time, other branches — e.g. certain services — are struggling with a real shortage of labour.

Cheap employment has relatively sharply raised the cost of technology, particularly mechanization to substitute live labour which is expensive enough as it is. In this way the wage regulation restricted intensive investments and provided incentives for extensive investment.

The labour situation developed in the enterprises frequently led to a practice of wage payment in contradiction to the socialist principle of distribution according to work. For the most part, enterprises did not use their opportunities to raise wages as incentives to better work, to improve wage ratios, but subordinated them to the requirements of the "labour market", devoting part of their attention to luring away workers from other enterprises.

These deficiencies in income and wage regulation led to irrational economy with live labour, to waste in staff and had a detrimental effect on individual and social morale as well. Its effects were felt in the slackening of labour discipline, in a spontaneous labour migration assuming harmful dimensions, in winning over labour from one job to the other, and in a growing money-grubbing. All these factors have caused society both moral and serious financial damage.

The favourable change in industrial productivity which took place in 1970 is a noteworthy phenomenon. Growing demand in the spheres of final use by the national economy (consumption by the population, investments, exports), caused an upswing in industrial production. This increase in production was achieved with a smaller staff increase than planned, mainly with the existing staffs in the enterprises, which had been exaggeratedly increased in previous years. This favourable change was the combined result of political, social and economic factors. Of these factors, a role was obviously played by

the fact that, based on the first two years of experience, on January 1, 1970 the wage regulation was modified while its fundamental principles were left unchanged. Enterprise costs of increasing staffs were raised, those of average wages were somewhat diminished so that the two approached one another.

However, the required harmony has not yet developed between the rise in productivity and that in average wages. As a matter of fact, in 1970, average wages increased quicker than productivity. The primary reason for this is that to increase overtime has become necessary and this involves a rise in ihe wage level. Therefore, it is important that a suitable ratio shall be estab-ltshed here as quickly as possible.

Some problems of development

One of the most critical points of the country's economic development is tlie tension between supply and demand in the construction field. In the years prior to the introduction of the new management system, more investments were started than could be completed at a suitable rate, and thus completion of the investments has become protracted. Measures have been taken to expand bulding materials industry, to increase building capacity, and to reduce purchasing power for investment goods. As a result, the tension has decreased, although it is still quite marked.

Demand and at the same time, tension, is great also because the costs of investments financed by the central budget, already in the process of execution, have grown. We were also less able to reduce the volume and ratio of investments completed at the expense of the central budget than had been planned when establishing the size of enterprise development funds at the time the mechanism was introduced. As a result of higher profits than planned, development funds of the enterprises also increased above the planned level.

The detrimental effects of the investment tension not only appear in that we are not able to meet demands (including construction demands on part of the population), but also in that the stock of incomplete investments is quite large, the gestation period very long, the costs of construction are high. Construction prices — despite administrative pricing of a larger proportion of building materials — have risen substantially. This is why the interests of the national economy call for establishing equilibrium in this field as quickly as possible. However, since this is a very serious structural tension which can only be overcome with difficulty — it is as it were, almost the most important point of tension in the 4th Five-Year Plan — equilibrium can only be established through increasing supply and restricting demand. If we consistently enforce the plan, a balanced situation can be achieved in the second half of the 4th Five-Year Plan.

An important goal of the reform is technological progress, through accelerating technological development, increasing efficiency and developing of a suitable production pattern. We find ourselves facing a dual problem in this field. On the one hand, disequilibrium in the investment process puts a brake on technological development, as do in many cases low efficiency and the high costs of construction. On the other hand, in general, the regulators did not exert sufficient "pressure" on the enterprises for the acceleration of technological development, and modernization of the production pattern, nor are incentives for increasing efficiency and technological development satisfactory. In certain enterprises, where a rapid growth rate is justified by social necessity, the development fund is too low in many cases, and the flow of social capital is quite negligible.

The fundamental reason for the deviation between development resources and development needs among branches of industry and enterprises is that the present profit rates and future development requirements do not necessarily coincide. The enterprises and their controlling bodies wanted to counterbalance or lessen this true contradiction by increasingly trying to assert the principle of self-financing in their price and subsidy policies. The principle of self-financing—that is, that the enterprises cover their accumulation from their own resources—is, in many respects, correct and should be taken into consideration in development allocations also in the future. Its over-accentuation, that is, a completion through self-financing at all costs, of development deemed necessary by the plan leads on the one hand to an unjustified rise in the price level and, on the other, it denies the role of the state budget in development.

On the long range, this is a problem of great importance, for if it is not solved, it will lead to disproportions. In working out the 4th Five Year Plan, the problem was felt, and generally it has been bridged over in the national economic plan with state subsidies.

In order to ensure a smooth transition, not only were increases in personal incomes made possible, but the formation of individual enterprise development funds stemming from the profits or from "formed" profits* was made possible for each enterprise. This method cannot be maintained in the future, for it would lead to the dissipation of development resources. For this reason, in the future, development funds in general will not be permitted to be formed from government subsidies which have the character of reinbursement for losses.

Weighing of investments realized within the scope of enterprise decisions, for the most part takes place on enterprise level, and from enterprise points of view, which by necessity deviate from that of the national economy. The

* (inclusive subsidies — *Ed. Note.*)

system of forming the development fund, and the comparatively short terms for repayment of credit do not make it possible, in general, to repay the credit from the profits of the new investment. Enterprises use up the entire, or a substantial portion of the development fund during the period of repayment. This means that the fate of a new investment is not determined primarily by its own efficiency, but by the initially existing investment fund of the investor, that is, by his ability to pay off the loan. Taking the share of amortization remaining in the enterprise also into consideration, this is primarily determined by the size of the existing assets of the enterprise. Therefore, this system of development tends rather to conserve existing ratios, and the organic composition of capital already developed. This is why it is of great importance that, on the one hand, the credit zone and government intervention means (subsidies) will grow during the period of the 4th Five Year Plan, together with the growing role of repayment from the investment itself when considering the granting of loans and, on the other hand, that the flow of social capital shall play a greater role than the present one, primarily through banking methods, and also through direct associations among enterprises.

Charge on assets engaged — wage tax

The ratio between the charges on live and embodied labour in current costs and in the use of additional (new) resources is also connected to prices and income regulation. (By charges on live labour we mean wages and the taxes and social insurance contributions which must be paid as a percentage of wages*, by those on embodied labour we mean the amortization, the charge for assets engaged as well as interest on credit if procurement took place through credit.) The analyses clearly showed that the burden on embodied labour is comparatively higher while that on live labour is comparatively lower. Enterprise costs of live labour do not cover social inputs, while in contrast, the charges on capital contain substantial net income. At present the majority of staff increases are tax-free while, at the same time, the development fund, which is the source of complementary capital investment, is charged with a substantial tax.

In debates on the further improvement of the regulators, the question of increasing wage taxes, and reducing the tax on capital engaged was raised. In our opinion, an increase in the wage tax, with a simultaneous reduction in the tax on capital engaged would provide an incentive for more intensive development, but modification of the 1970 wage regulators would have a similar or even stronger effect in aiding the labour economy and intensive development.

* (but non-deductible from wages paid. — *Ed. Note).*

Modification of the tax rates can be carried out in a way that the changes balance one another on the national economic level, but the situation is different by branches (depending on the ratio of capital to wages). (Proposals were made to determine a 3—3.5 per cent charge on the gross value of fixed assets, or 5 per cent on the net value, together with a rise from the present 25 per cent wage tax to 40 per cent.) As a result of the modification, producers' prices in the manufacturing industry would rise, while those in other branches of industry, even taking the market situation into consideration, would presumably not decrease to the desired extent, which invokes the danger of a general rise in the price level.

The solution, however, which would call for decreasing the charge on assets without changing the wage tax, raises the question that if the price level cannot be decreased with this measure to a suitable degree in a consistent manner (this is a real risk in this case), then the loss of income stemming from the reduction of the tax on capital engaged should be compensated for by a rise in the profit tax. However, a compensation by a rise in the profit tax would have according to our estimation, a far stronger price raising effect than the raising of the wage tax. We must remark, that a simple raising of the wage tax (without reducing the charge on assets) in itself, would not have a lasting result for, after a general rise in the cost level, it would gradually spread, over a period of years, throughout the price system, and would lead to price increases, with the majority of products and eventually, a general rise in the price level.

Taking all these factors into consideration — although in principle an approximation between the costs of live and embodied labour is justified — in order to avoid the price changes and primarily the rise in the general price level which would take place because of the change in these proportions, at present we will not modify the tax rates on wages and capital engaged. But we have set ourselves the goal of attaining during the 4th Five Year Plan better proportions between the costs of production factors accompanied by the smallest possible price fluctuation.

The question of the projection basis for the charge on capital has also been raised. In principle, it would be correct to calculate the tax on fixed assets on the basis of their net value, for the net value expresses the efficiency of the fixed assets, and the true value of capital tied down in production better than the gross value. The present system places an unjustified burden on enterprises operating with old, obsolete fixed assets, for they must face the same demands for efficiency as enterprises operating with new or less outdated fixed assets. There are two practical reasons causing postponement of the change-over. The change-over to net value — in certain opinions — would hinder the scrapping of obsolete fixed assets, which is not desirable, since its present level is too low as it is and, at the same time, it would substantially change cost, profitability, and then price relations, too.

Profit taxation

The system of income regulation is in close connection with the price system and state subsidies. No full-scale administrative price modification has been planned for the period of the 4th Five Year Plan. Instead, a gradual development of the price system has been set as a goal, through which price ratios and realizable profit ratios become better expressions of the efficiency of enterprise work in the national economic sense. This assumes that market value judgement shall have a more consistent effect on prices, than at present, that economic competition shall become stronger, and the influence of international price ratios shall be asserted on a broader scale.

Today the price system and the system of income regulators are linked by a comparatively broad scale of budgetary subsidies and income withdrawals. The goal in narrowing down the present forms of this system is that prices and profits should become more reliable measures of the efficiency of economic activity than they are at present. Reimbursements for losses, which work against structural changes, will be gradually reduced. Enterprises, generally speaking, will not be permitted to form development funds from supports of such character. In the future subsidies will be limited rather to specific economic policy goals (advantageous structural changes, favourable technological development, etc.).

In essence, the new system of income regulators can be viewed as an improved form of the present system. Regarding the type of incentive it will continue as profit interest, but interest in the total sum of profits, and not only in its increment.

No doubt there are certain advantages of interest in increment of profit, since this would provide strong incentives to increase profits, but it also has many negative features. Basic taxes or some similar form would have to be introduced on a broad scale (that is a tax to withdraw the earlier developed basic profits), which would have the effect of conserving distortions in prices which already exist, and would raise the price level. In the case of a fixed basic tax, the system would embody the need for continuous modification, as in a few years the basic tax would again have to be raised owing to increased profits, introducing thereby harmful periodicity into the economy. The rapid rate of increase of the profits remaining after deduction of the fixed basic tax, would necessitate a strongly progressive profit tax and this would dampen the intensity of incentives.

A fixed-sum basic tax, by not burdening the growth in production, would serve as a greater incentive to increase production than the present system, while it would be less of an incentive to reduce production costs. It would not be a correct goal to further diminish interest in reducing production costs, which is weak enough as it is. Regarding its role as an incentive to increase

production, it would rather support an extensive growth of production than an intensive one. For all these reasons basic tax and production tax (which is similar in character) will not be applied in more than a rather narrow scope in the future, too.

In order to create financial equilibrium the ratio of centralized income will be slightly increased compared to what would remain valid in the present system. Raising the centralized proportion will cover subsidies to investment resources in certain branches of industry, where sufficient development resources are not formed.

Development resources and desirable development do not coincide in all branches, and this is the allocation problem behind the investment plans: under the given circumstances this can, in general, only be bridged over by suitable state subsidies.

We would observe that a special contradiction of the income regulation and taxation system is, that it carries in itself the continous and consistent redistribution of the net social income in favour of the enterprise sphere, at the expense of the state budget. This stems from the fact that the enterprises only share in the most dynamically increasing net income element, i.e. profits, while they do not share in the more slowly increasing charge on assets engaged, or in the wage tax.

The planned consumption-accumulation ratio (75—77 : 25—23) can only be ensured, in our opinion, if the so-called "divided" system of enterprise fund formation and profit taxation is maintained in the future. In the "divided" system, profits are divided into the enterprise sharing fund and the development fund prior to taxation, and the two parts are taxed at different rates — the former progressively, and the latter proportionately. While it is true that an "undivided" system would provide the enterprises with greater possibilities for manouvering, in choosing between production factors (labour or capital), and this would in principle lead to smaller social input. In principle, this method would have a more favourable effect than the present one on the price level, for, in given cases, the enterprises could raise the personal incomes of the staff without being "forced" — perhaps unnecessarily — to form development funds, which would unnecessarily raise prices or prevent them from being reduced.

However, conditions for this method have not yet matured. Joint handling of enterprise funds (sharing and development) could only be realized under more perspective-minded interest relations than the present ones, and less oriented toward increasing personal incomes. Today, namely, there is still a great danger that in an "undivided" system a part of the enterprises would neglect development, and raise personal incomes unreasonably. Introduction of this system would require more deep-reaching changes than the present methods. To some extent the present rigid division will be made more flexible in the

future by the possibility of a "virement" from the sharing fund to the development fund at lower tax rates. However, in my opinion, it would be a mistake to place too high hopes on this.

In dividing profits, we are raising the wage-coefficient applied in the formula* (e.g. the double coefficient applied generally, will be raised to triple) and, as a result, the weight of live labour will increase in comparison to that of capital. The distribution of profits between the funds takes place according to the ratio of all assets to wages. Using the coefficient, the wage ratio, and thus the ratio of the sharing fund within profits, is increased. As a result of the increase in the wage coefficient and the modified system of wage regulation, the average tax rate of profits due to the sharing fund will be higher than the present one, 58—60 per cent. Through this the taxes on additional production factors (the taxes on the sharing and development funds, i. e. on the parts of profit allocated to the funds will approach one another.

In order to increase incentives the progression of taxation will be substantially reduced, from the present 0—70 per cent to 40—70 per cent. Taxation will not change in forming the development fund.

The development fund

According to the 4th Five-Year Plan, 480 thousand million forints will be distributed in the socialist sector for investments. For its foundation and to improve equilibrium between investment supply and demand, the plan provides for a financial-technological background of 500 thousand million forints. In comparison to the previous five-year period the increase in investments in the socialist sector comes to about 32—33 per cent, and within this, the investments of the non-productive branches will rise by about 55—60 per cent, and those of the productive branches by 22—24 per cent. Along with a substantial increase in the proportion of non-productive investments, the share of investments to be realized in the enterprise decision sphere will also increase. The ratio of enterprise investments within the total will rise from 50.4 per cent in 1970 to 53.6 per cent by 1975 while, within the sum of investments in socialist industry, it will rise from 50.4 percent to 71.6 per cent.

In the productive sphere, relying on the possibilities given by international cooperation, a selective development policy must be implemented, concentrating the financial and intellectual resources, and not aiming at a linear development policy developing all branches of industry and enterprises equally. — Considering the size of the country this is the only way the international competitiveness of the economy can be increased. Development resources must

* For details see [2]

be ensured for the efficient, progressive branches. Centrally determined development programmes must have priority and their implementation is compulsory for the enterprises as well.

In certain branches the investments which are absolutely necessary from the point of view of proportionate development must be aided with individual measures, and state preferences. Central resources should be used primarily to finance investment goals to ensure development of the infrastructure, and those helping to change the structure of the national economy. From the point of view of proportionate development and the balance of the state budget it is of fundamental importance that the volume of state investments and the burden on the state budget shall not rise above the planned level. An important requirement is that the regulators should aid the formation of enterprise association and the necessary flow of social capital.

The development fund strengthens the perspective approach in enterprise economy, embodying long-term interests. An important condition for the country's economic growth is that the enterprises which can be developed more efficiently, yield greater incomes, and expand their activities more rapidly, should be also provided with greater development possibilities, than those with lower profitability. To this end the linear tax on the part of profits going to the development fund will remain.

To an extent the raising of the wage coefficient will have a reducing effect on the development funds formed automatically from profits, but not on the total of enterprise investments, because incomes centralized in this way will be returned to the enterprises in the form of investment contribution from the state budget (in five years almost 50 thousand million forints, including supports for agriculture).

These state contributions can be supports directly complementing the development funds, and can also be supplied through indirect measures. Direct investment contributions (capital allocations) may be either repayable (when they serve the realization of goals in cases when the shortage of capital is only temporary; in this case the banks determine the period of repayment and the interest) or they may also be non-repayable (in the interest of realizing goals embodied in the national economic plan, which could not be implemented from enterprise resources).

The main forms of indirect support (preferences) are tax preferences, permissions for placing a larger than average proportion of depreciation allowances into the development funds, and that payment of interest on credit is assumed by the central budget. In all forms of granting credit, whenever it is possible, tenders are asked for.

The larger proportion of depreciation allowances (generally 60 per cent) was left with the enterprises until now, too, primarily to finance replacement. The part of amortization remaining with the enterprises was not sufficient in

every case to cover the highly differentiated needs for replacing fixed assets, and in such cases the development fund stemming from profits had to be made use of. In other enterprises, however, the amortization allowance made investments of an expansion nature possible above and beyond replacements. The system of accounting depreciation costs has been now modified in a way that the obligation to build up differentiated reserves depending on the growth rate of fixed assets is maintained in 1971, but between 1972 and 75 the enterprises will be allowed to make use of reserves formed in this manner. In connection with the further improvement of the regulators the need emerged to study and make research into the possibilities and the effects of another system under which accelerated amortization of a preferential nature were introduced for certain branches.

The credit zone increases within total enterprise investments and, together with it, the possibility for the state to influence the realization of fundamental goals of the national economy. In the 4th Five-Year Plan the credit zone will make up 13 per cent of total investments, 18 per cent of industrial investments and 26 per cent of investments in the manufacturing industry. Realization of the goals in the plan will presumably be aided by a greater flow of social capital than the present one, primarily through enterprise initiatives, and their voluntary association.

In order to reduce the permanent tension between supply and demand in the building industry, and to provide incentives for reconstruction of machinery, it would be desirable to change the present ratio between construction and machinery within the present investment cost structure, in favour of the machines at the expense of construction. The question is highly complex and a satisfactory solution has not yet been worked out. Either through tax differentiation or through modification in prices a redistribution of development funds would take place, and this would sensitively affect investments already under way in the enterprises and the new development initiatives. If, however, conditions deviating from the present ones were only applied to newly started investments, then, although the national economic effect of the reorganization would only appear slowly, gradually, the impact on the enterprises would be more bearable. I feel that that the possibilities for solving this problem must be searched for.

In financing inventories the regulators only ensure financing possibilities for increasing inventories at a slower growth rate than that of the national income, to safeguard the volume of enterprise investments.

The reserve fund must be increased by 10 per cent of the sharing fund (as in the past) and by 12.5 per cent of the development fund annually. Raising the latter rate is justified by the tension in the investment market.

The new system of wage regulation

According to the 4th Five Year Plan the per capita real income will grow by 25—27 per cent. An important goal of the plan is that within the real income, real wages should account for a larger share of the rise than in the past. Real wages will increase by 15—17 per cent. In order to increase financial incentives, the new wage regulation system will allow a larger automatic wage and personal income outflow than the present one. The size of this, for the whole of the national economy, is on average 3 per cent annually. An important requirement is that the planned wage outflow should only come about if the development and efficiency taken into consideration by the plan are realized.

The new wage regulation system maintains the fundamental principles of the present one. The sharing fund formed from profits will continue to provide the larger proportion of the increase in personal incomes, however, regarding manpower management it will assert higher requirements in that it will make wage development possibilities dependent on the growth of the combined sum of per capita enterprise wages and profits: $\frac{\text{wage} + \text{profits}}{\text{staff number}}$. For each 1 per cent rise in the indicator, average wages can be increased by 0.3 percent while paying a once-and-for-all levy at a preferential (50 per cent) rate. Increases in average wages beyond this level will be more heavily taxed. Wage increases can be accounted as costs but, depending on the extent of the rise, a levy payable from the sharing fund must be paid into the central budget. The cumulated burden of the rise in the wage level on the sharing fund will cease and so will the shifting of the tax-rate table. The latter, for the most part ensured the possibility of raising the wage level without extra requirements, to the extent of about 0.6—1.4 per cent, depending on the nature of the different enterprises.

The economic content of the per capita wage + profit indicator applied in wage regulation — along with its positive effect on increasing productivity — can be challenged for a number of reasons, but primarily because the numerator of the fraction contains almost the entire enterprise gain, while the denominator only contains one of the production factors, i.e. labour, and does not contain tied-down capital. For this reason the index is a bit "lopsided". However, different calculations and considerations indicate that — in the present situation, when we would like to provide more effective incentives for increasing productivity and intensive investment — its introduction was not a mistake for the incentives operated in the correct direction.

The role of this indicator is not exclusive in raising wages. The wage regulators were formulated in such a way that about 2 per cent of possibilities for increasing incomes should depend on this indicator while the remaining 1

per cent of the 3 per cent national economic average should be independent of it, with a progressive levy payable from the sharing fund. Of course, these ratios are only valid on the average, owing to deviations by enterprises in the indicator and in trends of the sharing fund. (E.g. if the improvement of the indicator is 8 per cent, then a $8 \times 0.3 = 2.4$ per cent increase of average wages can be implemented at the expense of costs with a 50 per cent levy to be paid from the sharing fund, while a further 0.5 per cent rise is accompanied by a 150 per cent levy, and a further 0.5 per cent increase by a 200 per cent levy to be paid from the sharing fund, while any further 0.5 per cent increase involves a levy of 250, 300 and 400 per cent. The 150—200 per cent levy on wage rises is not yet prohibitive, and is not intended to put a brake on the rise in the wage level for it is a question of a once-and-for-all levy and the cumulated burden on the wage level has been ended.) The remaining part of the sharing fund — after the levy has been paid — serves, as in the past, to pay end-year profit shares and bonuses.

The new system provides greater incentives than the earlier one for increasing productivity, and for better labour management. Interest in overstaffing, and in retaining redundant labour decreases. At the same time the improvement of work discipline is promoted and incentive wage systems, making an improvement in the internal enterprise mechanism possible, may be applied.

Interest in overstaffing is the strongest negative phenomenon accompanying the average wage regulation, which however, cannot be separated from the variant of the average wage regulation applied. Only its harmful effects can be somewhat diminished. This detrimental phenomenon can not be fully eliminated without the elimination of average wage regulation itself. However, it was necessary to maintain this system since average wage regulation has some positive features, primarily regarding maintenance of relative wage rates, and a solution which would retain the positive features while lacking the negative ones has not been found, as yet.

Increased incentives for raising productivity and profitability result in approaching to each other the burdens on increasing staff and on raising the wage level: it is assumed that they will be accompanied by a further differentiation of personal incomes among the different enterprises. However, we consider this differentiation necessary in the present stage, since the goals of the 4th Five Year Plan can only be realized by increased material incentives. In industry 75—80 per cent of the rise in production, and 85—90 per cent of the growth in the national income must be covered by increased productivity. This is the only way to increase staffs in the tertiary branches in accordance with social needs.

One of the greatest problems the regulatory system is faced with is, from among the requirements on the plan, the target for productivity. Full

employment is a macro-level category and for this reason regulators must act as incentives for the enterprises to employ the labour force efficiently, and not to simply retain it at all costs, or to increase it unnecessarily. Where it is needed, incentives must be provided for the regrouping of the unnecessary labour force. In order to permanently increase productivity, incentives must be provided for the application of modern technologies and the production of modern products.

In the new system of wage regulation those enterprises will have an advantage which are capable of increasing their profits at a quicker rate than the average, and those which already have a high profit level. The latter enterprises — which can, in general, increase their high profits at a lower rate — will be also provided greater incentives as compared to the present system, for it will be possible for them to realize justified increases in the wage level even with a smaller than average increase in profits. In the enterprises with low profits, a quicker rate of increase is necessary (and also possible) to reach a 1 per cent rise in the average wage level. The requirements for increasing profits are somewhat higher on enterprises with a low organic composition of capital than on those with high organic composition, which is also correct, for this slightly favours the large-scale enterprises. The small enterprises, since they could adjust themselves more flexibly and more rapidly to market conditions, have had comparatively more dynamic wage development opportunities even heretofore. Thus, there is no danger of their lagging behind in raising the wage level.

The question of the effects the modified income and wage regulators have on the price level has been raised. While the stability of the price level is fundamentally determined by market equilibrium, it may be established that since all systems with interests in profits serve as incentives for price rises, this system has a similar effect. In general, the more intensive the interest in increasing profits, the greater the interest in raising prices, too. Nevertheless, it would seem that the modified system, despite increasing the interests in profit does not enhance the trend to raise prices, for the outflow of purchasing power is regulated with suitable safety. While the original wage regulators restrict the rise in average wages more, and the increase in staffs less, the new system makes greater differentiation and increases possibilities for the rise in personal incomes in case output increases suitably; however, it raises stricter requirements against staff increase. These measures suitably regulate the total wage bill and, through this, the growth in purchasing power.

Within the framework of the general wage regulation system special economic activities are regulated differently:

— In the home trade and turnover sphere, emphasis must be placed on good commodity supply to the population, on expanding the choice of goods, on a safe management of inventories in the interests of supply. For this reason,

in wage regulation the "favoured" increase in wage level will be made dependent on total turnover and on the rise in per capita turnover, instead of the development of wages + profits.

— Regulation of the total wage bill will continue to be applied, with suitable modification, in agricultural state farms, and state forestries, as well as to the purchasing and industrial activities of consumers' cooperatives.

— Regulation of the total wage bill will be maintained with the railways. In other fields of transportation and telecommunications — depending on the objective conditions of the particular branches — wage preferences will be ensured in a differentiated manner for raising average wages.

— Suitable preferences will be applied to servicing enterprises and craftsmen's cooperatives completing repairs and services for the population, to ensure a rise in the wage level in harmony with that of the other branches of the national economy.

The transition to the new wage regulation system will to a certain extent redistribute the established personal income among enterprises. According to calculations for branches of industry, the size of the redistribution will be comparatively small, but it may be assumed that it will be larger on enterprise level.

One of the technical problems of the change-over will be how to determine the average wage level of the basis. The average wage to serve as a basis for accounting in 1971 will be the actual average wage level of 1970, except when the per capita disposable sharing fund was lower than in 1969. The intention here is to avoid that those enterprises which, in connection with the change-over to the new system, raised the wage levels at the expense of the end-year profit shares even at the cost of reducing it, should receive an undeserved advantage. For this reason, in case of a drop in the per capita disposable sharing fund, the 1970 actual wage level must be corrected for the drop in the sharing fund, and only then can it be taken for the basic wage level. If the increase of the 1970 average wage level is not more than 3 per cent compared to 1969, the 1970 actual average wage level can be accepted as a basis, even if the per capita disposable sharing fund decreased. As from 1972 the actual average wage level of the previous year will form the basis.

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The planned development can only be realized if there is a substantial improvement in the productivity of labour, in the efficiency of the economy, in adjustment to demand, and in increasing competitiveness on foreign markets, if development is characterized increasingly by intensive methods, and if the intensive methods become the dominant ones by the end of the 4th Five-Year Plan period.

Under the given circumstances, the modified system of enterprise income and wage regulators is an advance, because it will presumably work in the direction of increasing the efficiency of the economy. Research into the effects of the new regulators, analysis of domestic and foreign experience, research coordinated with further development with a view to the long-term economic policy goals, will continue to be important jobs for economists in the future.

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СОВЕРШЕНСТВОВАНИЕ СИСТЕМЫ РЕГУЛИРОВАНИЯ ДОХОДОВ ПРЕДПРИЯТИЙ И ЗАРАБОТНОЙ ПЛАТЫ

Л. КОНЯ

Вместе с четвертым пятилетним планом правительство одобрило также и коррекцию системы экономического регулирования. Поскольку опыт, полученный в связи с новой системой хозяйственного управления, по существу является положительным, нет необходимости в коррекции основных принципов, а нужно только усовершенствовать отдельные элементы регулирования. Необходимость в совершенствовании связана с 1) сокращением числа элементов, рассчитанных на переходной период; 2) использованием полученного до сих пор положительного и отрицательного опыта; 3) требованиями, которые четвертый пятилетний план предъявляет к регулированию, в первую очередь со стороны эффективности.

К числу положительных тенденций относятся улучшение народнохозяйственного равновесия, рост планомерности экономического развития. В ходе осуществления третьего пятилетнего плана народное хозяйство развивалось согласно установленным принципам экономической политики, произошло повышение уровня хозяйственной деятельности предприятий.

Имели место также и отрицательные тенденции. В промышленности и строительстве в 1968—1969 годы рост производительности труда был неудовлетворительным. Рост спроса на рабочую силу был непропорционален темпу экономического развития и наблюдалась нежелательная текучесть рабочей силы. Эти отрицательные тенденции сложились под воздействием ряда факторов, среди которых, однако, главную роль играло экономическое регулирование, в особенности система регулирования заработной платы.

Примененный метод регулирования средней заработной платы в основном удовлетворил своей основной функции регулирования покупательной силы и предотвращения возникновения диспропорций в области заработной платы, но одновременно с этим вызвал у предприятий заинтересованность в сохранении данного списочного состава и в тех случаях, когда они не могли обеспечить его эффективного занятия. Увеличение списочного состава было для предприятий слишком дешевым, а повышение средней заработной платы слишком дорогим делом. Поэтому отдельные предприятия пользовались возможностью сокращения уровня средней заработной платы по предприятию путем приема на работу низкооплачиваемой рабочей силы, чтобы таким образом без налогообложения, — сравнительно дешево, — повысить фонд заработной платы. Этот метод регулирования заработной платы тормозил осуществление интенсивных капиталовложений и поощрял экстенсивный способ

развития экономики. Осуществленные в 1970 году изменения в области регулирования заработной платы принесли уже ощутительное улучшение, но в течение четвертой пятилетки в этом отношении следует добиться дальнейших результатов.

В области капиталовложений основная проблема состоит в напряжении между спросом на строительство и его удовлетворением, которое представится возможным преодолеть только во второй половине четвертого пятилетнего плана.

Противоречия экономического развития связаны также и с тем, что прибыль не всегда отражает в должной мере эффективность хозяйственной деятельности, что существующая система цен в ряде случаев признает также и убыточное производство.

Концепция экономической политики, заложенная в четвертом пятилетнем планд, предъявляет к системе регулирования требование, чтобы она стимулировала преприятиея к повышению эффективности хозяйственной деятельности и оказывала поддержку интенсивным факторам экономического развития. Регулирование доходов в большей мере следует поставить на службу повышения производительности труда, потому что только таким образом можно выполнить задачи, поставленные в области производительности труда. В промышленности 85—90 процентов прироста чистой пропорции следует получить за счет повышения производительности труда. В сфере материального производства нужно проводить селективную политику развития, опираясь на возможности, заложенные в международном сотрудничестве. Соотношение потребления и накопления в национальном доходе остается неизменным, а внутри накопления темп роста основных фондов должен превысить темп роста запасов.

Развитие системы цен и дотаций пойдет в направлении более последовательного учета оценки внутреннего и международного рынка, благодаря чему прибыль будет лучше отражать эффективность хозяйственной деятельности предприятий. Государственные дотации будут сокращены.

Регулирование доходов и заработной платы на предприятиях и в дальнейшем будет основываться на заинтересованности в прибыли. Коррекция регулирования приведет к некоторому повышению централизованной доли чистого дохода. В интересах повышения поощрения прогрессивная шкала обложения фонда участия в прибылях, служащего для увеличения личных доходов, будет сужена, а налог на фонд развития останется и в дальнейшем в неизменной мере линейным.

Новым элементом является возможность повышения уровня заработной платы в зависимости также от роста показателя заработной платы + прибыль в расчете на одного занятого $\left(\frac{\text{Заработная плата} + \text{Прибыль}}{\text{Списочный состав}}\right)$. В дальнейшем повышение заработной платы возможно за счет издержек, но в зависимости от размера роста из фонда участия надо уплачивать единовременный налог. Этот налог начисляется по льготной ставке (в размере 50%) до тех пор, пока рост средней заработной платы на превысит 30% прироста заработной платы и прибыли в расчете на одного занятого. Повышение уровня средней заработной платы выше этой границы влечет за собой повышение налога.

Можно предположить, что новая система будет лучше стимулировать к росту производительности труда, к экономичному использованию рабочей силы. Сокращается заинтересованность в сохранении излишней рабочей силы. Новая система повышает заинтересованность в капиталовложениях, позволяющих сэкономить живой труд, содействует более рациональному выбору и более эффективному использованию факторов производства.

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SOCIAL MOBILITY AND ECONOMIC DEVELOPMENT IN HUNGARY

Economic development is strongly correlated with social processes, e.g. migration, social mobility, cultural change. Economic planning ought to take into consideration these social corollaries of economic growth. A comprehensive survey of social mobility in Hungary performed by the Demographic Research Institute of the Central Statistical Office provides a detailed picture of the processes of mobility, including some historical and international comparisons as well.

Theories of the relation between social mobility and socio-economic development

Scientific statements concerning the factors which determine social mobility in a given society are rather different, even contradictory:

1. A few decades ago it was general opinion both in the United States and in Europe that possibilities for social mobility are much greater in America than in the European countries, because the American society is more "democratic", more "open", the European countries being in general more "aristocratic" and more "closed"; thus social mobility depends on the social system of the country. Empirical studies of mobility, however, disproved this one popular theory [1, 2, 3].

2. On the basis of these first empirical surveys Lipset and Bendix [4] formulated their well-known theory. According to them "the overall pattern of social mobility appears to be the same in the industrial societies of various Western countries . . . Further, although it is clear that social mobility is related in many ways to the economic expansion of industrial societies, it is at least doubtful that the rates of mobility and expansion are correlated. Since a number of the countries for which we have data have had different rates of economic expansion but show comparable rates of social mobility, our tentative interpretation is that social mobility of societies becomes relatively high once their industrialization, and hence their economic expansion, reaches a certain level" (p. 13). Thus it is not the social system, its democratic or aristocratic character, nor the rate of economic development, but the level of development which determines the extent of mobility. Miller and Bryce, however, did not

find strong correlations between social mobility (more exactly: different patterns of mobility) and economic indicators [5].*

Hungarian society provides a suitable field to test these different theories. The economy almost stagnated between the two World Wars, the annual growth rate of national income being about 2 per cent; because of the consequences of the Second World War production has declined to a very low level, followed by a period of comparatively rapid economic growth in the 25 years since the War [7, 8, 9]. National income trebled from 1950 to 1970. During that time the social system changed from a conservative feudal-capitalist system to a socialist system based on the public ownership of almost all means of production.

On the other hand, we have at our disposal a detailed survey on mobility by the Demographic Research Institute [10, 11] giving a full picture of intergenerational and intragenerational (career) mobility, as well as of several factors and concomitants of mobility (migration, education [school] level, fertility etc.). Also we have at our disposal mobility data from the censuses of 1930 and 1949 [12, 13], and from a special survey on the working class in Budapest in 1929 [14].** Although several methodological problems render an analysis of the latter data difficult, they can be used for rough comparisons

Social mobility after the Second World War

In the wake of economic development and social transformations, the occupational structure of Hungarian society changed rather radically after the Second World War. In the period between the census of 1941 and the micro-census of 1963 the number of men*** in non-manual occupations increased by almost 150 per cent, the number of manual workers in industry, building and other non-agricultural sectors increased by almost 50 per cent, while the number of male manuals in agriculture decreased by about 60 per cent. Also inside the particular social strata there were deep changes, first of all in agriculture, but also in industry and trade where the number of self-employed diminished strongly. These structural changes necessitated a large extent of social mobility.

The influence of occupational structural changes was enhanced by the effect of differential fertility, as agricultural population, most of all the agri-

* Cutright recently calculated rather high correlations between the rate of development and mobility in different countries, but his analysis seems to be less conclusive than the work of Miller and Bryce, because he used a very condensed measure of mobility, the "Q" of Yule, neglecting the different types and patterns of mobility [6].

** Lackó [15] and Rupp [16] analyzed these historical data on social mobility, their results have been utilized in this study.

*** Only the mobility of men is analyzed here, because of the difficulties connected with the study of mobility of women (who are often temporarily inactive).

cultural labourers (as distinguished from small landowners or farmers) had the highest and the non-manual workers the lowest fertility between the two World Wars.

The combined effect of the changes in occupational structure and of differential fertility are reflected in the social structure of the present sample and in the social structure before the Second World War of the fathers of the men in the sample.* There are more than three times as many intellectuals and top executives in the sample at present than among the fathers, three times as many other non-manuals, more than twice many workers of all categories, but only half as many agricultural labourers and small landowners or farmes and less than half as many self-employed artisans, shop-keepers and members of industrial cooperatives taken together (Table 1).

Thus, the changes in social structure, as well as differential fertility necessarily brought about social mobility at an important scale: more than two-thirds of the intellectuals and top executives, as well as of the other non-manuals, and half of the skilled, semi-skilled and unskilled workers must have originated from other social groups, while almost half of the sons of peasants were necessarily obliged to "outflow" from agriculture. The forces of socio-economic progress determined the *main direction of the social mobility process:*** *from the social strata of agricultural population into the groups of non-agricultural manuals, as well as from the group of agricultural and non-agricultural manuals into the groups of top executives, intellectuals and other non-manuals.*

91 per cent of those who were intergenerationally mobile in the sample changed their social position in this main direction and only 9 per cent opposite to it (Table 1). The majority of the individual mobility movements were mobility steps from the agricultural population into the manual occupations (51 per cent of all cases of mobility), a smaller part consisted of mobility steps from lower grade manual occupations to higher grade manual occupations, e.g. from the unskilled group into the skilled group etc. (32 per cent), and a relatively small part of total mobility was movement from the agricultural and non-agricultural manual strata into the non-manual strata (8 per cent). Thus the *main feature of mobility* in Hungary was the change from peasant status into non-agricultural manual status, in other words *the inflow of peasants into industry* (and partly also into the service sector).

* The sample of the mobility survey of the Demographic Research Group composed approximately 16,000 families. Here we use only the data of the approximately 12,000 male heads of families.

** The expression of "upward" and "downward" mobility are avoided in the following discussion on purpose, instead of these the expressions "mobility in the main direction" and "mobility opposite to the main direction" are used. The cause of this terminology is that — since we do not dispose of a reliable survey on the objective and subjective ranking of different occupations — it is impossible at present to state unequivocally that mobility n the main direction was always an "upward" movement.

Table 1

Intergenerational mobility in Hungary 1962—64: father in 1938, son at present

Father in 1938	Son at present											
	Executive, intellectual	Other non-manual	Artisan, member of ind. cooperative	Skilled	Semi-skilled	Office attendant	Unskilled	Day-worker	Agricultural	Other	Dependent	Total
Executive, intellectual	56.5	24.3	2.7	8.2	2.7	0.5	2.7	—	2.0	0.4	—	1000
Other non-manual	28.5	35.5	6.3	19.2	4.2	0.2	3.0	0.2	2.0	0.9	—	100.0
Artisan	9.6	17.7	10.7	29.6	8.1	2.1	7.9	0.3	12.2	1.8	—	100.0
Skilled	10.7	19.6	4.1	46.0	7.1	1.5	5.7	0.2	4.6	0.5	—	100.0
Semi-skilled	5.3	14.8	5.5	36.1	16.5	2.3	9.1	0.5	7.8	2.1	—	100.0
Office attendant	9.1	26.0	6.3	29.9	5.8	5.0	7.9	0.6	8.7	0.7	—	100.0
Unskilled	6.1	10.5	3.7	31.9	14.6	2.6	19.2	—	9.7	1.7	—	100.0
Day-worker	3.2	8.5	8.9	27.5	12.9	3.0	18.6	4.9	11.7	0.8	—	100.0
Agricultural	2.7	4.2	2.8	15.2	9.2	2.5	11.7	0.3	50.3	1.1	—	100.0
Other	10.9	23.2	5.4	26.8	8.8	1.9	8.0	—	15.0	—	—	100.0
Total	6.7	10.1	4.2	22.2	9.2	2.2	10.4	0.3	33.6	1.1	—	100.0
Executive, intellectual	16.1	4.6	1.3	0.7	0.6	0.4	0.5	—	0.1	0.6	—	1.9
Other non-manual	15.7	12.9	5.5	3.2	1.7	0.3	1.1	2.9	0.2	2.7	—	3.7
Artisan	15.0	18.3	26.6	13.9	9.2	9.8	7.8	11.2	3.8	16.3	—	10.4
Skilled	17.1	20.7	10.6	22.1	8.2	6.9	5.8	5.9	1.5	4.5	—	10.6
Semi-skilled	3.7	6.8	6.1	7.5	8.3	4.7	4.0	7.7	1.1	8.5	—	4.6
Office attendant	1.7	3.2	1.8	1.7	0.8	2.7	0.9	2.4	0.3	0.7	—	1.2
Unskilled	4.4	5.1	4.3	7.0	7.8	5.7	9.0	—	1.4	7.0	—	4.9
Day-worker	0.5	0.9	2.2	1.3	1.4	1.4	1.9	17.2	0.4	0.7	—	1.1
Agricultural	24.3	25.4	40.4	41.5	61.1	67.3	68.3	52.7	90.8	59.0	—	60.7
Other	1.5	2.1	1.2	1.1	0.9	0.8	0.7	—	0.4	—	—	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	—	100.0

Table 2

Intergenerational mobility in Hungary 1962—64: father in 1938, son at first job

Father in 1938	Social group at first job										
	Executive, intellectual	Other non-manual	Artisan, member of ind. coop.	Skilled	Semi-skilled	Office attendant	Unskilled	Day-worker	Agricultural	Other	Total
Executive, intellectual	45.4	29.2	1.4	10.0	2.7	0.5	6.9	0.9	0.8	2.2	100.0
Other non-manual	17.0	36.1	0.9	30.7	4.3	0.5	5.5	0.2	3.8	1.0	100.0
Artisan	4.5	12.3	8.2	51.1	3.1	0.1	6.7	0.7	12.5	0.8	100.0
Skilled	3.5	9.1	1.0	55.4	7.0	0.1	12.9	1.6	8.9	0.5	100.0
Semi-skilled	2.0	6.6	0.8	39.8	17.6	0.7	14.7	1.7	15.2	0.9	100.0
Office attendant	3.4	12.2	—	51.5	3.3	—	11.3	1.1	17.2	—	100.0
Unskilled	0.6	6.1	1.5	39.3	8.8	0.4	24.4	1.1	17.8	—	100.0
Day-worker	2.5	1.5	1.7	32.5	8.6	0.8	14.1	13.4	24.1	0.8	100.0
Agricultural	1.3	2.0	0.7	14.4	2.9	0.3	5.8	1.0	71.0	0.6	100.0
Other	3.4	17.2	0.8	36.7	4.5	—	17.2	—	17.6	2.6	100.0
Total	3.3	6.3	1.6	26.3	4.5	0.3	8.3	1.1	47.7	0.6	100.0
Executive	26.2	8.9	1.6	0.7	1.2	3.1	1.6	1.5	0.0	6.4	1.9
Other non-manual	18.9	21.2	2.2	4.3	3.5	6.3	2.5	0.8	0.3	5.6	3.7
Artisan	14.1	20.4	53.5	20.2	7.3	3.1	8.4	6.2	2.7	13.8	10.4
Skilled	11.1	15.5	6.4	22.4	16.7	2.5	16.6	14.9	2.0	8.3	10.6
Semi-skilled	2.7	4.9	2.3	6.9	18.2	11.3	8.2	6.8	1.5	6.4	4.6
Office attendant	1.2	2.4	—	2.4	0.9	—	1.7	1.2	0.5	—	1.2
Unskilled	1.0	4.7	4.5	7.3	9.6	7.5	14.4	4.5	1.8	—	4.9
Day-worker	0.8	0.3	1.1	1.3	2.0	3.1	1.8	12.1	0.5	1.3	1.1
Agricultural	23.0	19.1	28.0	33.2	39.7	63.1	42.9	52.0	90.3	54.5	60.7
Other	1.0	2.6	0.4	1.3	0.9	—	1.9	—	0.4	3.7	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 3

Intragenerational mobility in Hungary 1962—64: first and present job

Social group at first job	Present social group										
	Executive, intellectual	Other non-manual	Artisan, member of ind. coop.	Skilled	Semi-skilled	Office attendant	Unskilled	Day-worker	Agricultural	Other	Total
Executive, intellectual	84.3	9.2	2.6	2.0	1.1	—	—	—	0.3	0.5	100.0
Other non-manual	28.8	57.3	1.4	5.1	3.1	0.6	1.9	—	1.3	0.5	100.0
Artisan, member of ind. coop.	—	11.6	25.4	23.6	8.9	1.4	11.0	0.9	16.2	1.0	100.0
Skilled	3.7	13.1	11.0	51.0	5.8	2.2	4.4	0.1	7.5	1.2	100.0
Semi-skilled	4.6	12.0	1.6	22.6	38.3	2.8	6.8	0.2	10.4	0.7	100.0
Office attendant	9.4	2.5	6.2	17.5	—	26.9	7.5	—	18.1	11.9	100.0
Unskilled	3.8	9.9	1.9	28.8	14.9	1.7	26.0	0.7	11.7	0.6	100.0
Day-worker	1.5	8.0	2.0	19.3	13.4	4.1	25.5	8.0	16.7	1.5	100.0
Agricultural	1.1	2.0	0.8	8.9	8.7	2.5	12.8	0.2	61.8	1.2	100.0
Other	4.0	22.6	1.3	10.9	7.4	6.4	17.8	—	12.0	17.6	100.0
Total	6.7	10.1	4.1	22.2	9.2	2.2	10.4	0.3	33.6	1.2	100.0
Executive, intellectual	41.7	3.0	2.1	0.3	0.4	—	—	—	0.0	1.5	3.3
Other non-manual	26.9	35.5	2.1	1.4	2.2	1.5	1.2	—	0.2	2.7	6.3
Artisan, member of ind. coop.	—	1.8	9.7	1.7	1.5	1.0	1.7	4.7	0.8	1.4	1.6
Skilled	14.4	34.2	69.8	60.6	16.6	26.1	11.2	8.3	5.9	25.9	26.3
Semi-skilled	3.1	5.3	1.8	4.6	18.7	5.5	2.9	2.4	1.4	2.7	4.5
Office attendant	0.4	0.1	0.4	0.2	—	3.3	0.2	—	0.2	2.8	0.3
Unskilled	4.7	8.1	3.8	10.7	13.4	6.3	20.6	18.9	2.9	4.6	8.2
Day-worker	0.3	0.9	0.5	1.0	1.7	2.1	2.8	31.4	0.6	1.5	1.1
Agricultural	8.1	9.6	9.6	19.2	45.0	52.3	58.3	34.3	87.8	47.7	47.7
Other	0.4	1.5	0.2	0.3	0.5	1.9	1.1	—	0.2	9.8	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 4

Present social group of sons of non-manual, manual and agricultural worker fathers according to the school level

School level (years of school education)	Son at present										
	Executive, intellectual	Other non-manual	Artisan, member of ind. coop.	Skilled	Semi-skilled	Office attendant	Unskilled	Day-worker	Agricultural	Other	Total
Father: non-manual worker											
Less than 6 years	—	—	—	—	32.1	—	17.9	—	32.1	17.9	100.0
6—7 years	—	14.9	17.6	45.3	5.8	1.2	3.7	1.5	7.6	2.4	100.0
8 years	6.3	33.9	5.7	36.1	8.8	—	5.1	—	3.3	0.8	100.0
9—12 years	5.0	36.3	11.0	36.8	—	2.7	5.5	—	—	2.7	100.0
Final examination at secondary school	28.1	55.2	3.2	7.4	1.8	—	3.6	—	0.7	—	100.0
University degree	82.3	11.5	1.9	1.4	2.4	—	—	—	0.5	—	100.0
Father: manual worker											
Less than 6 years	0.4	3.9	8.0	23.3	17.5	3.9	21.9	1.6	17.1	2.4	100.0
6—7 years	0.6	5.6	8.5	43.3	13.1	3.7	10.6	0.4	13.1	1.1	1000
8 years	2.2	18.0	5.2	52.0	8.6	0.5	7.3	—	4.7	1.5	1000
9—12 years	6.2	39.4	6.4	39.6	3.8	1.1	1.7	—	0.9	0.9	100.0
Final examination at secondary school	22.0	58.5	3.9	10.8	1.5	0.4	1.7	—	0.6	0.6	100.0
University degree	88.2	7.3	2.3	1.0	—	—	—	—	—	1.2	100.0
Total											

Scool level (years of schol education)	Son at present										
	Executive, intellectual	Other non-manual	Artisan, member of ind. coop.	Skilled	Semi-skilled	Office attendant	Unskilled	Day-worker	Agricultural	Other	Total
Father: agricultural worker											
Less than 6 years	0.0	0.7	2.0	7.1	8.8	3.1	12.6	0.5	64.1	1.1	100.0
6—7 years	0.5	1.7	3.5	14.9	9.5	2.8	12.4	0.2	53.5	1.0	100.0
8 years	3.2	8.2	1.8	34.9	12.1	1.1	11.5	—	25.1	2.1	100.0
9—12 years	10.3	36.1	4.3	25.1	7.5	—	1.7	—	13.9	1.1	100.0
Final examination at secondary school	24.6	57.4	0.5	9.9	0.6	—	1.2	—	5.8	—	100.0
University degree	82.5	12.5	1.9	1.7	—	—	0.7	—	0.7	—	100.0

These characteristics of mobility in Hungary have a counterpart in the development of the sectoral composition of national income: the production of industry grew from 1950 to 1969 from 100 to 436, that of the building industry to 378, while that of agriculture to 116 only. Social mobility was strongly correlated with the industrialization of the country.

The question arises, however, to what extent did the more "open" or more "egalitarian" character of Hungarian society after the Second World War contribute to social mobility? It is difficult to operationalize the concept of "openness" of society. If we define open society as a society characterized by equal opportunity for everyone independently of his social origin to attain the same social status, position, or occupation, then we may measure "openness" by the extent of circular mobility compared to structural mobility, which latter may be divided again into the necessary minimum structural mobility and other structural mobility.*

In the sample of the mobility survey of the Demographic Research Institute,

59 per cent were intergenerationally mobile (compared to the father) of which:

33 per cent may be considered as minimum structural mobility,

8 per cent other structural mobility,

18 per cent circular mobility.

Thus, *the importance of structural factors in mobility was much higher than of the factors connected with the "openness" of the social system.* This empirical result is in accordance with the statement of Ossowski [17] that socialist revolution exerted its influence in the direction of increasing social mobility first of all through increasing the pace of economic and social progress and the change of political and cultural value systems had (at least in the period following immediately the socialist revolution) a smaller influence on the extent of mobility.

Two further characteristics of the mobility process in Hungary should be emphasized:

1. *Intragenerational or career mobility* [18] *played an important role* in total mobility, about half of total mobility having taken place between the fathers' occupation and the first job and another half between first and present job, i.e.

* The definitions of these concepts are: necessary minimum structural mobility: the mobility which would have occurred in the case if outflow took place from the diminishing social strata only and inflow exclusively into the increasing strata; other structural mobility is the mobility in the main direction caused by the fact that structural changes are generally realized by movements between neighbouring social groups, e.g. from the group of unskilled workers to that of semi-skilled workers, from the semi-skilled ones to the skilled group, from the skilled group into non-manual occupations etc.; circular mobility consists of vice-versa movements between different groups, regardless of structural changes, e.g. some part of the sons of skilled workers entering the non-manual group and the same amount of sons of non-manuals taking their place in the skilled group.

during the career of the respondents (Tables 2 and 3). Inflow into professional occupations necessitating attainment of higher school level is also frequent during a career. This fact seems to prove the importance of adult education, in *evening schools* (and at the universities). The inflow into the skilled occupations, on the contrary, took place in the majority of cases intergenerationally, i.e. at the time of entering the first job. By generalization it may be stated that *the young sons of peasants rather became skilled workers, while the older peasants rather entered some semi-skilled or unskilled occupation*, if they moved into the non-agricultural manual strata [11].

These facts are again in close connection with the economic development of the country. Industrialization began suddenly after the War, the demand for manpower in industry rose swiftly. The demand for skilled workers was satisfied mostly from the younger generations going through apprenticeship and from older semi-skilled and unskilled workers who had already some industrial training and learned the new skill at the job. Older peasants filled the places of these latter workers in the semi-skilled and unskilled groups.

2. The attainment of higher school qualification was a most important factor in the social mobility in the main direction (Table 4). Peasants and sons of peasants who entered some non-agricultural social group have higher school qualification, than those who remained in agriculture, the workers and peasants and their sons who entered the top executive, intellectual and other non-manual groups have higher school qualification than those who remained in their group of origin.

The growing importance of schooling in mobility is a fact often stressed by authors investigating social mobility in Western countries. It is noteworthy, however, that even in Hungary where social mobility took place under somewhat different conditions, in connection not only with general economic development, but also with a change in the social system, the *attainment of a higher school qualification was strongly connected with the change in social position either as a precondition to it, or a consequence of it.*

The connection between mobility and school qualification is even stronger if viewed from the opposite viewpoint: not everybody who originated from another social group and entered the group of top executives and intellectuals attained parallelly a higher school level (though the majority did), but *almost everybody who acquired a university degree belongs to the group of top executives and for intellectuals.* The demand for qualified manpower seems to have been so strong that sooner or later everybody who managed to graduate from a university got an adequate job. The overwhelming majority of those sons of non-manuals who are at present manual workers, did not attain even the complete secondary school qualification. This statement is not in contradiction with the fact that, in some periods after the War, there was a considerable mobility from non-manual occupations into the groups of manual

workers, but most of these returned after some years into non-manual jobs [19]. On the contrary, there was very few "return" mobility of the type: manual — non-manual — manual, i.e. those who originated from the worker and peasant social groups and entered top executive, intellectual or other non-manual occupations, very rarely returned into the manual strata (mostly only in cases when they could not attain the school level necessary for that type of job).

The importance of education in the process of social mobility may be interpreted as a manifestation of the demand for knowledge and skills, in other terms: for human investment in the conditions of modern socio-economic development. This imperative demand prevails sooner or later also in the case of revolutionary changes of the social system, as in Hungary.*

Social mobility in historical perspective

Recently *Fügedi* analyzed the conditions of social mobility in the Hungarian ruling class, the top aristocracy in the Middle Ages and demonstrated a surprising stability of the small group of ruling families [23]. For several centuries the composition of the ruling class changed very slowly, the members of the families belonging to the ruling group at the time of the original settlement of Hungarians in the Danube valley in the basin of the Carpathians and of the foundation of the Kingdom of Hungary (10th century) still belonged to the top aristocracy at the end of the Middle Ages.

It would be desirable to dispose of similar historical studies of social mobility in other periods of Hungarian history too; at present, however, we can follow the development of social mobility only from 1929 on. The working class survey of Budapest [14], as well as the censuses of 1930 [12] and 1949 [13] contain data on intergenerational mobility. Well aware of the difficulties of comparison** [7] (first of all because of the fact that the data of 1949 are published only for both sexes together, and because of differences in the classification of occupations) we may draw some conclusions on social mobility and its relation to economic development since the First World War.

Comparing the results of 1930 (Table 5)*** and 1949 (Table 6) with the

* The empirical results of the mobility survey of the Demographic Research Institute of the Central Statistical Office, as well as the conclusions drawn from them are supported by other sources of data and analyses on mobility, as a general stratification survey of the Central Statistical Office containing some data on intergenerational mobility [20], [21] and a special survey on the career of leaders of village councils [22].

** The classification of different occupations is not entirely comparable between 1930, 1949, 1960 and 1963.

*** According to the results of the survey in 1929 [14] the composition of the working class in Budapest by the social position of the father was at that time: father non-manual 5 per cent, self-employed manual 31 per cent, manual worker 29 per cent, agricultural 28 per cent, other and unknown 7 per cent.

Table 5

Intergenerational mobility of men (earners) in 1930 (n = 2 932 864)

Father	Son at present				
	non-manual	self-employed manual	manual worker	agricultural	Total
Non-manual	33	4	3	—	4
Self-employed manual	28	48	22	2	14
Manual worker	9	9	30	2	10
Agricultural	14	33	35	94	65
Total	100	100	100	100	100

Father	Son at present					
	non-manual	self-employed manual	manual worker ;	agricultural	other*	Total
Non-manual	57	8	18	2	15	100
Self-employed manual	13	29	40	10	8	100
Manual worker	5	7	72	8	8	100
Agricultural	2	4	14	76	4	100
Total	7	8	25	53	7	100

* Mostly pensionnaires.

data taken from the mobility survey of the Demographic Research Institute in 1962—64 (Table 7)* the following conclusions can be drawn:

1. The percentage of those who originated from manual worker or agricultural social groups increased in the *non-manual* group from 1930 to 1962—64 i.e. the inflow of workers and peasants into non-manual occupations is higher at present than between the two World Wars.

2. The percentage of those who originated in the agricultural stratum increased in the non-agricultural *worker* groups from 1930 to 1962—64, i.e. the inflow of peasants into manual occupations in industries and services is higher at present than between the two World Wars.

Thus, *mobility in the main direction was significantly higher after the Second World War than before.*

3. The outflow of sons of non-manuals into the manual strata decreased to a certain degree.

4. The outflow of sons of manual workers into the agricultural stratum remained at the same, relatively low, level.

* Table 7 is a "summary" of Table 1.

Table 6

Intergenerational social mobility of men and women (earners) in 1949 (n = 4 409 299)

Father	Son and daughter at present				
	non-manual	self-employed manual	manual worker	agricultural	Total
Non-manual	29	6	3	1	5
Self-employed manual	20	37	14	3	11
Manual worker	31	20	40	3	19
Agricultural	18	34	40	92	63
Unknown	2	3	3	1	2
Total	100	100	100	100	100

Father	Son and daughter at present				
	non-manual	self-employed manual	manual worker	agricultural	Total
Non-manual	67	10	18	5	100
Self-employed manual	20	26	40	14	100
Manual worker	18	9	65	8	100
Agricultural	3	4	20	73	100
Unknown	10	10	51	29	100
Total	11	8	31	50	100

Table 7

Intergenerational social mobility of men in 1962—1964

Father	Son at present			
	non-manual	manual	agricultural	Total
Non-manual	23	3	—	6
Self-employed manual	17	13	4	10
Manual worker	35	32	5	23
Agricultural	25	52	91	61
Total	100	100	100	100

Father	Son at present			
	non-manual	manual	agricultural	Total
Non-manual	70	28		100
Manual (self-employed and worker)	25	66	9	100
Agricultural	7	43	50	100
Total	17	49	34	100

Thus, *mobility opposite to the main direction, i.e. circular mobility decreased somewhat from 1930 to 1962—64.* This seems to be a very important conclusion and is in contradiction with scientific and popular hypotheses and beliefs concerning the mobility after social revolutions. Without further deeper investigation of this phenomenon, however, it is impossible to explain the causes of this empirical finding.

5. The chances of working class sons to enter the non-manual occupations considerably increased from 1930 to 1962—64.

6. The chances of peasant sons to enter non-agricultural manual and non-manual occupations similarly grew to a high extent from 1930 to 1962—64.

Thus, *the chances for mobility of members of the working class and of the peasant class are much higher at present* than they were in the past.

All the above conclusions may be interpreted in terms of different economic development in the period before and after the Second World War. The period between the two World Wars was characterized by slow economic growth, national income rose by an annual average of 2 per cent after the setback caused by the First World War; the recession was especially prolonged and from its consequences the economy recovered slowly. Thus, industrialization which might have been a way out of the serious economic and social problems of the country (agricultural underemployment, "three million beggars" in the villages etc.), proceeded at a very moderate rate only. In consequence, the occupational and social composition of society underwent only relatively small changes, predominance of agriculture remained the main characteristic of the occupational structure (the proportion of male earners in agriculture remained above 50 per cent). The non-agricultural working class was relatively weak and grew partly by absorbing the social group of artisans, providing in consequence relatively few chances for peasants to leave agriculture. Only the years of the War brought some changes, with the upswing of industrial war production. These however, were, soon swept away by the devastations. At the census of 1949 the percentage of earners in agriculture was approximately the same as in 1941, and only 3 percentage points less than in 1930, whereas the percentage of industrial and service workers, as well as of nonmanuals rose only slightly since 1930. As against all that, in the two following decades national income grew at a yearly average rate of 5.6 per cent, industry became the leading sector of the economy, and, in consequence, the occupational and social structure changed radically: today (according to the census of 1970) only 23 per cent of active earners are maouals in agriculture, the percentage of non-agricultural manuals grew to 51 per cent and that of non-manuals to 26 per cent. The differences in the rate of change of occupational structure are displayed (of course not exactly) also by the marginal columns and rows, i.e. by the occupational composition of fathers and sons (daughters) in Tables 5—7. *Greater changes in occupational structure brought about greater mobility.*

The changes in the proportions of different social strata to each other also had an important effect on the chances of mobility: obviously, there are better chances to "outflow" from the agricultural stratum, if it becomes smaller as compared to the growing groups of manuals and non-manuals, as more "places" are available in the latter groups for fewer sons of peasants. Similarly a greater non-manual stratum provides by its growth more places for mobile persons originating from other classes.

International comparison of social mobility

In international comparison, methodological difficulties are even more important than if we try to compare social mobility at different dates in the same country. Some tentative conclusions, however, seem to be possible.

Comparing the "outflow" mobility ratios quoted by *Lipset* and *Bendix* [4] and those of the survey of the Demographic Research Institute in Hungary, at first the similarity seems to be striking. E.g.:

	The proportion		
	of sons of manuals	of sons of peasants	of sons of non-manuals
	who are at present		
	non-manuals	manuals	manuals and peasants
	(as percentage of the social group of origin)		
France	35	13	27
Germany I. survey	27	28	42
Germany II. survey	30	19	20
Germany III. survey	27	37	30
Sweden	29	42	25
Switzerland	44	19	16
United States I. survey	35	39	29
United States II. survey	31	46	35
Japan	33	22	26
Hungary	25	*43*	*30*

It would be, however, unwise to draw the conclusion that Hungarian mobility confirms the thesis of Lipset and Bendix, namely, that social mobility is similar in all industrialized countries. If, namely, the inflow mobility ratios

are calculated from the data published by Lipset and Bendix and compared with the Hungarian data,* very important differences are displayed. E.g.:

	Proportion		
	of sons of manuals who are at presents non-manuals	of sons of peasants who are at presents non-manuals	of sons of peasants who are at presents manuals
	(as percentage of the social group of destination)		
France	18	17	24
Germany III. survey	26	11	17
Sweden	32	22	32
United States I. survey	32	20	32
Japan	16	27	32
Hungary	*52*	*25*	*52*

Thus, although *outflow mobility ratios*** *in Hungary are more or less similar to those in other countries, the inflow of workers and peasants into the non-manual stratum and the inflow of peasants into the non-agricultural manual stratum is higher in Hungary* than in any other country compared by Lipset and Bendix.***

As the very broad occupational groups used by Lipset and Bendix (non-manual — manual — farm) seem to be too aggregated and may be therefore misleading, the Hungarian mobility ratios were compared by finer occupational classification (see Table 1) to the results of two mobility surveys, that of Blau and Duncan in the United States (25) and of Glass and associates in England (1), who used comparable occupational groups.**** It was found that:

* This calculation based on the data of Lipset and Bendix and the comparison with Hungarian results was first made by *Kemény* [24].

** Outflow mobility ratio is defined as the proportion of mobile persons (in percentages) of the social group of origin. Inflow mobility ratio is defined as the proportion of mobile persons (in percentages) of the social group of destination (present group).

*** Miller [26] compared "national mobility profiles", among them also the mobility of Hungary based on the results of the 1949 census. It is possible to classify Hungarian mobility in 1962—64 according to his criteria in the following way:

— manual into non-manual: high mobility (just above the dividing line of high and low);
— non-manual into manual: high mobility;
— manual into elite (intellectuals and executives): high;
— middle classes (other non-manual) into elite: high;
— total movement out of elite: low;
— middle classes downward to upward movement: low;
— elite into manual: high.

As Miller, too, uses outflow mobility ratios, there is again no clear-cut difference between Hungarian mobility and that of Western countries.

**** Data for the United States on pages 28 and 39 in [25], data for England on page 183 in [1].

1. the outflow of sons of intellectuals (professionals), executives, and managers into other social groups is slightly higher in Hungary than in the United States and England;

2. the chances of a son of a skilled, semi-skilled and unskilled worker to enter the group of intellectuals and executives (professionals, managers) are higher in the United States and lower in England than in Hungary;

3. the chances of a son of a peasant to enter the group of intellectuals and executives (professionals, managers) are higher in the United States than in Hungary;

4. the chances of a son of a skilled, semi-skilled and unskilled worker to enter other non-manual occupations are more or less similar in the three countries;

5. the chances of a son of a peasant to enter the other non-manual occupations are smaller in Hungary than in the United States.

Thus, *circular mobility* (manifested by the outflow of intellectuals and executives into other groups) *is similar or somewhat higher in Hungary* than in the other two countries. As to the chances of sons of workers and peasants to reach intellectual, executive and other non-manual occupations, it is difficult to state any clear-cut tendency, but surely they are not higher in Hungary than in the United States.

The inflow mobility ratios, however, display again very clear differences:

1. *the percentage of sons of manual workers and peasants in the social group of intellectuals and executives* (managers, professionals) *is decidedly higher in Hungary* than in the two other countries,

2. *the percentage of sons of peasants in all groups of non-agricultural manual workers is much higher in Hungary* than in the United States.

Thus, the finer international comparison based on a more detailed list of social groups confirms the above-mentioned conclusions drawn from the comparison of Hungarian mobility with the data used by Lipset and Bendix. This unexpected and rather peculiar result, Hungarian mobility being similar from the viewpoint of outflow mobility ratios and much higher from the viewpoint of inflow mobility ratios, is again *a consequence of structural factors and ultimately of the rate of economic development.* The national economy of Hungary and, in consequence, its occupational structure is at a lower level of development than that of the United States and England: the ratio of agricultural population still is much higher and that of the social groups of intellectuals, managers and other non-manuals much smaller. On the other hand, economic development and the change of occupational structure was probably faster in Hungary than in the United States and England in the period preceding the mobility surveys compared. Therefore, the rapidly growing intellectual and other non-manual social groups absorbed a large number of persons originating from the working class and agricultural population who constitute today the

majority of these social groups. The number of these mobile persons, however, was not so important compared to their original stratum because of the relatively smaller weight of their class of destination and greater weight of their class of origin. Similarly, the sons of the agricultural population who entered non-agricultural manual occupations constitute the majority of the working class today, while in the United States the exodus of peasants into industry and services influenced the composition of manual groups to a smaller extent, as farm population was already very small.

Some remarks on future mobility and problems of social policy concerning mobility

From the analysis of social mobility in the Hungarian society and from its comparison in historical perspective as well as with other developed countries it seems to be clear that *the main driving force of mobility was economic development.* It follows that future mobility will also depend, first of all, on future economic development. (Fertility differences of social classes decreased and are continuing to decrease, so that it is improbable that differential fertility will be a very important factor in bringing about social mobility.) If national income grows at the planned high rate (about 6 per cent a year), the number of people with university degree must grow rapidly (as a precondition and a consequence of economic development). Similarly, the number of high-level executive and manager jobs will increase. The doubling in one generation of the percentage of intellectuals with university qualification and of top executives implies an inflow of 50 per cent of persons originating from other social strata even in the case of total occupational inheritence of the children of intellectuals. If the extent of occupational inheritance of intellectuals and executives remains the same as in the period investigated by the mobility survey of the Demographic Research Institute, i.e. 56.5 per cent (see Table 1), the implied inflow will be more than 70 per cent. A higher rate of economic development would imply still higher inflow, an eventual lower rate of growth obviously a lower inflow of sons of workers and peasants into the social group of intellectuals and executives.

A high rate of social mobility, however, is also a precondition of a high rate of economic development. Therefore, a comprehensive social policy embracing, among other things, the fostering of the chances of social mobility by different means (e.g. educational policy, regional development policy, migration policy) is an important component of an overall economic policy for economic growth and social progress.

Annex

Definition of the social groups used in the article:

1. Intellectual and executive: all persons having a university degree *and* working in a job where a university degree is required, as well as all persons having a top executive position in enterprises (managers) and state administration (inclusive of leaders of village councils).

2. Other non-manual: all other people having a "white-collar" job.

3. Artisan, member of industrial cooperative: all self-employed persons outside agriculture, as well as the members of non-agricultural cooperatives. In the case of the fathers' social position (in 1938) only self-employed persons, as there were no cooperatives (compared to the present ones) at that time.

4. Skilled worker: persons having learned some skilled trade and having an adequate job, exceptionally also persons doing such a job without qualification.

5. Semi-skilled worker: persons having a job (mostly machine work) requiring a short learning, without learned skill.

6. Office attendant: all kinds of non-agricultural manual workers who cannot be classified into the other categories, e.g. office attendants, porters, messengers, etc.

7. Unskilled worker: persons in jobs where learning is not necessary.

8. Day-worker: persons without a regular job. At present it means probably deviant behaviour, in the past it was a regular form of employment.

9. Agricultural: farmers, agricultural labourers, members of agricultural cooperatives.

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ОБЩЕСТВЕННАЯ МОБИЛЬНОСТЬ И ЭКОНОМИЧЕСКОЕ РАЗВИТИЕ В ВЕНГРИИ

Р. АНДОРКА

В литературе можно встретиться с различными положениями о факторах, определяющих величину общественной мобильности. Одни считают «открытый характер общества» важнейшим определяющим фактором, другие придают решающее значение уровню или темпу экономического развития.

Исследование общественной мобильности, проведенное Демографическим институтом при ЦСУ, позволяет проверить эти противоположные гипотезы на опыте Венгрии. Переписи населения 1930 и 1949 года, а также обследование положения будапештских рабочих 1929 года содержат некоторые данные о мобильности, которые можно использовать для цели исторического сравнения.

На протяжении истекших 25 лет в Венгрии имел место крупный экономический прогресс, параллельно с которым произошло изменение структуры занятости и общественной структуры. Это структурное преобразование являлось важнейшей движущей силой роста общественной мобильности.

Основным направлением общественной мобильности был переход из слоя сельскохозяйственного населения в слой несельскохозяйственных рабочих. Примерно половина нынешних рабочих происходит из крестьянства. Более двух третей нынешнего слоя интеллигенции и руководящих работников и более четырех пятых остальных работников умственного труда происходили из семей работников физического труда.

Крупную роль в процессе мобильности играл переход из одного общественного слоя в другой слой в ходе собственной трудовой деятельности, например, переход рабочих в группу интеллигенции и руководящих работников, переход крестьян в ряды рабочих.

Общественная мобильность была тесно связана с получением более высокого школьного образования. Рост потребности в квалифицированной рабочей силе, — в результате ускорения экономического развития, — имел настолько крупные масштабы, что все лица, получившие более высокое школьное образование, почти без исключения получали соответствующую новую должность.

Доля лиц рабочего и крестьянского происхождения в группе интеллигенции и руководящих работников, а также во всем слое работников умственного труда в настоящее время существенно больше, чем в 1930 и 1949 годах. Аналогичным образом существенно возросла доля лиц крестьянского происхождения внутри рабочего класса. Это связано с тем, что в период между двумя мировыми войнами экономическое развитие в Венгрии было весьма медленным, а после социалистического переустройства темп экономического прогресса чрезвычайно ускорился.

Сопоставление венгерских и зарубежных коэффициентов мобильности опровергает положение американских социологов Липсета и Бендикса, согласно которому масштабы общественной мобильности в экономически развитых странах являются примерно одинаковыми. В Венгрии доля лиц рабочего и крестьянского происхождения в группе интеллигенции и руководящих работников и работников умственного труда вообще, а также доля лиц крестьянского происхождения среди рабочих существенно выше, чем в западных странах, обследованных упомянутыми выше авторами. Это опять-таки можно объяснить структурными факторами и более быстрым темпом экономического развития.

На основании анализа общественной мобильности можно сделать вывод, что важнейшим фактором последней и в дальнейшем будет являться экономическое развитие. Социальная политика, расширяющая различными средствами возможности собственной мобильности, (школьное образование, региональное развитие, миграция населения) тоже является одной из препосылок быстрого экономического прогресса.

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SOME CHARACTERISTIC FEATURES OF INDUSTRIALIZATION IN DEVELOPING, IN ADVANCED CAPITALIST AND IN SOCIALIST COUNTRIES*

The paper contains a comparison between the industrialization processes of the developed capitalist, the socialist and the developing countries, and shows several special features and expected further development of the latter.

Industrialization is an economic process which by and large has been completed in the advanced capitalist countries and in the European socialist countries. The question may be raised whether the developing countries indeed undergo industrialization, transforming and modernizing their economies, and if so, what are the similarities and the differences between industrialization processes taking place in various periods, various regions and under different economic and social conditions; what conclusions an analysis and comparison of these processes permit us to draw concerning the expected industrial expansion in developing countries.

According to a frequently quoted statement by Marx: "The country that is more developed industrially only shows to the less developed the image of its own future" [1]. Of course, Marx did not mean this statement to refer to the long-term and world-wide tendencies of industrial growth but spoke about the general validity of the "natural laws of capitalist production", saying that the German readers of his work should not be at ease by thinking that the situation in Germany was by far not so bad as the one prevailing among the British industrial and agricultural working class. It is, however, not unjustified to interpret the validity of Marx's statement somewhat wider. It can be proved that the process of industrialization shows many similarities even if it has taken place in various countries in different periods and under different conditions.

The similarity is, of course, the greater the more general our approach is to the process. The definition adopted by the Committee for Industrial Development of the UN referring to technological up-to-dateness, diversified economic structure, a dynamic manufacturing industry is, for instance, of a general

* The article is based on a chapter in the book by the author under the title "Strategies of industrialization in developing countries" appeared recently in Hungarian and to be published in English by C. Hurst & Co. Publishers, London.

validity.* On the other hand, the deeper we go into details and the more concretely we analyze industrialization in the individual countries, the greater we find the differences even between countries undergoing industrialization almost simultaneously, on the same cultural level and under the same social system.

In the present comparison the main characteristics of industrialization will be examined from three aspects, such as the relation of industrialization

— to the growth of total and per capita national income,

— to the changes in economic structure (of the whole economy and within industry),

— to the widespread application of scientific and technological results in practice.

a) The most important criterion of industrialization and, at the same time, of economic growth is *a lasting and rapid growth of total and per capita national income.* — National income, of course, grows not only in a modern industrial economy. According to some authors, production prior to the industrial revolution was unchanged and productivity was determined by the number of population: "When population increased, the per capita product diminished, and when population decreased, the per capita product increased." [2]. This statement, even if it be true for some shorter period, can certainly not be accepted for a longer period. The world's population increased also prior to the industrial revolution. (According to Kuznets from 275 million in the year 1000 to about 730—750 million by 1750 [3]. Even if the data are not too accurate, the fact of growth cannot be denied.) However, the growth of population is hardly conceivable without the growth of production and of national income. It is probable that productivity also increased for a long time, — although slowly. Again, according to Kuznets, the per capita national income increased in England** between 1700—1780, that is, prior to the industrial revolution, by 2 per cent every ten years.

It is, however, an important fact that *since the industrial revolution, and owing to industrialization, the rate of economic growth has greatly accelerated — in terms of both total and per capita national income.* As has been mentioned, the growth of per capita national income was 2 per cent every 10 years in England prior to the industrial revolution, in the 100 years following the industrial revolution (1780—1881) this ten-year rate of growth was 13.4 per cent in England, 17.9 per cent in France (1841/50—1960/62), 9.2 per cent in a first (1851/55—1871/75) and 17.9 per cent in a later period (1871/75—1960/62) in Ger-

* "Industrialization is a process of economic development, where a growing part of national resources is mobilized for shaping a technologically up-to-date and diversified economic structure. This economy is characterized by a dynamic manufacturing industry, producing means of production and consumer goods, which is capable of securing the rapid growth of the whole economy, and economic and social progress". [18]

** The data refer to national product.

many. In the other advanced countries the growth rates were similar or, in some cases, even higher [17].

These ten-year growth rates correspond to annual compound rates of 0.9—2.0 per cent. For somewhat later periods more detailed data and covering more capitalist countries are available. According to Maddison, the growth of per capita income in 12 developed capitalist countries* was 1.6 per cent on an average from 1870 to 1913, 1.1 per cent from 1913 to 1950, and 3.1 per cent from 1950 to 1960 [4]. The rate of economic growth (of per capita national income) did not attain the annual 2 per cent in any of the developed capitalist countries between 1913 and 1950. Even between 1870 and 1913 it was surpassed only in Denmark (2.1 p.c.), Sweden (2.3), Canada (2.0) and the USA (2.2).

Against this picture, the economies of the developing countries did not grow, or grew extremely slowly, up to the middle of the 20th century. Of course, there are no reliable data available for this period; only the very approximative estimates of some authors can be relied upon. According to Kuznets, the per capita income in underdeveloped countries increased by 50 per cent in the past century, that is, by about 0.4 per cent annually. According to Patel, growth was even slower [5], only 20 per cent between 1850 and 1960, that is, 0.1 per cent on an annual average.

In comparison to this situation, the about 2 per cent annual growth rate of per capita national income in the developing countries after World War II (2.2 per cent between 1955 and 1960 and 2 per cent between 1960 and 1966) is a decisive turn, even if this rate is lower than that of the advanced capitalist countries (3—4 per cent) or of the socialist countries (5.5—6.5 per cent, actually) [6]. *Thus, the process of industrialization in the developing countries started in the middle of the twentieth century and the growth of per capita national income was not slower than it had been in the initial stage of industrialization of the now developed capitalist countries*, though slower than the rate of industrialization of the socialist countries and slower than the present growth of the advanced capitalist countries.

At the beginning of industrialization, however, the developing countries started in many respects from a more difficult situation, from a lower level than the countries which first industrialized. — A comparison of per capita income levels between countries situated very far from one another or between remote periods is well known to be extremely uncertain and we can only rely on the "bold" estimates of a few authors. The per capita national income in developing countries may have been around 75—100 dollars in the middle of the preceding century. At the same time this was about 340 dollars in the advanced capitalist countries according to Kuznets, while according to Patel it

* Belgium, Denmark, France, Germany, Italy, the Netherlands, Norway, Sweden, Switzerland, UK, Canada, USA.

was 150 dollars in 1850 in the now industrialized countries. (The gap between the two estimates is not so great as would seem from the two figures, since what Kuznets has in mind are the early industrializing most advanced capitalist countries while Patel includes all now industrialized countries, not only of Western Europe and the USA, but also the Scandinavian ones and the European socialist countries.)

In spite of the ambiguity of the estimates, it seems unequivocal that *the advanced capitalist countries were richer at the beginning of industrialization than are the now developing countries.* The situation is less unequivocal in respect of the European socialist countries, since they had attained highly different economic levels when they started to industrialize. It seems, however, that their economic level was rather higher than that of the developing countries at the start of the process.

Let us now have a look at the growth rate of industry. There are no reliable data available on the "early industrializing" countries, but the tendency is sufficiently clear. The growth rate of industrial production in England was 2—3 per cent between 1793 and 1817, 3—4 per cent between 1818 and 1855 and again 2—3 per cent between 1856 and 1875 [7]. In France, the figures are the following: 2.1 per cent for 1815/24—1845/54, 2 per cent for 1845/54—1865/74 and 1.5 per cent for 1865/74—1885/94 [8].

Such relatively moderate industrial growth rates were rather usual in the early industrializing countries. *Late industrialization is characterized by quicker growth rates.* For socialist industrialization, particularly in its initial stages, we find at least a 9—10 per cent annual growth rates; in the developing countries, it was almost 8 per cent annually between 1950 and 1966.

b) It is a characteristic tendency of *changes in economic structure* that, together with industrialization, economic growth and the growth of population, the ratio of those employed in the primary sectors (agriculture, fishery, etc.) gradually diminishes and so does the share of their contribution to national income while the importance of the secondary sector (manufacturing) and later of the tertiary one (services), increases. This structural change is one of the possible criteria for a numerical characterization of the industrialization process.

At the start of the transformation process of economic structure, about 80 per cent of those economically active were still engaged in the primary sector. Such is the situation even today in quite a few developing countries. According to economic historians, such was the situation also in the now developed countries. This, however, had changed by the time of the first population censuses. (In England, e.g., agriculture engaged only about 35 per cent of the population and contributed to national income 32 per cent of the total in 1801, but even in the 17th century, that is, before the industrial revolution, agriculture only yielded 40—45 per cent of national income. With the progress of economic

growth and industrialization the share of those engaged in the primary sector has gradually diminished to around ten per cent in the most advanced countries, while the share of industry has gradually increased and stabilized around 30—40 per cent.

Comprehensive data on changes in the structure of employment are available from 1860 and 1880 for the major regions of the advanced capitalist countries, and from 1900 and 1920 for the developing countries.

Table 1

Long-term changes in the structure of employment

Ratio of those engaged in agriculture and industry to total employment, percentages

Area	1860	1880	1900	1920	1930	1950	1960
Europe							
agriculture	—	55.7	50.6	47.2	43.6	39.2	31.8
manufacturing	—	20.0	22.3	22.8	23.7	24.4	27.5
European Economic Community							
agriculture	—	50.8	44.4	40.0	35.1	30.5	20.5
manufacturing	—	27.2*	25.6	26.9	27.7	27.6	32.1
North America							
agriculture	60.5	50.8	38.3	28.2	23.3	12.9	7.3
manufacturing	18.3	18.6	22.5	26.8	23.7	27.4	28.7
Latin America							
agriculture	—	—	—	65.9	63.4	54.1	50.1
manufacturing	—	—	—	13.0	13.4	13.8	14.5
South and South-east Asia							
agriculture	—	—	76.4	77.5	76.8	75.3	73.1
manufacturing	—	—	9.9	9.4	9.2	7.3	8.8
North Africa							
agriculture	—	—	—	76.8	76.0	72.9	69.6
manufacturing	—	—	—	6.3	6.3	7.4	7.6

* Including construction.

Source: Bairoch, P.—Limbor, I. M.: Changes in the Industrial Distribution of the World Labour Force, by Region, 1880—1960. International Labour Review. Oct. 1968.

Around 1880 only 50 per cent of those employed in the developed capitalist countries worked in agriculture and about 25 per cent in manufacturing. From that date, the share of agriculture has been decreasing and that of industry growing. However, the absolute numbers of the agricultural labour force continued to grow up to 1920 both in Europe and in the EEC comprising the more developed countries, as well as in North America.

For the socialist countries no similar comprehensive data are available for long periods, but the main tendencies can be established from the data relating to the individual countries [9]. In the Soviet Union, the structure of employment did not change between 1913 and 1928, or, rather, the share of industrial employment somewhat declined, from 9 to 8 per cent, and that of agriculture somewhat increased, from 74.9 per cent to 79.8 per cent. From 1928 on, the share of industry increased quickly and that of agriculture diminished. In the smaller European socialist countries industry increased rather slowly up to the years following World War II, and the share of agriculture decreased also slowly. E.g. the share of industrial employment in the total increased from 8.1 per cent in 1934 to 10.3 per cent in 1946 in Bulgaria, from 17 per cent in 1910 to 20.1 per cent in 1941 in Hungary and from 16.9 per cent in 1913 to 18.8 per cent in 1950 in Poland. The rapid change in structure started after World War II.

The absolute numbers of agricultural employment increased in the Soviet Union up to 1928, in Bulgaria, Yugoslavia and Hungary till the years after the war (the data for Poland are not comparable). *In the European socialist countries the rapid change in economic structure and the decline in the absolute numbers of agricultural employment are the consequences of industrialization.*

As can be seen from Table 1, it is characteristic for the developing countries that the ratio of agricultural employment is high and that of manufacturing is low; the share of the latter very slowly increased up to about 1950; in South and East Asia it even declined: from 9.9 per cent in 1900 to 7.3 per cent in 1950. The same tendencies can be found when individual countries are examined. In India, industrial employment fell from 12.4 per cent in 1911 to 10.5 per cent in 1931 and 9.5 per cent in 1951 and started to grow only later. In Mexico, the ratio was 10.9 per cent in both 1921 and 1940, 12.7 per cent in 1950 and 15 per cent in 1960. In Turkey, there has been hardly any change since 1935. *Thus, industrialization affecting the economic structure in the developing countries started to any serious extent only in the mid-50-ies.*

Of course, it must be remembered that the population of the developing countries has grown, particularly in recent times, much quicker than it did in the advanced capitalist countries at the start of their industrialization. The annual average of population increase in these countries was 0.4—0.8 per cent at the end of the 19th and the beginning of the 20th centuries, while the population growth in the developing countries now exceeds the annual 2 per cent.

This undoubtedly affects the changes in economic structure and prolongs the extensive growth of agriculture, that is, the period when agricultural employment is growing in absolute terms.

The main tendencies of changes in the internal structure of industry are generally known, and will not be dealt with here in detail [10]. They can be outlined as follows: The heavy industry usually grows quicker than the light and food industries. In the course of growth, first metallurgy and engineering were the dynamic branches, later metallurgy increased but slowly, and chemical industry has eventually become the most dynamic branch of industry.

Of course, there are many deviations from this general scheme. At the start of industrialization the "leading sector" may differ from country to country. In England, e.g., initially the textile industry was the leading sector, giving impulses to machine building and indirectly also to transports, and it was the most important branch in export. In Germany, however, no such part was played by the textile industry, even at the start of industrialization in the last century, since this had to cope with the British competition; engineering showed a rather rapid development, partly owing to state subsidies, railway construction, etc. and became an important export branch.

Before World War I, the textile industry in Hungary was underdeveloped owing to the competition put up by the Austrian industry, but a relatively modern machine building and metallurgy shaped up partly to supply domestic railway construction and mining; in compliance with the agricultural character of the country the share of the food industry was considerable. After World War I, — owing to protective customs duties — the share of the textile industry jumped from the 4.8 per cent in 1913 to 12.6 per cent by 1925 (calculated for the 1920 area of the country [11]).

In highly industrialized countries the share of the heavy industy is usually greater than in others, though this ratio is not an unequivocal indicator of the industrial development level. To quote a few examples: the share of the heavy industry (including mining) in 1964 was 38.2 per cent in Ireland, 48.8 per cent in Austria, 72.4 per cent in the UK and 70.7 per cent in the GFR. [12]

Industrialization in the socialist countries first led to the rapid develop. ment of the heavy industry, mainly metallurgy and engineering. A UN study examining the "typical" pattern by branches of industry in several countries as a function of economic development levels (in terms of per capita national income) and the number of population, established that, on an average, the shares of metallurgy and engineering are high in the industry of the socialist countries while those of the textile and the food industries are relatively low [13]. In Hungary, e.g. the share of the heavy industry was 70.5 per cent in 1964, that is, about the same as in the industrially more advanced countries, The share of engineering is also characteristic of the development level: it was 15.5 per cent in Ireland, 14.3 in Greece, 21.0 per cent in Finland, 23.6 per cent

in Austria, 34.5 in the FRG, 36.9 per cent the UK and 32.1 per cent in Hungary in 1964.

The industrial structure of developing countries may also be observed to follow that of the developed ones. The structural change is quicker than economic development, particularly in large countries. In other words, the internal structure of industry approaches that of the developed industrial countries quicker than the general growth of the economy. In India, e.g. the share of engineering within industry amounted to about 20 per cent as early as in 1962, in Brazil similarly to 20 per cent in 1963 and this is undoubtedly higher than it was in the now developed countries at similar levels of economic development; it attains or approaches the proportions of much more advanced capitalist countries (e.g. of Finland or Austria). The situation is, on the whole, similar with respect to the heavy industry: in India its share is almost 50 per cent and in Brazil more than 50 per cent.

c) *The large-scale and massive application of scientific and technological achievements* coincided with the initial stage of industrialization, with the industrial revolution in the now developed capitalist countries. In this respect it is advisable to distinguish two stages. In the *preliminary stage* of industrialization the material and the socio-political conditions of applying modern technology came into existence. Material conditions should be understood to mean scientific and technological discoveries, or rather, their wide diffusion; socio-political conditions, to refer to a system or changes in the system, enabling modern technology to be more generally applied. In the course of history, however, this latter date did not necessarily coincide with *the massive spread of modern technology, with the predominance of large-scale production methods* continuously developing within industry and relying on the application of modern scientific results. A characteristic feature of the first industrializing, pioneering countries is that this preliminary stage is short, the appearance and the spread of modern technology can hardly be told apart. It was precisely the possibility of the spreading of new inventions, the social demand that brought them about and made possible that new ideas should find application, should be experimented with and thereby mature and spread (without these, an invention would be, at best, a technical curiosity to be soon forgotten).

If we can speak at all about a preliminary stage in England, it may have lasted 10—20 years, not more. It was longer in all the other late-industrializing countries of Western Europe. In Germany, the industrial revolution began in the thirties of the 19th century.* Thus, the preliminary stage lasted about 30—40 years, since the material conditions for the application of the new technology were present as early as the end of the 18th century, mainly under the impact of the industrial revolution going on in England. The general economic

* According to Mottek precisely in 1834. [14]

and cultural development level in Germany was favourable for the application of new technological methods, and the use of machines, mainly of cotton-weaving machines and steam engines started. But a greater spread of manufacturing industry was hindered by the Napoleonic wars and by the tiny states, that constituted feudal Germany and split up its economy. — Therefore, industrialization could not be started without surmounting postwar difficulties liquidating the feudal framework and mainly without creating an economic unity of Germany through the Zollverein in 1834.

In the United States of America, the political and social conditions for industrialization were created by the War of Independence and the separation from England. Production based on the use of machinery made its appearance in the late 18th and the early 19th centuries in America, but the quick spread of factory methods started only about 1820, thanks to the protective customs duties introduced in 1816. Like in England, industrialization evolved mainly in the textile industry, which had a central importance for stimulating other branches, mainly machine building.

France, where in the wake of the British industrial revolution the conditions of industrialization had been created already in the late 18th and the early 19th centuries, lagged behind England and even behind Germany, in spite of the bourgeois revolution. It is difficult to establish the exact date when industrialization started or to link it to some political or economic event. We will, however, not err too much if we put the real start of industrialization around the mid-19th century, when industrial output almost doubled in 30 years, while industrial employment increased by only 40 per cent. In Belgium, industrialization evolved earlier, in the Scandinavian countries later than in France and Germany. At any rate, we may establish that *the preliminary stage of industrialization was concluded before the end of the 19th century in both Western Europe and the USA — in the leading countries even in the first half of the 19th century — and the mass production and application of machines, of mechanical large-scale factory production started.*

A general characteristic of industrialization — somewhat neglected by science — is that, with the exception of England, every country was a "late, industrializing country" for a longer or shorter period. The late industrializing countries took over the technological methods, and partly also the economic ones, from the pioneer country or countries. Compared to England the other West-European countries and even the United States were late in industrialization; but compared to the European socialist countries and, particulary, the developing ones, the late-comers are "early industrializing" countries.

In the other countries of the world, both the preliminary stage of industrialization and industrialization proper (that is, the mass use of machinery techniques) started later. In Eastern Europe the preliminary stage started, in general, with the liquidation of feudalism. In Hungary, e.g., it began after the

abolition of serfdom, or rather after the compromise of 1867 with the Hapsburgs. In these countries, however, the system of latifundia and the reactionary policies related to them (possibly other circumstances, as e.g. Hungary's political dependence on Austria) hindered industrial development. Real and fast development started only with socialist industrialization.

In the developing countries, the preliminary stage started with colonization which abolished the old social framework hindering the application of modern technology and allowed the use of modern technology, though in a narrow scope and serving mainly the interests of the capitalist or the colonizing country. This applies particularly to Africa and Asia.

The late industrializing countries apply the technology established in industrialized countries. *This task is the more difficult, the later industrialization starts, the longer the preparatory stage lasts and the greater the difference in development levels.* Fast development cannot be achieved by applying the technology initially used by the pioneer country; it requires modern technology existing in the given period and this results in certain contradictions which are difficult to solve. Modern technology is, namely, more capital-intensive (per worker) than the old one, its application requires greater skill, special qualification and training; the late industrializing countries, however, are poor, short of capital and of skilled and qualified labour.

This problem of late industrialization had to be faced also by the socialist countries. Speaking in general terms, apart from problems of detail, their industrialization strategies — relying on the social ownership of the means of production and on economic planning — were aimed partly at a maximum utilization of existing resources, meaning mainly manpower, and at putting them to productive use and at raising the quality of labour, particularly industrial labour, by training skilled workers and engineers. In the early stage of industrialization this was carried out mainly by the non-conventional means of *adult education*, that is, by re-training during work, on evening courses, etc. Another aspect of development strategy was to secure a high rate of accumulation and to channel a considerable part of accumulation into industry. Finally, efforts were made to utilize intensively the capacities created by introducing several shifts, and to eliminate seasonal fluctuations and other uncertainties with the aid of planning. — Obviously, a development of this type, which has essentially solved the basic task, namely, rapid industrialization, could not be carried on without losses. Quick mobilization of labour resources involved losses, since there was no time for proper training; losses were due to quick training, since the efficiency of various courses was not high, a great part of those re-trained left their new trades. Also the intensive utilization of capacities involved losses, though in an indirect and less measurable way, inasmuch as the flexibility of the economy, the adaptive capacity of the productive apparatus to changing requirements was reduced.

As is known, the growth of the scale of production, i.e. concentration, was one of the general forms of technological development. It may be observed that the late industrializing countries frequently build up a productive apparatus highly concentrated compared to their general development level. This occurred already in capitalist Hungary. Before the First World War Hungarian industry, which lagged behind in productive capacity and the volume of industrial production, and which had not yet really entered the stage of rapid industrialization, attained and even surpassed more developed capitalist countries with respect to the concentration of her industry. For instance, in Germany 36 out of 100 industrial workers were engaged in enterprises employing more than 50 workers, in Austria this figure was 25, and in Hungary 44. In Germany 6.6 per cent of industrial workers were employed in plants with more than 100 workers, in Hungary this was 10 per cent. The situation was similar in respect of mechanical energy, if calculated by HP per worker: the Hungarian figures almost attain the British data and are higher than the French or the German ones [15].

Socialist industrialization was accompanied by even greater concentration. A statistical measurement, and particularly, an international comparison of concentration is of course a rather difficult task, because the various data (e.g. average number of workers in a plant, or the distribution of plants by size) are not necessarily changing in the same way and do not give the same results. But the general tendency is unequivocal. The development of the average number of workers between 1942 and 1965 in Hungarian manufacturing plants is, e.g., a characteristic indicator:

Average number of workers per plant [16]

1942	1955	1960	1965
97	169	177	195

At any rate, it may be established that in the period of socialist industrialization, concentration quickly increased in Hungary — similarly to the other socialist countries. The extent of concentration in Hungary is high by international standards. The share in employment in plants with more than 1000 workers was 51 per cent in Hungary (1965), 39.8 per cent in the FRG (1964), 30.3 per cent in Italy (1961), 23.3 per cent in Belgium (1963) and 16.9 per cent in Finland (1963). — Beside its unquestionable advantages, concetration involved also certain disadvantages — at least in Hungary — because a large-scale plant cannot adapt itself to changing demand as quickly and flexibly as a small-scale one. The relative importance of advantages and disadvantages, of course, varies by branches.

As far as the situation can be surveyed on the basis of statistical data, concentration, as a result and a means of applying modern technology, increases also in the developing countries, though its extent is very much smaller than in the developed capitalist and, particularly, in the socialist countries. The ratio of the small-scale handicrafts is particularly great. It may be unequivocally stated that with economic and industrial development the share of small-scale industries and handicrafts decreases while the extent of concentration increases. According to available data, the share of employment in factories with more than 100 employees is 51 per cent in the more developed Latin American countries; 51 per cent in the moderately developed ones and 35 per cent in those on the lowest level of development. — The Hungarian data, on the whole comparable with these, show 80 per cent for 1945 and 85 per cent for 1960.*

From what has been said it may be established that in the developing world, particularly in the Afro-Asian countries, industrialization proper started only after the liquidation of the colonial system, that is, about the middle of the 20th century. A general characteristic of industrialization is the growth of per capita national income and the transformation of the economic structure In general, countries embarking late on the road of industrialization, thus the. European socialist countries and the developing countries alike, have adopted and continue to adopt a higher technical level than that of the now developed countries at the start of their own industrialization. As a consequence, both the national economic and the industrial structure (macro-structure) quickly approached that of the advanced countries. In the socialist countries this was a consequence of deliberate preferences, but in the developing countries this was due precisely to the adoption of more advanced technology. This tendency is likely to assert itself also in the future.

Owing to technological progress, it is potentially possible for late industrializing countries to jump over certain stages, to use more up-to-date technology right at the start not only with respect to a larger-scale production, or higher technological equipment of labour, but also as regards the character of the technology employed. It seems, for instance, that in the developing countries — at least in some of them — more up-to-date transport and communication techniques are being introduced, in so far as trucks, cars and air borne transport play a greater role than the capital-intensive railway investments with long pay-back periods. In the developing countries, also energy supply is built to a greater extent on hydrocarbons, and coal mining has a lesser significance than in the developed capitalist or the socialist countries.

* Considered as factories are plants with more than 19 employees in Hungarian statistical practice, while Latin American statistics set the limit at 5 employees. By making the necessary corrections, the difference between the two sets of data would be even greater.

(This may, of course, also have geological reasons.) It seems, however, that later the structures will come closer to one another. A certain development of railways will become necessary also in the developing countries, and also coal mining will evolve. This is indicated at least by the fact that in the developed capitalist countries coal mining has stagnated or been reduced in recent years, while it has grown in the developing countries at an annual rate of 5 per cent. Apart from the effect of natural, geological conditions, the main tendencies concerning the branch (macro-)structures, is that the patterns of industry in individual countries approximate one another. This is of considerable importance because the importance of specialization deriving from microstructures (product structure) is playing an ever greater role in the international division of labour.

Both socialist and developing countries are characterized by a quick growth of industrial production which, in the late industrializing countries, is due not, or not only to spontaneous economic development but also to political decisions: it is a tool in the service of economic growth, national independence and social progress.

Thus, structural change and the rate of industrial development display similar tendencies in both the socialist and the developing countries. But this is not necessarily the case regarding the concentration of plants.

The social conditions and the role of the state in the capitalist countries are different from what they are in the developing countries. According to the ideology originally prevailing in the capitalist countries, progress is best served if the state interferes the least in the economy; the interference of the state, its economic role, and its planning activity developed only later. In the developing countries, no such ideas hinder the economic role of the state from asserting itself, on the contrary, planning is an indispensable tool of economic growth while in the developed capitalist countries planning is a consequence of development.

In the socialist countries, planning is closely related to the social ownership of the means of production. In the developing countries, however, the scope of social ownership, as well as the efforts to increase the role of social ownership widely differ. Fast concentration in the socialist countries was also a consequence of the social ownership of the means of production. In the developing countries — if not the concentration process itself, which is objectively necessary, but — the extent of concentration depends partly on the future development of social ownership in industry, partly on planning and on economic policies. It is fully conceivable that tendencies differing from country to country and from industry to industry will develop in this respect. In India, e.g., the state-owned enterprises in the heavy industry have acquired an important role and there are considerable efforts at concentration. In the light industry, however, particularly in cotton weaving, Indian planning and economic policy aims precisely at maintaining and even expanding small-scale industry and cottage industry and this obviously is a tendeney opposed to concentration.

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НЕКОТОРЫЕ ХАРАКТЕРНЫЕ ЧЕРТЫ ИНДУСТРИАЛИЗАЦИИ В РАЗВИВАЮЩИХСЯ, РАЗВИТЫХ КАПИТАЛИСТИЧЕСКИХ И СОЦИАЛИСТИЧЕСКИХ СТРАНАХ

Дь. ЦУКОР

Автор сравнивает процессы индустриализации, которые произошли и происходят в развитых капиталистических, социалистических и развивающихся странах. Цель сравнения заключается, с одной стороны, в установлении того, происходит ли на самом деле индустриализация развивающихся стран с точки зрения воздействия этого процесса на преобразование и модернизацию их экономики и, с другой стороны, в извлечении выводов о перспективах промышленности в развивающихся странах.

Сравнение производится в следующих трех главных аспектах:

а) *Рост национального дохода в целом и в расчете на душу населения.*

До промышленной революции национальный доход в целом возрастал пропорционально населению или в крайнем случае лишь незначительно быстрее. Со времени промышленной революции и в результатепос ледней в странах, вступивших на путь индуст-

ризализации в значительной мере ускорился ход экономического развития и, следовательно, рост национального дохода в целом и в расчете на душу населения, хотя темп последнего вплоть до второй мировой войны с точки зрения нынешних масштабов был сравнительно медленным; годовой прирост на душу населения не превышал 1—2%. После второй мировой войны для развития капиталистических стран был характерен 3—4 процентный годовой прирост (хотя имеются как значительно более медленные, так и значительно более быстрые темпы), а в социалистических странах годовой прирост составлял около 5,5—6,5 процентов. Экономический уровень развивающихся стран до середины столетия практически находился в состоянии застоя. По сравнению с этим, достигнутый в течение истекших двух десятилетий примерно 2%-ный годовой прирост означает решающее изменение. Это, правда, более медленный темп роста, чем в социалистических или развитых капиталистических странах, но не медленнее роста, имевшего место в старых индустриальных государствах, — при значительно меньшем приросте населения, — в начальный период их развития. Следовательно в этом отношении процесс индустриализации начал оказывать воздействие на ускорение экономического роста этих стран.

Темпы промышленного развития в странах, рано создавших промышленность, — хотя прежние данные содержат много неточностей, — на протяжении длительного периода не превышали 2—3% в год. По сравнению с этим в государствах, позже вступивших на путь индустриального развития, — в социалистических и развивающихся странах, — темпы развития промышленности являются гораздо более высокими; в развивающихся странах с 1950 года они составляют примерно 8% в год.

б) *Изменение экономической структуры.*

Историческая тенденция процесса, — а именно сокращение удельного веса первичного сектора (в национальном доходе и занятости) и рост удельного веса сперва вторичного, а потом и третичного сектора, — является общеизвестной. В начале индустриализации примерно 80% занятости сосредоточено в первичном секторе, главным образом в сельском хозяйстве. Это соотношение в западных странах, вступивших первыми на путь индустриализации, к концу 19 века сократилось примерно до 50%; в настоящее время в наиболее развитых странах оно составляет около 10%. Доля обрабатывающей промышленности в тот же период возросла с 20 до 30—35%. Аналогичное изменение наступило также и в результате социалистической индустриализации.

В развивающихся странах индустриализация, — с точки зрения структуры народного хозяйства, — более определенным образом началась в середине 20 века, до 1950 года доля перерабатывающей промышленности возрастала медленно, а в Южной и Восточной Азии даже сократилась. Быстрый естественный прирост населения замедляет изменение народхозяйственной структуры в развивающихся странах. В старых индустриальных государствах в конце 19 и начале 20 века годовой прирост населения составлял 0,4—0,8%, а в развивающихся странах во второй половине 20 века превышает 2%. Это обстоятельство тормозит сокращение доли сельскохозяйственной занятости.

Известной является также и тенденция изменения внутренней отраслевой структуры промышленности, а именно более быстрый рост тяжелой промышленности и сравнительно более медленный рост легкой и пищевой промышленности. Внутри тяжелой промышленности ранее динамичными отраслями являлись металлургия и машиностроение, а теперь машиностроение и химическая промышленность. В ходе истории в отдельных странах имеют место значительные отклонения от общей схемы, так в начальной период индустриализации, например, в Англии выдающуюся роль играла текстильная промышленность, в Германии, как раз из-за высокого уровня развития английской текстильной промышленности, эта роль была менее определенной, но сравнительно рано получило значительное развитие машиностроение.

Аналогичной является основная тенденция структуры промышленности в развивающихся странах. Характерно, что внутренняя структура промышленности быстрее приближается к промышленной структуре развитых стран, чем уровень общего экономического развития.

в) *Широкое и массовое применение достижений* науки и техники является одной из характерных черт промышленной революции и, соответственно, индустриализации. В этом отношении мы различаем два периода. Первым является подготовительный период, — его содержание заключается в создании предметных и общественно-политических предпосылок, — который не всегда совпадает с фактическим массовым внедрением современной техники и всеобщим распространением крупнохозяйственных методов. Для первых индустриальных государств является характерным сравнительно короткий подготовительный период; в Западной Европе и Соединенных Штатах он закончился к концу 19 века.

В других странах подготовительный период начался позже и был более продолжительным. Например в Восточной Европе подготовительный период начался после окончания феодальной эпохи, так в Венгрии после отмены крепостного права или, вернее, после 1867 года, причем система крупных поместий и связанная с ней реакционная политика (или другие обстоятельства) тормозили индустриальное развитие. Подлинно быстрый прогресс принесла только социалистическая индустриализация.

В развивающихся странах начало подготовительного периода связано с колониализмом, поскольку последний разбил традициональные общественные рамки и привел ко внедрению, — правда в небольших масштабах, — современной техники. Однако колониализм, подчинив колонии интересам метрополий, препятствовал развертыванию индустриализации, так что подъем последней и связанного с ней массового применения современной техники мог наступить только после ликвидации колониального ига.

Страны, вступающие позднее на путь индустриального развития, используют сравнительно более прогрессивную технику, чем старые индустриальные государства в аналогичный период своего экономического развития (который можно охарактеризовать с помощью национального дохода на душу населения). Это можно наблюдать, с одной стороны, на примере промышленной структуры и, с другой стороны, концентрации. Структура промышленности в странах, которые позднее вступили на путь индустриального развития, является «более современной», а их промышленности присуща более высокая степень концентрации, чем это имело место в случае нынейшних развитых стран на аналогичном этапе их экономического развития. Эти тенденции, вероятно, сохранятся и в будущем.

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F. KOZMA

A SYSTEM OF REGIONAL ECONOMIC TABLES FOR ANALYZING INTERNATIONAL ECONOMIC COOPERATION

The author suggests a regional economic table capable of observing the macro-economic interrelations of the material processes of international economic cooperation. The system consists of a) Input-output tables converted to foreign trade prices, b) Regional Balances of Material Interrelations, c) Balances of Regional Foreign Trade Relations, and d) Matrices of export and import efficiency.

The System of Regional Economic Tables (from here on RET system) is a macro-economic data system to study the material flows and achievements of regional economic cooperation; it serves to observe and forecast the fundamental interrelations of the material flows taking place within a region.

The basic tables of the RET system are the input-output tables converted to world market prices. The method of conversion to world market prices of the I/O tables was solved by Gyula Kovásznai and his colleagues at the Institute of Economics, Hungarian Academy of Sciences [1]. Trial calculations for 1960 prove that their method is fundamentally correct, and at most a few details of secondary importance (prices applied, branch desaggregation, etc.) require correction. The I/O tables converted to world market prices can be extrapolated for about four years without any greater distortion on the basis of the gross production value, pattern of production costs, and national income time series. Therefore, it is sufficient to convert the I/O tables whenever the tables of the individual countries are published.

The compared I/O tables of the individual countries are linked by the Regional Balances of Material Interrelations (RBMI). It is expedient to work these out on the national economic and branch levels either annually or every second year.

The structure of RBMI is as follows.

They are prepared in matrix form, similarly to the I/O tables. In their rows (horizontally) we mark purchasers (input, imports), while the columns contain sales (output, exports), and the point where the series and columns meet (in the diagonal cells) contains the sums of domestic consumption of home products. Table 1 shows a RBMI related to the CMEA* and calculated for

* For the sake of uniformity our examples hereinafter will refer to the CMEA countries. Of course the calculations can be made for any regional group.

branch (or product) "A". The sectors have been filled in schematically, with algebraic signs. The following are a few examples referring to Hungary, in order to make the table more comprehensible:

x_1y_2 — Bulgaria's imports from Hungary = Hungary's export to Bulgaria;

x_2y_1 — Bulgaria's exports to Hungary = Hungary's imports from Bulgaria;

x_2y_2 — internal utilization (or output) of Hungary's domestically produced goods;(**)

$y_2\sum_{1}^{7-n}x$ — Hungary's total exports to the CMEA countries;

$y_2\sum_{1}^{7}x$ — Hungary's total output for the entire region (including her domestic market)(**);

x_8y_2 — Hungary's exports to third countries;

$y_2\sum_{1}^{8}x$ — Hungary's total output (**);

Table 1

Branch "A" Regional Balance of Material

	From				
		Bulgaria	Hungary	German Democratic Republic	Poland
To		y_1	y_2	y_3	y_4
Bulgaria	x_1	x_1y_1	x_1y_2	x_1y_3	x_1y_4
Hungary	x_2	x_2y_1	x_2y_2	x_2y_3	x_2y_4
GDR	x_3	x_3y_1	x_3y_2	x_3y_3	x_3y_4
Poland	x_4	x_4y_1	x_4y_2	x_4y_3	x_4y_4
Romania	x_5	x_5y_1	x_5y_2	x_5y_3	x_5y_4
USSR	x_6	x_6y_1	x_6y_2	x_6y_4	x_6y_4
Czechoslovakia	x_7	x_7y_1	x_7y_2	x_7y_3	x_7y_4
CMEA foreign market total	$\sum_{1}^{7-n}x$	$y_1\sum_{1}^{7-n}x$	$y_2\sum_{1}^{7-n}x$	$y_3\sum_{1}^{7-n}x$	$y_4\sum_{1}^{7-n}x$
CMEA regional market total	$\sum_{1}^{7}x$	$y_1\sum_{1}^{7}x$	$y_2\sum_{1}^{7}x$	$y_3\sum_{1}^{7}x$	$y_4\sum_{1}^{7}x$
3rd countries	x_8	x_8y_1	x_8y_2	x_8y_3	x_8y_4
Total output	$\sum_{1}^{8}x$	$y_1\sum_{1}^{8}x$	$y_2\sum_{1}^{8}x$	$y_3\sum_{1}^{8}x$	$y_4\sum_{1}^{8}x$

$\overset{7-n}{x_2\Sigma y}$ — Hungary's total imports from CMEA countries;

$\overset{7}{x_2\Sigma y}$ — Hungary's total utilization of regional resources (including her own) (**);

x_2y_8 — Hungary's imports from third countries;

$\overset{8}{x_2\Sigma y}$ — Hungary's total output.

The RBMI tables computed for the different countries are summarized in a synthetic table with the social product utilized within the country placed in the diagonal cells (x_ny_n), total exports in the columns (y), and total imports in the rows (x).

The RBMI tables can be worked out in any arbitrary break-down, depending on the details in the statistical sources. In the case of homogeneous commodity quantities (e.g. electric energy, oil, cellulose, wheat) they can also be

Interrelations (RBMI "A")

	From					
Romania	USSR	Czechoslovakia	CMEA foreign market total	CMEA regional market tota l	3rd countries	Total input
y_5	y_6	y_7	$\overset{7-n}{\Sigma x}$	$\overset{7}{\Sigma x}$	y_8	$\overset{8}{\Sigma x}$
x_1y_6	x_1y_6	x_1y_7	$x_1\overset{7-n}{\Sigma y}$	$x_1\overset{7}{\Sigma y}$	x_1y_8	$x_1\overset{8}{\Sigma y}$
x_2y_5	x_2y_6	x_2y_7	$x_2\overset{7-n}{\Sigma y}$	$x_2\overset{7}{\Sigma y}$	x_2y_8	$x_2\overset{8}{\Sigma y}$
x_3y_5	x_3y_6	x_3y_7	$x_3\overset{7-n}{\Sigma y}$	$x_3\overset{7}{\Sigma y}$	x_3y_8	$x_3\overset{8}{\Sigma y}$
x_4y_5	x_4y_6	x_4y_7	$x_4\overset{7-n}{\Sigma y}$	$x_4\overset{7}{\Sigma y}$	x_4y_8	$x_1\overset{8}{\Sigma y}$
x_5y_5	x_5y_6	x_5y_7	$x_5\overset{7-n}{\Sigma y}$	$x_5\overset{7}{\Sigma y}$	x_5y_8	$x_5\overset{8}{\Sigma y}$
x_6y_5	x_6y_6	x_6y_7	$x_6\overset{7-n}{\Sigma y}$	$x_6\overset{7}{\Sigma y}$	x_6y_8	$x_6\overset{8}{\Sigma y}$
x_7y_5	x_7y_6	x_7y_7	$x_7\overset{7-n}{\Sigma y}$	$x_7\overset{7}{\Sigma y}$	x_7y_8	$x_7\overset{8}{\Sigma y}$
$y_5\overset{7-n}{\Sigma x}$	$y_6\overset{7-n}{\Sigma x}$	$y_7\overset{7-n}{\Sigma x}$	$\overset{7-n}{\Sigma x}\ \overset{7-n}{\Sigma y}$	$\overset{7-n}{\Sigma x}\ \overset{7}{\Sigma y}$	$y_8\overset{7-n}{\Sigma x}$	$\overset{7-n}{\Sigma x}\ \overset{8}{\Sigma y}$
$y_5\overset{7}{\Sigma x}$	$y_6\overset{7}{\Sigma x}$	$y_7\overset{7}{\Sigma x}$	$\overset{7}{\Sigma x}\ \overset{7-n}{\Sigma y}$	$\overset{7}{\Sigma x}\ \overset{7}{\Sigma y}$	$y_8\overset{7}{\Sigma x}$	$\overset{7}{\Sigma x}\ \overset{8}{\Sigma y}$
x_8y_5	x_8y_6	x_8y_7	$x_8\overset{7-n}{\Sigma y}$	$x_8\overset{7}{\Sigma y}$	x_8y	$x_8\overset{8}{\Sigma y}$
$y_5\overset{8}{\Sigma x}$	$y_6\overset{8}{\Sigma x}$	$y_7\overset{8}{\Sigma x}$	$\overset{8}{\Sigma x}\ \overset{7-n}{\Sigma y}$	$\overset{8}{\Sigma x}\ \overset{7}{\Sigma y}$	$y_8\overset{8}{\Sigma x}$	$\overset{8}{\Sigma x}\ \overset{8}{\Sigma y}$

prepared in physical units of measurement. In the case of complex volumes of products it is expedient to work them out in foreign trade prices. The diagonal ($x_n y_n$) sectors can be filled in with the aid of I/O tables converted to world market prices or, in some cases, with data on internal utilization (production-exports) using special coefficients between international and national currencies.

RBMIs can also be prepared without the diagonal sectors ($x_n y_n$), and in this case only the international commodity relations of the region can be analyzed, without taking internal resources and output into consideration. We call this simplified matrix the Balance of Regional Foreign Trade Relations (BRFTR).* The advantage of the BRFTR tables is that they can be prepared quickly, since they do not rely on I/O tables converted to roubles, or other common currency. Their disadvantage is that they cannot measure the relative size of external markets and resources (compared to the mass of the domestic markets) or of relationships. (They do not contain the quantities marked in the list by asterisks "**".)

Simple calculations using the RBMI and BRFTR tables

The simplest way to use the RBMI tables is to measure the intensity of relationships. The indices are reviewed below.

a) The ratio of the product volume sold on the markets of the countries of the region to the whole of output, to output within the region, or to domestic output used on the home market:

$$\overset{8}{\underset{1}{I}} = \frac{y_n \overset{7-n}{\underset{1}{\sum}} x}{y_n \overset{8}{\underset{1}{\sum}} x}; \qquad \overset{7}{\underset{1}{I}} = \frac{y_n \overset{7-n}{\underset{1}{\sum}} x}{y_n \overset{7}{\underset{1}{\sum}} x}; \qquad \overset{n}{\underset{1}{I}} = \frac{y_n \overset{7-n}{\underset{1}{\sum}} x}{x_n y_n}$$

or a desaggregation of these, e.g.

$$\overset{8}{\underset{1}{I}} = \frac{x_1 y_n}{y_n x} + \frac{x_2 y_n}{y_n x} + \ldots + \frac{x_{n-1} y_n}{y_n x}.$$

The break-down is a comparison of the proportion of commodity volume sold on the markets of the individual countries, to the approporiate aggregate outputs.

* UN Foreign Trade Statistics use similar tables.

b) The ratio of the total volume of imports from the individual countries of the region to the whole of inputs, to inputs from within the region, or to home consumption of domestically produced products:

$$\overset{8}{\underset{1}{I}} = \frac{x_n \overset{7-n}{\underset{1}{\sum}} y}{x_n \overset{8}{\underset{1}{\sum}} y}; \qquad \overset{7}{\underset{1}{I}} = \frac{x_n \overset{7-n}{\underset{1}{\sum}} y}{x_n \overset{7}{\underset{1}{\sum}} y}; \qquad \overset{n}{\underset{1}{I}} = \frac{x_n \overset{7-n}{\underset{1}{\sum}} y}{x_n y_n}$$

The aggregate index number — similarly to the previous one — can be split up into bilateral relationships, and then we receive the relationship between imports from the cooperating countries and total domestic use originating from within the region.

c) From the RBMI table, by dividing the different sectors with one another the relative size of an arbitrary market or source of supply compared to the aggregated market (source of supply) can be worked out.

The market (or source of supply) may be the domestic market of an individual member country, or it can be bilateral shipment. The aggregated market (source) may be the total output (input) of the region, (including the total ofdomestic, regional and third markets, but it may also be any of these taken separately).

By way of example. we will review some of these:

$$\frac{x_2 \overset{7-n}{\underset{1}{\sum}} y}{\overset{7-n}{\underset{1}{\sum}} x \; \overset{7}{\underset{1}{\sum}} y} = \text{absorptive capacity of the Hungarian market as percentage of the total output of the CMEA countries.}$$

$$\frac{x_2 \overset{8}{\underset{1}{\sum}} y}{\overset{8}{\underset{1}{\sum}} x \; \overset{8}{\underset{1}{\sum}} y} = \text{Hungarian demand for goods from CMEA countries as percentage of the entire regional (domestic + intercountry) markets of the CMEA countries.}$$

The BRFTR tables can be used to make the simplest calculations for the distribution of regional turnover, for measuring dispersion, according to bilateral relations or sub-regions:

$$\frac{x_1 y_2}{x y} + \frac{x_7 y_2}{x y} + \ldots + \frac{x_n y_m}{x y} + \ldots + \frac{x_1 y_6}{x y} = 1{,}00$$

The members of the series express, in the form of percentages of total input, our output within the region, the international shipments within the given bilateral relationship. By placing the percentage figures into the sectors

of the matrix we receive the network of the "field intensity" of the different bilateral turnover relations:

$\frac{x_6 \sum_1^7 y}{\sum_1^{7-n} x \sum_1^7 y}$ = percentage of imports from the USSR (of a given group of commodities) in the mass of commodities belonging to the given group appearing in the CMEA regional market,

$\frac{x_6 y_2}{x_6 \sum_1^{7-n} y}$ = share of Hungarian exports in USSR regional imports,

$\frac{x_6 y_2}{x_6 \sum_1^8 y}$ = weight of the volume of imports stemming from Hungary compared to the size of the USSR domestic market.

The data of the RBMI and BRFTR tables may be compared to other characteristic data of the countries from which they stem, and of the countries where they are destined to. E.g. the data of the tables are suitable:

a) for a comparative measurement of the per capita or per employee values of input and output, e.g.:

$\frac{x_6 y_2}{L_2}$ = Hungarian (e.g. foodstuff) exports to the Soviet Union per Hungarian capita;

$\frac{x_6 y_2}{L_6}$ = per USSR capita imports to the Soviet Union of Hungarian origin (e.g. industrial consumer goods)

$\frac{x_2 y_6}{F_2}$ = imports from the Soviet Union (e.g. of materials) per Hungarian industrial employee;

$\frac{x_2 y_6}{F_6}$ = exports to Hungary (e.g. of materials) per USSR industrial employee;

b) for the measurement of the value of input and output per unit of national income, investment volume, production volume, e.g.:

$\frac{x_1 y_6}{B_1}$ = USSR exports (e.g. of investment items) to Bulgaria as percentage of the Bulgarian investment volume;

$\frac{x_1 y_6}{T_6}$ = USSR exports to Bulgaria (e.g. of machinery and equipment) as percentage of the volume of Soviet engineering production;

$\frac{x_6 y}{F_8}$ = USSR imports (e.g. of industrial consumer goods and foodstuffs) from the CMEA countries as percentage of the consumption fund of the USSR national income.

While the production data of homogeneous articles and of manpower can be used in physical form in the denominators, aggregated production, national income, etc. data can, obviously, only be applied for evaluation and comparison in a form converted to world maket prices.

This means that the RET tables can be used to perform many, comparatively simple calculations which can provide important information

— about the degree of "openness" of the different economies, about the extent of intertwining as well as on the weight of the region and third countries as supply bases and markets for sales;

— about the absolute size of the markets within the region, the intensity of intertwining among the national markets, with a view to the *de facto* participation rate of the economic potential of the region in the process of integration;

— on differences in the strength of relations among the national markets, of their depth in individual bilateral or sub-regional relations;

— on the pattern of intertwining and the key branches in cooperation;

— on the size of mutual dependence, on bi- and multi-lateral inequalities.

All of these simple calculations provide, even if they refer to a single year, most interesting data to aid a deeper understanding of the phenomena of international cooperation. If, however, data on bilateral turnover between the countries of the region, and domestic use of products manufactured at home, are available in longer time series, there is nothing to prevent dynamization of either the RBMI or the BRFTR tables. In this case the coordinates are replaced by the $\frac{(x \cdot y)\text{n}}{xy/\text{n}}$ -series growth indices, which are expressed in the form of basis indices or indices of annual average growth. Similar calculations can be completed with dynamic matrices, as with the static matrix shown in the first table, with the difference that in the latter case we do not receive the difference in the magnitude of flow volume as a result, but their inequalities to the extent of their deviation in time. Therefore, in the x_2y_2 field of the first table we receive the average annual growth rate of Hungary's domestically produced goods for internal consumption; with the division of the values in fields x_4y_1 and x_1y_2 we receive the increased or decreased growth rate of exports from Bulgaria to the Soviet Union, in comparison with the exports of Hungary to the same destination, etc., etc.

Using the I/O tables converted to world market prices for analyzing cooperation

The I/O tables make the study of cooperation among the different countries possible through:

a) efficiency indices,

b) measuring differences in ability to compete,

c) measuring the advantages of cooperation,

d) comparison of the results of efficiency calculations,

e) dynamization of efficiency calculations.

a) *Efficiency index*

The efficiency index is formed with the aid of the I/O table converted to world market prices. The comparative tables express the gross production values, material cost elements, and the volume of fixed assets in identical units of measurement for identical branches of the different countries. That is, a unit quantity of a given kind of commodity, constituting a component of a set of commodities of some branch is expressed in the same dimension no matter in what country it was produced and for what purpose it was used. One ton of coal with 7000 calorific value per kilogram appears as X roubles or dollars whether it was produced in Poland or Bulgaria, whether it was used for personal consumption, or for energy production or in chemical industry, or for stockpiling, whether it was sold in the producing or in another country. This unit of measurement may be the *de facto* average selling price (product volume in foreign trade turnover divided by the total price income received in the total of the countries of the region), it may be a regional (e.g. CMEA) exchange price or a European major market price. We shall return to the problem of the price to be chosen. For the moment we would only emphasize that the basis of the value scale is not the individual national price systems but evaluation by the *international market*. Therefore, the I/O tables converted to world market prices evaluate products and national cost elements equally as if they were sold (bought) on the world market. To use a simple simile, the machines produced in Hungary are valued at the price for which they can be sold on the world market (even if they are sold at home) and total material costs (energy, raw materials, amortization) are calculated as if they fully stemmed from imports (even if they are of domestic origin). In this way the differences in the national value scale of products and material cost elements are replaced by a uniform world market value scale and the national differences in the net product content of a given product unit are proportionate with the efficiency differences beetween national labour inputs at any time.

Considering that I/O tables can only be compiled in large aggregates (and in order to make comparison possible the national aggregates must be extended still further) the system is not suited for measuring efficiency or for comparison in product depth, it can be used only for branch-level comparison. Since there is no possibility for measuring the efficiency of turning out a product unit, it is only the output per unit of labour participating in the production of the products in a branch, that is, the per capita production output expressed in international prices can be a subject for international comparison. With the aid of the I/O inverse table we can also calculate and make international comparisons of the final branch product per unit of employment in all vertical stages of the entire national economy. (If the entire output of Hungarian coal mining were saleable on the world market for 100 million roubles, the total

material costs were importable for 80 million roubles, and 200,000 people were employed in coal mining, then its efficiency — roughly speaking — would be 20,000,000/200,000 = 100 roubles; if the output of Polish coal mining were 1000 million roubles, its material costs 600 million, and employment 800,000 persons, then its efficiency would be 400,000,000/800,000 = 500 roubles. The two values are comparable. As against all comparisons made in national currencies — or against comparing them with the aid of the Fisher index — the difference is only as much as justified by the national and international price ratios of the different products of coal mining and of the elements of material mining costs: in the final analysis it expresses the fact that on the international market the annual new product of an average Polish miner (in terms of value added) is valued five times that produced by a Hungarian miner.

Table 2

International comparison of branch efficiency

		Bulgaria	Hungary	German Democratic Republic	Poland	Romania	Soviet Union	Czechoslovakia	The CMEA average of the branch
		A	B	C	D	E	F	G	
Electric energy	a	$h_{A,a}$	$h_{B,a}$	$h_{C,a}$	$h_{D,a}$	$h_{E,a}$	$h_{F,a}$	$h_{G,a}$	h_a
Fuels	b	$h_{A,b}$	$h_{B,b}$	$h_{C,b}$	$h_{D,b}$	$h_{E,b}$	$h_{F,b}$	$h_{G,b}$	h_b
Ferrous metallurgy	c	$h_{A,c}$	$h_{B,c}$	$h_{C,c}$	$h_{D,c}$	$h_{E,c}$	$h_{F,c}$	$h_{G,c}$	h_c
Non-ferrous metallurgy	d	$h_{A,d}$	$h_{B,d}$	$h_{C,d}$	$h_{D,d}$	$h_{E,d}$	$h_{F,d}$	$h_{G,d}$	h_d
Chemical industry	e	$h_{A,e}$	$h_{B,e}$	$h_{C,e}$	$h_{D,e}$	$h_{E,e}$	$h_{F,e}$	$h_{G,e}$	h_e
Building industry	f	$h_{A,f}$	$h_{B,f}$	$h_{C,f}$	$h_{D,f}$	$h_{E,f}$	$h_{F,f}$	$h_{G,f}$	h_f
Metal-working industry	g	$h_{A,g}$	$h_{B,g}$	$h_{C,g}$	$h_{D,g}$	$h_{E,g}$	$h_{F,g}$	$h_{G,g}$	h_g
Textile industry	h	$h_{A,h}$	$h_{B,h}$	$h_{C,h}$	$h_{D,h}$	$h_{E,h}$	$h_{F,h}$	$h_{G,h}$	h_h
Food industry	i	$h_{A,i}$	$h_{B,i}$	$h_{C,i}$	$h_{D,i}$	$h_{E,i}$	$h_{F,i}$	$h_{G,i}$	h_i
Other industries	j	$h_{A,j}$	$h_{B,j}$	$h_{C,j}$	$h_{D,j}$	$h_{E,j}$	$h_{F,j}$	$h_{G,j}$	h_j
Agriculture	k	$h_{A,k}$	$h_{B,k}$	$h_{C,k}$	$h_{D,k}$	$h_{E,k}$	$h_{F,k}$	$h_{G,k}$	h_k
Average of national economic efficiency		H_A	H_B	H_C	H_D	H_E	H_F	H_G	

Actual ifferences in efficiency are, naturally, caused not only by live labour, but by fixed asset requirements and the costs of training live labour. In order t take the former into consideration in measuring efficiency, the Kovásznai research group worked out a method, which, with smaller corrections, can be applied. A method for calculating the latter has yet to be found.

The research group operated, for practical reasons, with the reciprocal of the above efficiency index. It did not express the per capita production volume, but the annual labour and capital engagement of a unit of production value in roubles.

Annual labour and capital engagement can also be expressed in labour power. The efficiency formula for branches would be:

$$h_{N,m} = \frac{L_{N,m} + L_{(T)Nm} \cdot \Delta}{T_v} [X_N]$$

where N is the country, m is the branch, L is employment $L_{(T)}$ is fixed assets expressed in terms of employment, the Δ is the coefficient of pay-off, T_v is the final product of the branch and $[X_N]$ is the country's inverse I/O matrix. The table for the international comparison of efficiency is shown in Table 2.

In the final analysis, the indicator received contained the following. What is the volume of live labour and the amount of labour embodied in fixed assets that must be engaged for one year, in order to produce a final product in different branches of different countries, or in vertically connected branches, which can be sold abroad under average market conditions of the CMEA countries for 1 million roubles.

b) *Measuring differences in competitivity within the region (international efficiency differences of a given branch)*

The less the tied-down live labour and tools of labour embodying labour in one year are needed in crystallized form to produce products worth one million roubles in value, the more efficient is a productive activity.

If we compare the efficiency indices of a given (n) branch either bilaterally or to the regional average, we receive the relative competitivity of the given branch of the respective country.

For example [2]:

$$\frac{h_{B,b}}{h_{F,b}} = \frac{492 \text{ head}}{189 \text{ head}} = 2.60$$

that is, to produce one rouble in the Hungarian fuel industry, 2.6 times the amount of total national production factors used in the Soviet fuel industry must be tied down for one year. Therefore, the efficiency of the Soviet fuel industry is 2.6 times that of the Hungarian (the reverse: Hungarian efficiency is 0.38 times that of the Soviet Union). This efficiency difference does not indicate either the wage differences, or the costs of "producing" the manpower employed in the two countries. Thus, the labour force appears only quantitatively as a production factor.

c) *Measuring national economic advantages stemming from cooperation*

The efficiency of cooperation consists of two fundamental factors (closely related to one another). The specialization of countries in products which can be made under domestic relations with *relatively greater* efficiency (and,

accordingly, the elimination of relatively inefficient production from the structure) results in comparative advantage, while specialization in any product results in a stronger concentration of forces on research, investment and production, in better market position, etc. and, as a result, can further improve the efficiency of the given branch (even in branches at comparative disadvantage!). The actual advantage stems from the two: greater energy is concentrated on the product with more favourable conditions to start: the two advantage factors appear inseparably, in a cumulated and quantitative form in actual cooperation, if for no other reason because the measurement never starts from the 0 point (that is, from complete autarky).

The appearance of the advantages of cooperation in the I/O tables of the countriis attaches to the same efficieny indices as their competitivity. The difference is that

1. in this case we cannot speak of an international comparison of efficiency of identical branches, but measure the relative efficiencies of different branches of a given national economy;

2. while the comparison of competitivity can only be completed with the aid of I/O tables converted to roubles (and made comparable) it is expedient to measure comparative advantage from two aspects: on an international value scale, and in a system of values which reflects the national valuation of the products and their material components.

Comparison of the data in the tables by columns shows the differences in the efficiencies of the different branches in the individual countries, measured by the average foreign selling price ratios.

For example

$$\frac{h_{E,g}}{h_{E,k}} = \frac{351 \text{ head}}{1472 \text{ head}} = 0{,}238,$$

that is, in the Romanian metal-working industry one rouble worth of output can be produced with 0.238 times the production factors tied down for a year than in Romanian agriculture. Therefore, the Romanian metal-working industry is 4.2 times as efficient (on the value scale of average CMEA realization ratios) as agriculture.

This is where, from the valuation point of view, the nature of the common price system used to reprice I/O tables comes to the forefront. In the example used, the efficiency of the metal-working industry branches compared to agriculture is substantially influenced by the comparatively high CMEA machine prices. We do not believe that if this same calculations were done in the price system of the major European markets, the efficiency of the metal-working industry would be this much above that of agriculture. Naturally, the common price applied need not, in all cases, reflect actual input or value rela-

tions. If, for example, we study the distortions in CMEA turnover which began in the early 1960's (one of the goals of the Kovásznai research group) we must calculate with those valuation ratios which *de facto* affected turnover, and thereby, the patterns. If, however, our goal is to study the type of efficiency scale which would emerge if we joined the West European bloodstream, we must evaluate our production and costs alike at the main prices.

The average of branch efficiency indicators weighted by production structure yields the efficiency of production (H_t) while weighting by the export structure yields the efficiency of exports (H_e) and by using the import structure for weighting we obtain the efficiency of virtual import substitution (H_{Ih}). That is, if we average with the weights of production, we get the specific labour tied down on the national economic level for a unit of final product volume, accounted in international market value or domestic value. With the weights of exports this refers to the unit of export volume, with import weights to a unit of production, in case the import volume were replaced by domestic production.

An economy is efficiently linked to the international division of labour if

$$H_{Ex} \geqq H_T > H_{Ih}$$

If e.g. Romania exports agricultural products only, then 1 million (old) roubles can be produced with 472 production factor-units (in terms of labour). If it imports machines in place of this, it substitutes a production activity which could have been performed by 351 persons. It then registers a loss in efficiency, corresponding to 1121 "men" per million roubles. If, on the other hand, it can substitute for its agricultural exports machine exports, the situation will become the reverse. Every reduction of a million roubles of agricultural exports replaced by machine exports amounts to an efficiency improvement of 1121 "men".

The more deep-reaching the desaggregation by branches, for which efficiency indices can be calculated, the more detailed the country-breakdown in which we can study the differences of the H_{ex}, H_t, and H_{ih} indicators, and furthermore, if it becomes possible to work out the repricing of the I/O tables at the West European major market prices, aside from the average prices among the CMEA countries, the foundation for analysis we receive for the study of cooperation will become more complex.

d) *Substitution of efficiency calculation results into the RET system*

If we complete export efficiency and import substitution efficiency calculations for each country, and within this, for each bilateral relationship (perhaps by sub-regions), the results may be substituted into the BRFTR table (see Table 3). We receive two matrices.

Table 3

Export and import substitution efficiency matrix

	From									Efficiency of national economic import substitution
	Bulgaria	Hungary	German Democratic Republic	Poland	Romania	USSR	Czechoslo-vakia	CMEA average	3rd countries	
a) Export efficiencies to										
Bulgaria	—	$H_{Ex,2,1}$	$H_{Ex,3,1}$	$H_{Ex,4,1}$	$H_{Ex,5,1}$	$H_{Ex,6,1}$	$H_{Ex,7,1}$			
Hungary	$H_{Ex,1,2}$	—	$H_{Ex,3,2}$	$H_{Ex,4,2}$	$H_{Ex,5,2}$	$H_{Ex,6,2}$	$H_{Ex,7,2}$			
German Democratic Republic	$H_{Ex,1,3}$	$H_{Ex,2,3}$	—	$H_{Ex,4,3}$	$H_{Ex,5,3}$	$H_{Ex,6,3}$	$H_{Ex,7,3}$			
Poland	$H_{Ex,1,4}$	$H_{Ex,2,4}$	$H_{Ex,3,4}$	—	$H_{Ex,5,4}$	$H_{Ex,6,4}$	$H_{Ex,7,4}$			
Romania	$H_{Ex,1,5}$	$H_{Ex.2,5}$	$H_{Ex,3,5}$	$H_{Ex,4,5}$	—	$H_{Ex,6,5}$	$H_{Ex,7,5}$			
Soviet Union	$H_{Ex,1,6}$	$H_{Ex,2,6}$	$H_{Ex,3,6}$	$H_{Ex,4,6}$	$H_{Ex,5,6}$	—	$H_{Ex,7,6}$			
Czechoslovakia	$H_{Ex,1,7}$	$H_{Ex,2,7}$	$H_{Ex,3,7}$	$H_{Ex,4,7}$	$H_{Ex,5,7}$	$H_{Ex,6,7}$	—			
CMEA countries average	$H_{Ex,1(1-7)}$	$H_{Ex,2(1-7)}$	$H_{Ex,3(1-7)}$	$H_{Ex,4(1-7)}$	$H_{Ex,5(1-7)}$	$H_{Ex,6(1-7)}$	$H_{Ex,7(1-7)}$			
Third countries	$H_{Ex,1,8}$	$H_{Ex,2,8}$	$H_{Ex,3,8}$	$H_{Ex,4,8}$	$H_{Ex,5,8}$	$H_{Ex,6,8}$	$H_{Ex,7,8}$			
National economic export efficiency	$H_{Ex,1}$	$H_{Ex,2}$	$H_{Ex,3}$	$H_{Ex,4}$	$H_{Ex,5}$	$H_{Ex,6}$	$H_{Ex,7}$			
b) Efficiencies of substitution of imports to										
Bulgaria	—	$H_{Ih,1,2}$	$H_{Ih,1,3}$	$H_{Ih,1,4}$	$H_{Ih,1,5}$	$H_{Ih,1,6}$	$H_{Ih,1,7}$	$H_{Ih,1(1-7)}$	$H_{Ih,1,8}$	$H_{Ih,1}$
Hungary	$H_{Ih,2,1}$	—	$H_{Ih,2,3}$	$H_{Ih,2,4}$	$H_{Ih,2,5}$	$H_{Ih,2,6}$	$H_{Ih,2,7}$	$H_{Ih,2(1-7)}$	$H_{Ih,2,8}$	$H_{Ih,2}$
German Democratic Republic	$H_{Ih,3,1}$	$H_{Ih,3,2}$	—	$H_{Ih,3,4}$	$H_{Ih,3,5}$	$H_{Ih,3,6}$	$H_{Ih,3,7}$	$H_{Ih,3(1-7)}$	$H_{Ih,3,8}$	$H_{Ih,3}$
Poland	$H_{Ih,4,1}$	$H_{Ih,4,2}$	$H_{Ih,4,3}$	—	$H_{Ih,4,5}$	$H_{Ih,4,6}$	$H_{Ih,4,7}$	$H_{Ih,4(1-7)}$	$H_{Ih,4,8}$	$H_{Ih,4}$
Romania	$H_{Ih,5,1}$	$H_{Ih,5,2}$	$H_{Ih,5,3}$	$H_{Ih,5,4}$	—	$H_{Ih,5,6}$	$H_{Ih,5,7}$	$H_{hI,5(1-7)}$	$H_{Ih,5,8}$	$H_{Ih,5}$
Soviet Union	$H_{Ih,6,1}$	$H_{Ih,6,2}$	$H_{ih,6,3}$	$H_{Ih,6,4}$	$H_{Ih,6,5}$	—	$H_{Ih,6,7}$	$H_{Ih,6(1-7)}$	$H_{Ih,6,8}$	$H_{Ih,6}$
Czechoslovakia	$H_{Ih,7,1}$	$H_{Ih,7,2}$	$H_{Ih,7,3}$	$H_{Ih,7,4}$	$H_{Ih,7,5}$	$H_{Ih,7,6}$	—	$H_{Ih,7(1-7)}$	$H_{ih,7,8}$	$H_{Ih,7}$

The first matrix makes it possible to compare the export efficiency of the individual countries in different relationships, e.g.:

$\frac{H_{Ex,\,2,\,6}}{H_{Ex,\,2,\,6}}$ = the difference in efficiency between the Hungarian export structures to the Soviet Union and to the German Democratic Republic,

or

$\frac{H_{Ex,\,2\,(1-7)}}{H_{Ex,\,8}}$ = the difference in efficiency between the Hungarian export structures to CMEA countries and to third countries.

The other matrix makes the production substitution efficiency of imports from different country-relations comparable, e.g.:

$\frac{H_{Ih,\,2,\,1}}{H_{Ih,\,2,\,7}}$ = the difference in production substitution efficiency between the Hungarian import structure from Bulgaria and from Czechoslovakia.

If we divide the two matrices by one another, in the individual sectors we receive the relationship to one another of the export and import substitution efficiencies, that is, the bi-lateral relationships which are advantageous for the individual countries, and the extent to which they are so:

$$E_{n,\,m} = \frac{H_{Ex,\,n,\,m}}{H_{Ih,\,m,\,n}}$$

If $E_{n,m} > 1$ this means that production of one unit of roubles under the given bilateral relationship necessitates to engage more production factors than substitution of the entire pattern of imports from the given relation by domestic production. Therefore, turnover involves a loss of efficiency. If $E_{n,m} < 1$, then the turnover results in an improvement in the degree of efficiency for the national economy of the given country.

Similar calculations can be made with the aid of the production efficiency indices. Both the export efficiency, and the import substitution efficiency indices can be divided by the efficiency indices of production:

$$E_{Ex,\,n,\,m} = \frac{H_{Ex,\,n,\,m}}{H_T}$$

or

$$E_{Ih,\,n,\,m} = \frac{H_{Ih,\,n,\,m}}{H_T}$$

From this we can determine whether the export structure (in general, or in a definite relationship) improves the efficiency of production ($E_{Ex,n,n} < 1$) and whether the import structure means savings in production factors for the country ($E_{Ih,n,m} > 1$).

e) *Dynamization of efficiency calculations.* Since detailed I/O tables, that is, those which can be made uniform are prepared at five-year intervals at minimum, and since the preparation of the coefficients needed for conversion to roubles requires price data collection and calculations that are substantially labour intensive, comparative I/O tables can only be prepared rather infrequently. If, in the meantime there is no substantial change in price ratios (e.g. price reform) the internal blocks of the I/O tables (the technological matrices) can be extrapolated on the basis of production growth data. This however, can be used for at most one single approximative calculation in the interval between two I/O tables. This means that turnover efficiency matrices can in general only be prepared every 3—4 years, with a delay of about 2—3 years compared to the factual data. Despite this, the series prepared from the (branch, production, export and import substitution) efficiency indices may provide highly interesting informations:

— for analyzing the development and economic policy of the country in question,

— for changing the orientation of foreign trade relations,

— for studying efforts to change the pattern of foreign trade.

To a certain extent these calculations may provide an explanation for the ties appearing between the RBMI and the BRFTR tables.

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СИСТЕМА РЕГИОНАЛЬНЫХ ЭКОНОМИЧЕСКИХ ТАБЛИЦ ДЛЯ АНАЛИЗА МЕЖДУНАРОДНОГО СОТРУДНИЧЕСТВА

Ф. КОЗМА

Предложенная автором система региональных экономических таблиц служит для исследования макроэкономических взаимосвязей материальных процессов и прогнозирования развития разделения труда. Система состоит из следующих элементов:

а) пересчитанных на внешенторговые цены межотраслевых балансов,

б) региональных балансов материальных взаимозависимостей,

в) региональных балансов внешнеторговых связей,

г) матриц эффективности экспорта и импорта.

Региональный баланс материальных взаимозависимостей представляет собой шахматный баланс, в отдельных секторах которого фигурируют объемы двухсторонних поставок, а в диагональных секторах — объемы внутреннего потребления отечественного происхождения. Баланс можно составлять в любой детализации, начиная от общего оборота вплоть до отдельных изделий. В случае гомогенных продуктов баланс можно составлять и в натуральных единицах измерения. Диагональные секторы можно заполнить исходя из крайних данных межотраслевых балансов, выраженных во внешнеторговых ценах. Региональные балансы внешнеторговых связей являются упрощенной формой предыдущих балансов. Если пересчет внутреннего потребления отечественной продукции встречается с непреодолимыми трудностями, то региональные балансы внешне-

торговых связей все же позволяют осуществить анализ процессов, происходящих на внешнем рынке региона. С помощью матриц обеспечивается возможность анализа и, соответственно, прогноза важнейших товарных потоков и структуры регионального рынка, связей внутреннего и внешнего рынка, процессов обмена и взаимозависимостей разделения труда. В связи с этими анализами автор приводит многочисленные показатели.

С помощью выраженных во внешнеторговых ценах межотраслевых балансов можно образовать такие показатели эффективности, которые в соответствии с единой оценочной шкалой международного рынка выражают удельную трудоемкость и фондоемкость производства, протребления и экспортно-импортной структуры в странах региона. Благодаря этому становятся приблизительно измеримыми статические сравнительные выгоды, а также относительная международная конкурентоспособность различных производственных деятельностей отдельных стран. Удельные показатели трудоемкости (по живому труду и фондоемкости) могут быть разработаны в отношении каждого двухстороннего экспортного и импортного направления (по замещению), благодаря чему опять-таки в форме матрицы становится сопоставимой двухсторонняя таблица эффективности замещения импорта. Эти таблицы позволяют производить анализ эффективности взаимной внешней торговли макроэкономических единиц и могут послужить в качестве основы для предварительной оценки изменения структуры экспорта и импорта по отдельным направлениям.

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УКРЕПЛЕНИЕ СВЯЗЕЙ МЕЖДУ СОЦИАЛИСТИЧЕСКИМИ СТРАНАМИ ПУТЕМ НОВЫХ ФОРМ ПРЕДПРИНИМАТЕЛЬСТВА

В качестве вступления автор указывает на то, что в современной экономике возникли новые формы предпринимательства, пересекающие государственные границы, открывающие новые источники экономического роста.

Социалистические страны до сих пор еще весьма слабо черпали из этого источника экономического роста, хотя сходство их экономических систем облегчило бы образование многонациональных предприятий. Это сходство почти настолько велико, как сходство между отдельными штатами США, и гораздо сильнее, чем сходство между США и Западной Европой. Форма многонационального предприятия способствовала бы интеграции социалистических стран. Она не противоречит ни существованию общественной собственности, ни принципу планомерности экономической жизни, но ускорила бы темпы роста мира социализма.

На протяжении последних двух десятилетий деятельность предприятий обогатилась новыми формами и элементами как в капиталистических, так и в социалистических странах. Так, например, в деятельность производственных и сбытовых предприятий было включено множество элементов обслуживания (перевозки, сервис, консультации, прокат и т. д.); образовались длинные цепи вертикальных структур в сельскохозяйственном и промышленном производстве и сбыте; производственная деятельность предприятий переступила границы отдельных отраслей промышленности. Вместе с тем изменились также и формы организации, контроля, управления и сотрудничества предприятий. В качестве иллюстрации можно привести массу примеров, взятых из зарубежной и отечественной практики, касающихся как больших, так и малых предприятий. В универмагах Западной Европы удивленный покупатель может увидеть известный по аспирину крест фирмы «Байер» уже и на свитере. В Венгрии сельскохозяйственные производственные кооперативы развертывают деятельность и в области промышленного производства и обслуживания, чтобы повысить занятость своих членов и доходы, соответственно, расширяют товарный ассортимент внутреннего рынка.

Среди многих причин этого процесса удовольствуемся здесь указанием на самую очевидную: определенный уровень экономического развития требует *новых форм предпринимательства*, открывает возможность для распространения или принуждает к внедрению таких новых деловых форм,

которые впоследствии и сами превращаются в импульсы, стимулирующие движение в направлении следующего, более высокого уровня.

Однако новые формы предпринимательства выходят не только за пределы подотраслей и отраслей промышленности, но и за пределы государственных границ. В международном обороте сегодня участвуют не только товары, но также и капиталы, мысли (в формы лицензий и технической консультации), технологические процессы (промышленная кооперация), рабочие и специалисты, обладающие специфичными знаниями и т. д. Доля этих элементов постоянно возрастает наряду с понимаемой в традиционном смысле внешней торговлей. Поэтому в современной экономической литературе мы все чаще встречаемся с понятием «экстерной экономики» (external economy, économie exterieure, Aussenwirtschaft), внутри которой внешняя торговля в узком смысле слова составляет только одну — правда, преобладающую, но уменьшающуюся по своей доле, — часть.

Специфика этих новых элементов экстерной экономики заключается в том, что среди них сокращается роль традиционных международных посреднических («внешнеторговых») организаций и расширяются разнообразные формы прямых связей производственных предприятий с экономической жизнью других стран. Индель И. Кольде в своем известном труде о международном предприятии [1] определяет его как возникновение выходящих за государственные границы деловых операций и связей. Аналогичную дефиницию находим в работе Фармера, [2] который определяет международное предпринимательство (international business) как совокупность операций, осуществляемых одним предприятием в двух или нескольких независимых государствах. На уровне экономики предприятий (микроэкономика) эти новые деловые операции и организации соответствуют тем элементам, по которым экстерная экономика выходит за пределы внешней торговли на народнохозяйственном (макроэкономическом) уровне.

Эта выходящая за государственные границы хозяйственная деятельность предприятий представляет собой уже обособленную, самостоятельную дисциплину в западной экономической науке; литература на эту тему с начала 50-ых годов все в большей мере расширяется и специализируется;* образовался тип многонационального предприятия, в котором проблемы хозяйственной политики и принятия решений характерным образом отличаются от таковых в предприятиях, действующих в пределах только одной страны.

* Примером специализации является вышедший под редакцией Бертиля Лиандера том: Comparative analysis for international marketing. Boston, 1967. Allyn and Bacon. 198 p. В этой книге рассматриваются методы сбора, обработки и оценки иностранной экономической информации, необходимой многонациональному предприятию для принятия им решений. По сути дела она является справочником международного исследования рынков.

Причины и преимущества

В корне возрастающего влияния новых форм предпринимательства и новых элементов экстерной экономики, в частности, образования и увеличения роли многонациональных предприятий лежит ряд *причин*. Последние подвергаются детальному анализу в недавно вышедшей книге Дьёрдя Адама [3] об «империях бизнеса», *существующих* в капиталистическом мире. Остановимся только на двух объяснениях, встречающихся в зарубежной экономической литературе. Согласно одному из них элементы, получающие в современной мировой экономике распространение наряду с товарообменом, как, например, движение техники, менеджеров, производственных процессов и капиталовложений между странами, просто исключают традиционных посредников, которые лишь затрудняют или вовсе сводят на нет осуществление этих операций. Согласно второму объяснению, в результате прогресса техники связи и транспорта упало значение географических расстояний с точки зрения управления предприятиями и их функционирования. Поэтому прямая связь между предприятиями и рынком в возрастающей мере приобретает международный характер, а образ мышления и действий предприятия становится все более многонациональным.

Но важнейшая причина несомненно заключается в тех *преимуществах*, которые приносит деятельность предприятия, выходящая за пределы одной страны. Эти преимущества можно подытожить следующим образом на основании охватившего 104 международных капиталистических предприятия обследования:

1. Преимущества в области *сбыта:* меньшие издержки транспортировки и хранения, более легкий сервис, повышение эффективности продаж.

2. Преимущества *в производственной сфере:* экономия на запасах и транспорте, облегчение приспособления к местным стандартам и предписаниям; лучшая ознакомленность с качественными требованиями; более низкая заработная плата.

3. *Финансовые выгоды:* экономия в использовании оборотных фондов и кредита.

4. Преимущества *в управлении:* большее число альтернатив роста; более стабильное равновесие благодаря большей диверсификации производства и сбыта; лучшая окупаемость новой технологии и более продолжительное использование «вчерашней» техники; лучшая связь с поставщиками, перекупщиками, покупателями и государственными учреждениями; более легкий доступ к зарубежным техническим новшествам.

Эти получаемые предприятием преимущества проявляются на народнохозяйственном уровне в установлении более тесных и устойчивых связей между странами, улучшении использования природных ресурсов, рабочей силы и основных фондов. Следовательно, реализующиеся в экстерной эко-

номике новые формы предпринимательства вводят в экономическую жизнь новые импульсы роста как на уровне предприятий, так и на уровне народного хозяйства.

Новые формы предпринимательства и внешнеэкономические связи в деятельности социалистических предприятий

Венгерская экономическая реформа в ряде отношений открыла дорогу новым формам предпринимательства и установлению прямых международных связей между предприятиями. Отпало директивное по форме и количественное по содержанию планирование (которое в конечном итоге скорее устанавливало высший, а не низший предел стремлениям предприятия к росту), предприятия получили собственные средства для развития. Этим был создан простор для развертывания автономного стремления предприятий к экономическому росту, являющемуся также и источником народнохозяйственного роста.

Наше экономическое законодательство обеспечивает возможность реализации этих энергий роста в новых формах. Принятый в 1970 году Президиумом Венгерской Народной Республики указ № 19 регулирует вопрос хозяйственных объединений. А согласно действительным с 1 января 1971 года правительственным директивам кредитной политики, стало возможным предоставление инвестиционного кредита капитальному строительству, совместно осуществляемому несколькими хозяйственными организациями, если оно содействует более концентрированному использованию финансовых средств и созданию экономически рациональных размеров производства.

Новые формы предпринимательства уже сами по себе являются факторами выгодного включения в международное разделение труда. Так, в венгерском сельском хозяйстве создание тесно увязывающего коммерческую и производственную деятельность объединения «Гунниягибрид», охватывающего семь производственных кооперативов, две инкубаторские станции и один госхоз, позволило, например, заключить контракт с голландской фирмой «Евробрид». Образование этого совместного объединения открыло возможность переговоров соответствующего по уровню венгерского партнера с зарубежной фирмой и оптимального использования содержащихся в контракте выгод для венгерского сельского хозяйства.

О внешнеэкономической реализации новых форм предпринимательства свидетельствует, например, также и вышедшее в январе 1971 года распоряжение министра финансов, разрешающее передачу машин и оборудования напрокат за границу.

Конечно, крупное значение имел и сам по себе тот факт, что венгерская экономическая реформа дала экономическую интерпретацию принципу

внешнеторговой монополии социалистического государства, вместо прежнего административного толкования, благодаря чему определенный круг производственных предприятий установил прямую связь с зарубежными рынками. Этот шаг окажет значительное воздействие на все дальнейшее морфологическое и функциональное развитие социалистического предприятия как одного из основных элементов социалистического экономического строя. Мне хочется напомнить, что *основной* тип социалистического предприятия был разработан только применительно к функциям *внутри* народного хозяйства и первоначально не содержал таких элементов, которые позволили бы ему ощущать, воспринимать и использовать преимущества, заложенные в экстерной экономике как среде. Венгерская реформа и в этой области сделала значительный шаг вперед в направлении создания такого типа социалистического предприятия, который успешно функционирует и в условиях конкуренции современного мирового хозяйства.

Другой вопрос, что для окончательного оформления этого нового типа социалистического предприятия необходима также оценка и обобщение опыта, что, по всей вероятности, будет сделано в рамках теории роста социалистического предприятия. Ведь наш экономический строй располагает народнохозяйственными теориями роста, но еще не имеет социалистической микроэкономической концепции роста предприятий, теории, обобщающей с сугубо социалистических позиций цели, методы и условия экономического роста предприятий. Причина этого наряду с прочим заключается в том, что социалистическая прикладная экономия рассматривает производство всегда с *динамической* точки зрения, в то время как ее подход к *предприятию* является, с одной стороны, *статическим* и, с другой стороны, ограниченным в *функциональном* отношении. Например, в Венгрии только в порядке исключения и в незначительных масштабах имеют место случаи, когда предприятия одного ведомства осуществляют производственную деятельность, входящую в компетенцию другого ведомства. Выше я упомянул фирменную эмблему концерна «Байер», которую можно увидеть также и на свитере. Ну, а у нас нет такого примера, чтобы химический завод или фармацевтическая фабрика выпускали свитеры или хотя бы синтетическое волокно; точно таким же образом нет примера, чтобы промышленное предприятие располагало собственным сельскохозяйственным производством, выпускающим требуемым темпом и в установленном качестве используемое им сырье. Народнохозяйственный план распределяет ресурсы по отраслевому признаку, поэтому нет значительных средств для развития внеотраслевых профилей. Такое совпадение границ предприятий с компетенцией министерств несомненно облегчает статистический учет и управление, распоряжение средствами, что в конечном счете служит целям эффективности. Однако в *принципе* мы можем признать и преимущества того, чтобы производственное комбинирование в интересах экономической эффективности выходило за

рамки компетенций министерств, если возникающая на этой почве эффективность *превысит* уровень эффективности, обеспечиваемый организационной стройностью.

В то время как границы предприятий таким образом являются закрытыми в горизонтальной плоскости (между ведомствами), в отношении перемещения границ по *вертикали* (внутри ведомства) таких строгих принципов нет, как об этом свидетельствует проведенная 1 января 1971 года частичная децентрализация крупных предприятий.

Однако несомненно, что в Венгрии произошло расширение форм предпринимательства в области экстерной экономики.

Новые формы предпринимательства начинают складываться и в других социалистических странах. Но они еще не получили всеобщего применения во взаимных внешнеэкономических связях стран-членов СЭВ. В настоящее время, видимо, существует несоответствие между ростом *внутренней* экономики отдельных социалистических стран (а также возникающими в них формами предпринимательства) и гибкостью и разнообразием *внешнеэкономических* каналов, соединяющих их народные хозяйства. Во взаимном обороте между социалистическими странами все еще преобладает «классическая» форма внешней торговли: продажа товаров посредникам. Начинания предприятий по установлению прямых связей встречаются редко даже в области обычных сделок купли-продажи; в настоящее время подвижность граждан социалистических стран между этими странами является большей, чем подвижность предприятий.

Система внешнеторговых соглашений между социалистическими странами, а также регулярная координация народнохозяйственных и в том числе внешнеторговых планов, конечно, является формой сотрудничества более высокого порядка, чем внешняя торговля между капиталистическими странами, так как последние нередко стремятся осуществить цели своей внешнеторговой политики в ущерб друг другу. (Это стремление проявляется с особой наглядностью в изменениях валютных курсов.)

Однако установление более тесных связей между предприятиями социалистических стран не ослабило бы реализации внешнеторговых планов, зафиксированных в межгосударственных соглашениях, а наоборот, укрепило бы их выполнение. Более непосредственные связи между предприятиями высвободили бы новые источники энергии как раз на уровне практического осуществления и поставили бы их на службу выполнения внешнеторговых планов, сформулированных на народнохозяйственном уровне.

Так, одно из последствий слабых прямых связей между предприятиями даже в области внешней торговли в узком смысле слова заключается в том, что на внутренних рынках отдельных социалистических стран наблюдается калейдоскопичное изменение как раз ассортимента товаров, импортируемых из других социалистических стран. У венгерского потребителя поэтому

иногда возникает впечатление, что наш импорт из ведущих плановое хозяйство социалистических стран менее планомерен, чем импорт из капиталистических стран, хозяйство которых является бесплановым. (Например, электробритва «Ремингтон» versus выпускаемый в ГДР электрический утюг с регулятором нагрева.) Недостаточно развита и сопряженная с товарами система обслуживания. Так, инструкция по использованию электробритвы «Браун» составлена на 4 языках (на языках всех стран «Общего рынка») и содержит длинный перечень ремонтных мастерских в каждой из стран, а при импорте из социалистических стран сходных товаров мы очень редко встречаемся с этим видом обслуживания покупателя.

На рынке социалистических стран до сих пор не сложились такие характерные импортные товары, которые можно было бы обобщенно назвать «дешевыми жизненными удобствами»: повсеместно доступные в каждой социалистической стране товары с международной маркой (мыло, сигареты, напитки, горючее), позволяющие чуствовать себя по-домашнему гражданам социалистических стран, посещающим другие социалистические страны. Товаров с международной маркой в социалистических странах нет потому, что до сих пор не удалось осуществить трех *в равной мере важных* требований, предъявляемых к таким изделиям: а) постоянность *качества*, б) постоянность *предложения*, в) единая по форме и содержанию *реклама*.

Если даже и не предпосылкой, но во всяком случае одним из факторов всего этого могло бы явиться применение предприятиями новых форм предпринимательства также и во внешнеэкономических связях социалистических стран. Находящаяся в наши дни на повестке дня интеграция *внутри СЭВ* означает, наряду с прочим, именно установление в самых разнообразных формах прямых связей между предприятиями различных социалистических стран, включая также и деятельность отдельных предприятий или их объединений в других странах. Различные договоры о научно-техническом сотрудничестве тоже начнут приносить поистине плодотворные результаты в практической хозяйственной жизни, если их очаги, то есть предприятия, установят более тесные взаимные связи. И, наконец, участь мирного соревнования между двумя мировыми системами решается не только *внутри* народного хозяйства отдельных социалистических стран, но и в *экстерной экономике*, причем не в последнюю очередь во «внутренней» экстерной экономике, складывающейся между социалистическими странами. Мировой рынок, включая и рынок мировой социалистической системы, — это источник роста, из которого можно смело черпать с помощью новых форм предпринимательства.

Социалистические многонациональные предприятия?

Под социалистическим многонациональным предприятием мы понимаем такие социалистические государственные предприятия, которые осуществляют свою деятельность также и на территории другой социалистической страны. Целесообразно отличать их от совместных или смешанных предприятий, которые находятся в совместной собственности нескольких социалистических государств и действуют на территории одной или нескольких социалистических стран. Приводимые ниже соображения относятся к обоим типам; целесообразность применения того или иного типа зависит от практической обстановки.

1. *Преимущества.* Применение выходящих за пределы государственных территорий форм предпринимательства принесло бы социалистическим странам выгоды даже и в области «традиционной» взаимной внешней торговли. В этом отношении достаточно упомянуть только *зарубежные базы*, отсутствующие в настоящее время в арсенале операционных форм социалистических предприятий. Под зарубежной базой понимается, что какое-нибудь производственное или торговое предприятие социалистической страны «А» имеет в социалистической стране «Б» один или несколько находящихся в его собственности и ведении складов, из которых оно может обеспечить регулярное поступление товаров на рынок страны «Б». Применение системы зарубежных баз может явиться одним из факторов ликвидации неравномерности во взаимном импорте социалистических стран, например, в отношении запасных частей и потребительских товаров. Наиболее очевидное преимущество такой базы состоит в том, что производственное или сбытовое предприятие постоянно присутствует на зарубежном рынке и может благодаря этому использовать каждую новую возможность для сбыта (и, соответственно, *роста)*. Работа зарубежных баз отдельных предприятий, конечно, не ограничивалась бы только складированием и продажей со склада, а включала бы также и рекламу, передачу рыночной информации центральному управлению предприятия, организацию обслуживания покупателя, консультирования и т. д.

Создание *товаров с международной маркой* в странах-членах СЭВ уже связано с обращением *лицензий*. Повсеместно доступное в Западной Европе мыло «Люкс», например, первоначально производилось фирмой «Левер», теперь же оно не является исключительно экспортным товаром этой фирмы, а выпускается по ее лицензиям также и местными предприятиями в некоторых странах. Однако, упаковка, качество, способ преподнесения покупателю и реклама *совершенно тождественны* во всех странах. Название выпускающего на основе лицензии местного предприятия можно обнаружить на упаковке только после тщательного осмотра. Этот перечень можно продолжать чуть ли не до бесконечности, приводя такие имеющиеся в будапештских витринах товары, как «оригинальное швей-

царское» растворимое кофе (выпускамое на самом деле на Берегу Слоновой Кости), американские сигареты (многие сорта которых изготовляются в Швейцарии, где нет государственной табачной монополии и низки налоги), зубная паста «Сигнал» (выпускаемая югославским предприятием по западной лицензии и т. д.).

Создание таких товаров с международной маркой предприятиями социалистических стран несомненно было бы выгодно как производителям, так и потребителям.

Если производство товаров с международной маркой осуществляется не по лицензии, а на одном заводе, это, конечно, позволяет в существенной мере расширить масштабы производства. Именно это обстоятельство подводит нас к дальнейшему преимуществу новых форм предпринимательства, выходящих за государственные границы: к ускорению *технического прогресса*. Конечно, носителями передовой техники в капиталистических странах являются не только многонациональные предприятия, но все же можно установить наличие взаимосвязи между новой техникой и многонациональным характером предприятий. По крайней мере, о существовании такой взаимосвязи свидетельствует то обстоятельство, что в капиталистическом мире многонациональные предприятия особенно часто встречаются в отраслях с быстрыми темпами технического прогресса, как-то: автостроение (Рено, Фиат), химическая и нефтеперерабатывающая промышленность (Монтекатини), электротехническая промышленность (Сименс), производство изделий бытовой химии (Юнилевер), производство машиностроительных изделий особого назначения (Маннесманн).

С точки зрения мирового хозяйства производственные масштабы предприятий социалистических стран (за исключением Советского Союза) обычно недостаточны для разработки и массового применения наиболее передовой техники. Применяемые же в экстерной экономике новые формы предпринимательства могли бы обеспечить социалистическим странам в их взаимных отношениях более благоприятные условия для применения и распространения достижений технического прогресса. Важную роль в этом играет и фактор времени. Если социалистическое предприятие поддерживает прямую связь с широким кругом предприятий в других социалистических странах, оно может за более короткий срок реализовать новую технику, в результате чего сопряженные с техническим прогрессом и капиталовложениями крупные издержки окупаются значительно быстрее. Во многих случаях это является прямой предпосылкой внедрения новой техники, без которой последнее просто не осуществимо.

Из ряда прочих преимуществ я укажу только на высказывание Ференца Козмы, которое содержится в его недавно опубликованной книге [4]: в лице крупных международных социалистических предприятий можно было бы противопоставить крупным капиталистическим предприятиям равносиль-

ных партнеров, в то время как теперь каждая социалистическая страна вынуждена вести с ними переговоры в отдельности.

В заключение хочу только отметить, что при многонациональном характере или в форме совместного предприятия социалистические предприятия могли бы развивать более активную деятельность также и в отношении развивающихся стран. В случае крупных деловых начинаний, каковым является, например, оказание помощи в добыче сырья, это по сути дела единственная практически пригодная форма.

2. *Возможности.* Благодаря наличию ряда факторов функционирование многонациональных и совместных предприятий соцаиалистических стран в некоторых отношениях было бы более простым и легким, чем деятельность таких предприятий в капиталистических странах.

У. Скиннер в статье «Управление международным производством» [5] выражает мысль, что при деловых операциях за рубежом, предприятие должно учитывать четыре системы другой страны, а именно:

— техническую систему,
— политическую систему,
— культурную систему,
— экономическую систему.

Из этих четырех систем в социалистических странах политические и экономические системы в целом очень схожи, более того, большинство составных элементов этих систем однородно; в отношении же *культурной* и *технической* систем эти страны тоже весьма близки друг к другу. Их однородность крепче сплоченности капиталистических стран внутри капиталистического мира в целом; сопротивление среды созданию многонациональных и совместных предприятий, возникающее на почве различия систем, в социалистических странах, как правило, является меньшим, чем оно может быть в отношении нескольких капиталистических стран.

В предисловии к своей книге «Межнациональное управление» Ричард Фармер указывает, что в этом отношении существует два крайних случая. Если в США предприятие из штата Иллинойс создает филиал в штате Индиана, то оно остается в рамках аналогичной (хотя и далеко не тождественной) правовой системы. Если же оно создает дочернее предприятие во Франции, то последнее должно функционировать согласно Кодексу Наполеона, совершенно отличающемуся от англосаксонского законодательства; что разрешается в Америке, может быть преступлением во Франции. Но помимо этого имеются и такие различия, как приводимый в одном из очерков Фармера и Ричмана основывающийся на Коране кодекс Шариата в средневосточных странах, который предоставляет еще больше простора субъективизму судей, чем англосаксонское законодательство.

В отношении различий и сходств систем социалистические страны, видимо, занимают промежуточное место между американскими штатами,

с одной стороны, и разнородностью капиталистического мира в целом. *Сходство* между правовой системой и хозяйственными институциями социалистических стран почти настолько же велико, как между отдельными штатами в США (не следует забывать, что и между ними имеются некоторые различия в правовых системах), но значительно больше, чем, скажем, между США и Западной Европой или же между Западной Европой и Ближним и Средним Востоком. Следовательно, в этом отношении социалистические многонациональные и совместные предприятия находились бы в более легком положении, чем капиталистические многонациональное предприятие, действующее в США *и* Западной Европе или в Западной Европе *и* на Ближнем Востоке. Согласно одному американскому справочнику по этому вопросу, многонациональное предприятие выполняет по существу обычные функции предприятия, но — в различной среде. В странах же СЭВ «среда» содержит больше общих элементов, чем это имеет место между капиталистическими странами. Лишь в качестве примера стоит упомянуть, что связанный с возможностью изменения валютных курсов рынок, очевидно, в гораздо меньшей мере затрагивает социалистические многонациональные и совместные предприятия, чем аналогичные предприятия в капиталистических странах. То же самое относится и к фактору неопределенности, вызываемому инфляцией. Неслучайно, что в книге Кольде отдельная глава («Управление в условиях международной инфляции») посвящена влиянию инфляции на решения и функционирование многонационального предприятия.

Нельзя утверждать и того, что капиталистический строй в институциональном порядке способствует возникновению и деятельности многонациональных предприятий. Это всегда зависит от экономической политики отдельных стран (которая всегда является производной целого ряда экономических и политических факторов). Хорошо известны, например, те осложнения, которые возникли в связи с соглашением между французской фирмой «Машин Бюль» и американской корпорацией «Дженерал Электрик». В Японии же законы прямо запрещают вложение иностранного капитала в японские предприятия, допуская исключения только в редких случаях ценой весьма сложной процедуры.

Следовательно, можно сделать общий вывод, что политическая, экономическая и правовая обстановка на рынке стран-членов СЭВ в *принципе* могла бы обеспечить более благоприятные условия для деятельности многонациональных и совместных предприятий, чем атмосфера капиталистического мира, хотя правовая система стран-членов СЭВ в настоящее время и не регулирует условий учреждения и деятельности таких предприятий.

3. *Проблемы.* Более благоприятная среда, конечно, не означает автоматического решения проблем. Не реально и требование, чтобы эти проблемы получили свое решение одновременно и в отношении всех стран-членов

СЭВ. Такие решения приводят чаще свего к возникновению искусственных ситуаций и не коренятся в жизни, в повседневном опыте. Более целесообразным кажется распространение оправдавших себя двусторонних решений на несколько социалистических стран.

Проблематичным в области прямых связей и выходящей за государственные границы деятельности предприятий отдельных социалистических стран является прежде всего отсутствие правового регулирования положения социалистических многонациональных предприятий (которое в этом специфичном смысле, следовательно, явилось бы «международным частным правом»). Правила бухгалтерского учета в качественном отношении аналогичны, но в количественном отношении отличаются друг от друга. Такие новые формы предпринимательства, как лицензии, техническое обслуживание, консультирование по эксплуатации и прокат промышленного оборудования, вызывают сравнительно мало проблем. Но если предприятие одной социалистической страны захочет создать дочернее предприятие в другой социалистической стране, возникает целый ряд процедурных и материальных правовых вопросов (приобретение недвижимости, право собственности и т. д.). Вопросы налогообложения, получения кредитов, распоряжение прибылью вызывают необходимость в валютно-правовом регулировании. Возникают вопросы в области трудового права в связи с большей подвижностью специалистов и руководителей предприятий.

Такие экономические и правовые проблемы могли бы получить свое решение, например, путем введения в странах СЭВ в течение определенного периода единой системы хозяйственного права, регулирующей деятельность социалистических предприятий на территории другой социалистической страны. Но и до тех пор можно было бы регулировать такие связи особыми соглашениями, заключаемыми между двумя или несколькими странами.

Особую группу вопросов (правда, связанную с предыдущими проблемами) представляет собой то, что в цитированной выше книге Ференца Козмы фигурирует как «координация инструментов регулирования внутреннего рынка»: координированная коммунальная политика, согласование внешнеторговых дотаций, координированная кредитная политика, согласование методов ценообразования, налогообложения и надбавок к заработной плате.

Эти элементы в настоящее время еще различны в отдельных социалистических странах. Однако интеграция, осуществляющаяся на основе связей между предприятиями, не нуждается в полной тождественности этих элементов. Это подтверждается также и примером «Общего рынка», где *цена* аналогичного товара резко отличается даже в таких близких во всех отношениях странах, как Франция и Бельгия.

Изложенные здесь проблемы, конечно, не просты, но решение их вполне возможно. Некоторый опыт уже накоплен в связи с деятельностью создан-

ных до сих пор межнациональных предприятий («Халдэкс»,«Интрансмаш»). Далее, в качестве первого шага нет необходимости в общих для всех стран-членов СЭВ решениях, а в начале можно было бы приступить к решению этих проблем на двусторонней основе (применительно к действительному положению и возможностям). Впоследствии из этого могли бы возникнуть элементы единой системы международного правового регулирования деятельности предприятий, пригодной для органического включения в правовые системы отдельных стран.

4. *Принципиальные соображения.* Среди связанных с социалистическими межнациональными предприятиями принципиальных соображений прежде всего возникает вопрос о праве собственности, причем в двух аспектах. Первый аспект — когда внешнеторговая база, филиал, отделение по обслуживанию и т. д. какого-нибудь предприятия социалистической страны «А» находится в социалистической стране «Б». Думаю, нет необходимости доказывать, что это ни в коей мере не ущемляет принципа *общественной* собственности на средства производства. Второй случай: если предприятия социалистических стран «А» и «Б» создают совместное товарищество или предприятие, деятельность которого распространяется на другие социалистические страны или на развивающиеся страны, возможно, и на развитые капиталистические страны. В этом случае то обстоятельство, что вместо *одного* социалистического общества собственниками являются общества двух или нескольких социалистических стран, тоже ничего не меняет в факте общественной собственности.

Другое принципиальное соображение возникает в связи с вопросом о *планомерности*. Если на территории страны «Б» имеется производственное предприятие, составляющее собственность одного из предприятий социалистической страны «А» и соответственно этому решения о его работе принимаются в стране «А», то невольно возникает вопрос о возможном воздействии этого факта на планомерность экономической жизни страны «Б».

При взвешивании этого соображения следует иметь в виду, что этот вопрос сегодня, в условиях современного социалистического хозяйствования возникает по-иному, чем полтора десятилетия тому назад. В нынешней системе хозяйствования исходные мотивы действий предприятий и потребителей сами по себе не следует заведомо считать действиями, расходящимися с планомерностью или даже противостоящими последней. Ведь в конечном итоге они и сегодня по сути дела являются результатом государственных решений, создающих и регулирующих производственные мощности и покупательную силу. Это действительно в условиях развитого социализма, но не было действительно раньше, когда из-за ограниченности ресурсов следовало решать только в централизованном порядке. (Изменение положения объясняется, по существу, ростом производственных и потребительских резервов, что расширило сферу действия планомерности.) Истек-

шее со времени создания социалистического хозяйства время, осуществленные с тех пор количественные и качественные изменения предоставляют нам сегодня право проводить различие между *ранней* и *развитой* социалистической экономикой.

Планомерности роста в действительности угрожает не непосредственное включение отдельных социалистических предприятий в процесс роста в других социалистических странах, а то, если — как это имеет место в настоящее время — взаимный импорт социалистических стран носит характер кампаний, неравномерен или даже недостаточен, что затем вызывает перебои в производстве и оставляет спрос неудовлетворительным. Учитывая это, можно сказать, что более непосредственные связи между предприятиями социалистических стран, а также деятельность многонациональных и совместных предприятий сулит, по сравнению с нынешним положением, больше выгод, чем потенциальных опасностей для планомерности экономического развития.

5. *Реальности.* Как ни привлекательны изложенные выше выгоды и преимущества, как ни положительны результаты принципиальных соображений, все же совместные деловые начинания предприятий различных социалистических стран в настоящее время наталкиваются на *преграды, определяемые реальным положением.* Подробный и глубокий анализ этих преград содержится в вышедшей недавно отличной книге Шандора Ауша «Положение, механизм, перспективы сотрудничества в рамках СЭВ». [6] В этой книге в начале раздела под заглавием «Международная централизация, совместные предприятия и учреждения» (стр. 211—213) можно прочесть следующее:

«Нет ни одной другой области сотрудничества стран-членов СЭВ, где тормозящая прогресс роль внутреннего и внешнего хозяйственного механизма была бы логически настолько очевидной, а практические результаты были бы настолько скудными, как в области образования различных по степени развития и форме международных соглашений, начинаний и совместных организаций на уровне предприятий.»

Причины этого Ауш в этом разделе слоей книги обобщает следующим образом:

— в условиях директивного планового хозяйства поступающие сверху (вертикальные) центральные директивы практически исключают совместную (горизонтальную) инициативу и решения предприятий различных стран;

— измерение и сопоставление выгод и потерь или пусть даже затрат и результатов наталкивается на исключительно большие трудности и уже в сравнительно простых случаях. (В одной из дальнейших частей своей книги он иллюстрирует это как раз на примере предприятия «Халдэкс»);

— отсутствие переводной валюты;

— не обеспечено в институциональном порядке соответствие между капитальными вложениями из прибыли и инвестиционными решениями центральных органов.

На основании сказанного Ауш делает следующий вывод:

«Механизм сложившегося исторически и определяемого также и объективными экономическими законами порядка образования международных объединений, интернационализации и интеграции производства, а именно: сначала частных, а потом более широких интеграций между предприятиями, объединениями предприятий и, наконец, государствами в странах-членах СЭВ не функционирует.» (стр. 213.)

Эти факты действительности очевидны. Однако наряду с реальностью системы планирования и нынешнего (вертикального) направления вынесения решений (как институций и организационных форм) существует еще одна сфера реальностей — это реальность требований социалистического экономического роста, неотложных потребностей спроса и капиталовложений, материальных и товарных процессов, не терпящего отлагательств технического прогресса. Это, если угодно, является реальностью *реальностей*, противостоящей реальности институций. Противоречие между этими двумя видами реальностей в перспективе, по моему мнению, может быть решено только одним путем, а именно, путем приспособления *созданных человеком* институций к требованиям материальных процессов и, соответственно, экономического роста, а не наоборот.

Соревнование социалистического и капиталистического мира происходит не вне времени, а имеет свои *измерения во времени*. В этой связи возникает также и вопрос, какую позицию занимают страны-члены СЭВ, по сравнению с капиталистическими странами и их региональными группировками, в отношении высвобождения энергий роста, заключенных в изложенных выше новых формах предпринимательства.

Как представляется, западноевропейские капиталистические страны в своих взаимных связях в этом отношении еще не сумели добиться значительного прогресса. В странах «Общего рынка» пока еще весьма мало подлинных многонациональных предприятий (другим вопросом является присутствие в Европе американских предприятий). Объединение фирм «Агфа» и «Геверт» было скорее только формальным; ряд предприятий занял выжидательную позицию, ожидая появления всеобщего для стран «Общего рынка» нового наднационального закона об объединении. Э. Сэмпсон в нашумевшей книге «Анатомия Европы» [7] пишет о выходящем за национальные границы сотрудничестве предприятий стран «Общего рынка» как о благом пожелании, осуществить которое весьма трудно.

Однако для нас это не должно быть аргументом для проволочек, а сигналом к учету своих возможностей и интересов. В каждом соревновании хорошо получить преимущество еще на старте. Если в экономической интег-

рации стран-членов СЭВ будет достигнут прогресс благодаря применению во внешнеэкономических связях новых форм предпринимательства (что приведет к разрешению нынешнего противоречия между нашим политическим интернационализмом и экономическим партикуляризмом), то это не только откроет новые возможности социалистическим предприятиям, но сообщит также и новое ускорение темпу экономического роста всего социалистического мира.

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STRENGTHENING OF RELATIONS AMONG THE SOCIALIST COUNTRIES THROUGH NEW FORMS OF VENTURES

E. KEMENES

In the past two decades enterprise activity has been enriched by new forms and elements in both the capitalist and the socialist countries. Today, forms of enterprise reach not only beyond the borders of economic branches, but beyond those of countries as well. This had advantages in the fields of production, realization, finance and management. The new forms of enterprise connect new forces of growth into the economic lives of the enterprises and countries.

The Hungarian economic reform opened the way to such forms of undertaking in several respects. However, in the relations among CMEA countries these new forms of enterprises have not yet been able to mark out a trail for themselves. In the trade among the socialist countries the traditional form of foreign trade, restricted to commodity exchange is still the dominant one. And this despite the fact that the CMEA integration so frequently urged today means, among other things, exactly this direct relationship with its many forms of ties among the socialist countries, including activities of individual enterprises or groupings in other countries as well.

The operation of an enterprise of a socialist country in another socialist country, as well as that of joint and mixed enterprises would have many advantages. It would aid better and faster fulfilment of demands by consumers and investors alike, the spread of international trademarked items among the socialist countries, and would speed up technological progress.

The operation of multi-lateral and joint enterprises of the socialist countries would be simpler and easier in certain respects than that of similar corporations in the capitalist countries, since in the socialist countries the economic systems are quite similar. The resemblence of the legal systems and economic institutions in the socialist countries is

nearly as strong as in the individual states of the United States. In principle, the socialist ownership relations (the social ownership of the means of production) would not be a barrier to the existence of multi-lateral and mixed enterprises. Nevertheless, the formation of these enterprises is more difficult because

— the administrative system of plan directives, i.e. central directives coming from above make joint initiatives and decisions among the enterprises of the different countries impossible;

— according to experience gained so far (HALDEX), measuring and comparing input and output does not go smoothly;

— a transferable currency is lacking;

— there is no institutional coordination between the reinvestment of joint profits, or those earned in other countries and the investment decisions of the central bodies.

These problems could be gradually solved on the basis of experience gained from bi-lateral initiatives. This is the way in which the rules aimed at guiding the operations of socialist multi-national and mixed enterprises, their ownership relations, accounting, use of profits, taxation, etc. could be formulated.

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REVIEWS

P. GLATTFELDER—P. MÁTÉFFY

PRICE TYPE CALCULATIONS IN HUNGARY: EXPERIENCE AND NEW DIRECTIONS

Theoretical survey

Despite the fact that the Marxian theory of value has known the concept of socially necessary input and the deviation between price and value for over a hundred years, it was only in the last decade that this concept had been formalized and given econometric definition in the practice of the socialist countries. The importance of this circumstance is underlined by the fact that this was a precondition for the further development of socialist price formation on a scientific basis, in order to be able to show changes in the price system, the price mechanism, and the effects of these changes in an exact way.

The impetus given to the development of econometric thinking by the appearance and spread of electronic computers is well known. As a result, in the early 1960's their application became an actual possibility in Hungary and in the other socialist countries. Working out the methodology, and the actual calculations were preceded by the heated "Hungarian price debate" [1], which centered around value-proportionate prices, or more accurately, the problem of the centre of prices. (a)* Here the concrete question was raised: what should be taken as the basis of price formation, in what ratio to what production costs should the produced net income be distributed among the different products and productive activities in the planned price reform, which was then implemented in 1968.

The goal, therefore, was to urge exact, scientific price formation, and to study its concrete realization possibilities. It is natural that in the debate many contradictory points of view were expressed, considering that the economic functions of the prices themselves can be quite different. (Such as economic clearsight, social saving of labour, means for the distribution of the national income generated, for material incentive, etc.)

In the interests of comparing the variants emerging in the course of the debate, the Price Office organized a scientific research group. The job was to clear up the mathematical and economic problems connected with the question, and to carry out experimental (numerical) calculations [2, 3].

In essence, this working group undertook to present partly through a simple example, and partly by means of the whole 1959 statistical input-output table, the effects of 14 selected price types partly on the price level and price ratios (relative prices), and partly on other fundamental indices of the economy (production value, national income, foreign exchange coefficients, etc.). The cal-

* See the explanation of terms at the end of the article.

culations were completed not only with deviating types, but with differing conditions, namely:

a) single and two-level price system,*

b) changing and unchanged agricultural price level,**

c) changing and unchanged consumer price totals (consumer price level)

The variants proposed can be divided into four fundamental types depending on the method of distributing net income:

1) *Value-type prices:* the distribution of net income (profits) among products proportionately with wage costs ("live labour").

2) *Production price-type prices:* net income is distributed in proportion with the fixed and liquid assets employed.

3) *Average value-type prices:* the distribution of net income follows the proportions of production costs.

4) *Two- or multi-channel (mixed) price type:* production costs are complemented with net income in proportion with two or more resources.

The different price types were formalized by matrix-algebraic methods. It became obvious from the results that the majority of the eligible solutions had no practical importance, partly because their results clustered around the four fundamental price types mentioned, and partly because their application would only be a negligible modification of the existing price ratios.

Today it would be difficult to tell, whether the calculations and their results were truly the end to the "Hungarian price debate"; but it is a fact that theoretical debate in connection with price types quieted down for a long time; however, it has become lively again more recently.

The debate going on today is being fed from two sources: the first is existential; it denies the reason for the existence of the system itself, while the other is a less drastic direction; it does not attack the principle, but only the extent of its application. The first group is well represented by the standpoint of Vincze [4], who, from the point of view of price formation, considers the theoretical prices determined with the calculations discussed as incorrect terms of reference, and qualifies them as to be discarded, together with the method. According to the other view, the trouble is caused not by the multi-channel price, but the extent to which in practice production costs are supplemented with net income. The latter concept is essentially connected with the further development of the Hungarian system of economic regulators and should rather be treated as a question of numerical resource evaluation than a price type debate.

Using price type calculations in practical work

The first calculations in price work which could be used in practice were prepared on the basis of the 1959 input-output table of the Hungarian national economy partly for 19 aggregate branches, and partly with a 77 sector model. In the course of later years, price-type calculations completed with the aid of regularly published factual and planned tables of the Central Statistical Office and the National Planning Office became everyday practice for the National

* Two-level price system: deviation in price ratio or price level between producer and consumer prices.

** In the Hungarian price system agriculture enjoys special price preferences.

Materials and Price Office. However, prior to execution of the first calculations, there were a series of theoretical and methodological questions which had to be cleared up first, in the interests of a solution satisfactory both from the mathematical and the economic points of view. These partly meant economic assumptions to be applied in the calculation, including e.g. the structure of the different price systems, the problem of the single level and two-level price systems, the special handling of agriculture (rent, incomes for agricultural cooperative membership, determining the concept, sphere and size of net income, ensuring an unchanged consumer price level, handling of import materials and of amortization, the question of the investment and replacement rates within amortization allowance, etc.). The other part of the work included the foundation of mathematical calculation techniques, writing down the fundamental relations in forms of equations, the preparation of computer programmes and thereby solving these equations. Many problems were caused by the necessity of compiling supplementary data in connection with the input-output tables to be processed, as well as by questions such as ensuring the homogeneity of the tables, the handling of turnover tax, comprehensive determination of the value of assets belonging to the individual sectors, and its division by type of assets. Analysis of the results of the price calculations completed with the input-output balances meant a turning point in the practice of Hungarian price formation. On the one hand, it became possible to determine the extent to which actual prices deviate from the socially necessary input (assuming that the latter is determined on the basis of some price type), and on the other, to observe year by year the way prices break away from actual input as a result of continuous changes in the latter.

The first practical application of the conclusions won from the price-type calculations was in preparation for the 1968 price reform, when mainly 1959 actual figures and the 1964—65 plan data were analyzed. At the same time, the interest of economists in other price formation methods increased, and this was understandable in view of the 1959 price reform and the one planned for 1968. Calculations have made it possible to measure deviations between the agricultural and industrial price levels; the contributions of individual branches to the national income; this again inspired the drawing up and analysing of special input-output tables (for agriculture, the textile industry, the heavy industry, etc.). These combined or partial balances show the relations between the producer and consumer sectors in a breakdown by more important groups, or even items themselves in specific fields. Apart from making the work of planning easier (through their combination with the price-type calculations), these approaches also enable a special analysis of direct and indirect inputs and of relations between efficiency and prices on the national economic level. The diversified utilization possibility of such calculations increased the demand for improving the accuracy of input data, which resulted in a re-examination of accounting regulations, and further improvement in statistical work. It can be definitely stated that the reliability of initial data and hence of the calculations themselves increased year by year.

So far the following input-output tables have been used in the already routine-like price-type calculations:

— the 1959 and 1961 statistical fact tables

— the 1965 and 1968 fact tables (prepared by the National Planning Office)

— the 1964—1965—1968—1975 plan tables,

— the fifteen sector tables, at constant prices for each year between 1959 and 1966 worked out by the Price Office,

— the Price Office's 1961 and 1965 aggregated tables drawn up in terms of foreign exchanges (we will return to these later on).

Several other bodies have also completed price-type calculations since the first Price Office experiments (the Central Statistical Office, the National Planning Office, the Institute for Economic Planning) in more than one case on the basis of the so-called product-system price model. This latter, as is known, is a model built on the individual calculations of a comparatively large number of products, not unconditionally covering the whole national economy, fundamentally not intended for price-type calculations, but rather for the analysis of secondary, tertiary, etc. effects of price and cost changes. At the same time, however, the product models may be used to study the effects of the choice of the price type (or of changing it) on the price and cost ratios of the individual products.

The National Price Office, using its own 1960—61 product model, was the first to prepare a comparative analysis of the prices of certain more important consumer goods. Practically, the actual 1960 and 1966 consumer prices were compared with the calculated value-type and production (b) price-type consumer prices.

As we have already mentioned, the Price Office, in its first approach to the so-called initial prices of the 1968 price reform, also relied on the results of the product-level price-type calculations. This in practice, involved price-type calculations completed with the 1964—65 product model, where certain centrally determined price deviations were already built into the model at the start. Then the enterprises received the price indices determined in this way, so that they could take them into account when repricing their own material costs, with the aim of determining their own initial prices.

The studies directed towards the creation of a common socialist world market price system, within the framework of cooperation in the CMEA, have a special place in the history of Hungarian price-type calculations. According to earlier concepts, the approach to common foreign trade prices could have taken place based on the national product-level price-type calculations. Although these prices were not introduced in practice, the large volume of labour-intensive calculations, and the mathematical and methodological research in connection with determining them played a major role in the founding and spreading of the Hungarian price-type calculations [5].

Although the prices calculated in this way were not accepted as actual foreign trade prices, preparing them was not in vain, since demand for the approximation of the price systems, for the creation of a uniform currency, and for the further development of socialist economic integration is livelier today than ever. Despite all disturbing factors, and deviating economic roles, to a certain extent these calculated foreign trade prices are suitable for analyzing the national economic costs and the productivity in the individual countries on the product level, for a structural comparison of various branches of industry, and even for contrasting the price ratios (relative prices) of the two world markets.

A possible further development of the method: input-output tables and price-type calculations at world market prices

With the conclusions of the price-type debate of the early 1960's, general agreement was reached regarding the interpretation of the methods which have been applied in recent times for the quantification of "socially necessary input". These inputs are related to the cost proportions of a given period in a known manner and, although continually changing over time, in the final analysis they reflect current cost relations. These latter depend on the given production structure, on the level of technical progress, in foreign trade, price, income and other factors, and therefore it is certain that not even the most realistic price-type shows the optimal (nor a somewhat better than the present) branch structure, technology or price, but that, in principle, the obsolete structure, the wasteful use of materials and the high wage ratio appear in the costs of the price-type under discussion just as in reality. Therefore, it is highly doubtful whether the quantified "socially necessary inputs" in the price-types are truly "necessary", with particular respect to the fact that, in many a case, in our foreign trade relations the socialist and capitalist world market ("society" in the broader sense of the term) is not willing to recognize them. Thus the earlier assumption seems to gather momentum that with the substantial extension of foreign trade relations the price-type calculations, in their present form, are only suitable for studying the internal input relations of an autarkic economy, of their internal price and value ratios, while in an open economy they are undoubtedly in need of further improvement. From the results of the price-type calculations themselves we no longer receive sufficient information on what should be recognized as necessary inputs in an open economy, and what not. Furthermore, as a consequence, what price relations, what prices can be considered "ideal"? This conclusion would seem true even if it is taken into consideration that already at the very beginning we tried to take the value judgement of the external markets into consideration in some form or another, in a manner whereby export and import activities and secondary price effects were included into the fundamental equations. In reality, however, the "autarkic" nature of the results did not change much on this account.

In studying the problem, so far we have reached the conclusion that we would approach the *open* and *ideal* prices in the true sense of the term we look for, if it were possible to perform price-type calculations for economies — naturally hypothetical ones — which represent the average, the "world-market" input structure and technology, and the results gained in this way could be transformed in some way to the Hungarian economy.

However, it would seem that the results obtained in this way would never be free of the effects of differences in production structure, and other factors. Therefore, insofar as we were successful in quantifying the socially necessary inputs in the world market sense in the above manner — say, by branches — when comparing these with actual domestic inputs, the existing differences would have to be traced back to two reasons. One is the difference in actual prices, and the other is the systematic deviation, due to different conditions. Regarding the latter, we are thinking not primarily of factors in connection with the price question, such as natural conditions, differences in geographical and raw material situation of the countries, the attainable utilization of capacities, and the optimum capacity size, the supply of

capital, the infrastructural situation, the portion of national income used for technological development and research, etc. Aside from this, in connection with world market prices — beyond fluctuations in the business cycle — we must also consider that these prices are not input-proportionate either, for the fact that almost every capitalist government maintains open or concealed subsidies (e.g. exemptions from taxation, partial or complete state financing of technological development and research costs), and thus there are many factors which cannot be quantified as "input" nor do they appear in the calculations or in the statistical input-output tables. This means that we cannot hope for rapid success, if we want to quantify the deviation between domestic and world market "necessary" inputs, despite the fact that solution to the problem, and a fundamental analysis of the differences is becoming increasingly necessary, particularly if we want to set ourselves the goal of reducing these differences.

One of the possibilities for further development in the desired direction is offered by price-type calculations with the aid of input-output tables drawn up at world market prices.*

Balances calculated in terms of foreign exchange prices have been prepared on a number of occasions in Hungary. As a result of the cooperation between the National Materials and Price Office, and the Ministry for Heavy Industry, the 1961 Table of the Central Statistical Office was repriced, and then, so was the table for 1965. (Recalculation of the 1968 table is now under way.) These, as publications reviewing them point out (see e.g. [6]), reflect world market price ratios only insofar as they appear on the Hungarian border as export sales or import prices. Since, however, by the prices of the capitalist or the socialist world market we mean in practice the average prices of the markets in question, we can accept the tables drawn up in dollar and rouble terms as world market price models where these *average prices are established with special Hungarian weighting.*

We aggregated the 1961 and 1965 rouble and dollar tables into 15 sectors in the interest of the price-type calculations to be performed with them, similarly to the tables in forint terms prepared by the Central Statistical Office (excluding turnover tax) which served as the basis for the repricing.**

We prepared the price type calculations themselves in two types of basic variants: the so-called "value price"-type and the variant of the "production price" where a (5 perc cent) share of the net income appearing in the forint, rouble and dollar balance was distributed among the branches in proportion with the capital employed [3] while the remainder was projected to wages. The reason why only these two variants were used was that our goal was *not* to compare the price indices of the different price-types, *but to show* the size of differences in the input structure, in profitability, and in prices (ideal prices)

* The concept is not new: it was raised earlier as a theoretical possibility and, in fact, e.g. in Czechoslovakia, the methodological problems for a study of this sort have already been worked out in detail. However, as far as we know, we were the first to work out calculations of this sort in practice.

** Let us disregard here the details of the method how these tables were compiled, as well as certain technical questions of the repricing. From the point of view of methodology, we were only interested in having the same input-output table available at forint, rouble and dollar prices. This was finally solved for 1961 and 1965, using the fundamenta data already mentioned.

caused by a change-over from a more or less autarkic domestic price system to socialist or capitalist world market prices, without changing the actual, physical input structure.

Before reviewing the results of the indicated price-type calculations, let us have a glance at the *direct and cumulated input coefficients* of the three types of tables.

Table 1

Direct and cumulated cost factors on the basis of statistical input-output tables compiled in forints, roubles and dollars*

Branch	Chemical industry		Light industry		Agriculture		Socialist industry		National economy, total	
	1961	1965	1961	1965	1961	1965	1961	1965	1961	1965
1. Domestic material costs (per unit of output)										
— forints	0.42	0.32	0.45	0.37	0.47	0.44	0.50	0.45	0.47	0.44
— roubles	0.34	0.37	0.49	0.46	0.47	0.44	0.52	0.51	0.49	0.47
— dollars	0.38	0.43	0.54	0.53	0.46	0.45	0.54	0.55	0.48	0.48
2. Import material costs (per unit of output)										
— forints	0.29	0.23	0.14	0.12	0.02	0.04	0.13	0.11	0.08	0.08
— roubles	0.22	0.26	0.16	0.15	0.02	0.04	0.12	0.13	0.08	0.09
— dollars	0.27	0.32	0.19	0.19	0.02	0.04	0.13	0.15	0.08	0.10
3. Wage costs (per unit of output)										
— forints	0.08	0.07	0.16	0.15	0.38	0.38	0.12	0.13	0.20	0.20
— roubles	0.06	0.07	0.14	0.16	0.27	0.27	0.16	0.13	0.20	0.19
— dollars	0.08	0.09	0.17	0.20	0.28	0.29	0.13	0.14	0.19	0.20
4. Net income (profits) (per unit of output)										
— forints	0.14	0.32	0.21	0.33	0.09	0.09	0.19	0.25	0.18	0.20
— roubles	0.33	0.23	0.18	0.19	0.22	0.18	0.19	0.18	0.19	0.17
— dollars	0.21	0.07	0.06	0.04	0.21	0.19	0.14	0.09	0.18	0.16
5. Cumulated* import material costs										
— forints	0.36	0.28	0.24	0.19	0.07	0.10	0.22	0.19	0.16	0.16
— roubles	0.28	0.33	0.27	0.25	0.06	0.10	0.22	0.22	0.16	0.17
— dollars	0.34	0.42	0.33	0.33	0.06	0.10	0.20	0.26	0.14	0.19
6. Cumulated* wage costs										
— forints	0.22	0.17	0.31	0.26	0.64	0.60	0.30	0.28	0.38	0.35
— roubles	0.18	0.19	0.30	0.31	0.48	0.49	0.29	0.30	0.36	0.35
— dollars	0.21	0.24	0.38	0.41	0.49	0.49	0.32	0.35	0.36	0.37
7. Cumulated* net incomes										
— forints	0.29	0.44	0.38	0.49	0.21	0.20	0.37	0.41	0.34	0.35
— roubles	0.44	0.35	0.36	0.36	0.41	0.33	0.37	0.35	0.37	0.34
— dollars	0.33	0.19	0.20	0.16	0.38	0.33	0.35	0.25	0.36	0.31

* Cumulated: cost factors calculated with the aid of the Leontief inverse, taking thus also indirect inputs into consideration.

The three branches chosen very markedly show the trends — more than once of opposing character — which appear between the forint value and the tables compiled in terms of world market prices. It turns out, for example that the Hungarian *chemical industry* is not only the branch with the *highest import material consumption* in relative terms, but in contrast with the appearance given by the forint table, per unit requirements *showed a strongly increasing trend* in both rouble and dollar relations between 1961 and 1965. At the same time, the *relative profitability of agriculture is* — in both the rouble and dollar terms — *more than double* the rate shown by the forint table prepared by the Central Statistical Office (for both 1961 and 1965), despite the fact that the repriced (rouble and dollar price) tables would lead us to assume a slight drop in this field.

In the light industry the most noteworthy factor is that while on the basis of the forint prices profitability is quite substantial, and has shown a rise over time, in the dollar table the rate of net profits is extremely low (6 and 4 per cent), much lower than in any other branch. The profitability of the *chemical industry* is similar to its import requirements: while between 1961—65 it more than doubled in forints, the table compiled in dollars leads us to assume a close to 70 per cent drop.

The rate of wage costs, as if indicating an improvement in productivity, *dropped on the basis of the forint price tables*, but this is not the case with the tables in *foreign exchange* where *between 1961—65* there was a *rising* trend everywhere.

Another most noteworthy factor is that on the national economic level the major indices of the forint, rouble and dollar balance show a *minimum of deviation*. The maximum 4 per cent variance only appears in two cases of direct input: the 1965 rate of material costs, and the forint and dollar indices of net income. On the level of socialist industry the deviation is already larger, e.g. in 1965 the rate of net income was 25 per cent in forint prices and only 9 per cent in dollar prices. In the branches selected the variance is even greater, and in some cases — regarding the rate of income — it is quite marked.

From the deviations in the major economic parameters prepared in forint, rouble and dollar prices, we can in fact logically conclude that it is not irrelevant for price-type calculations (the so-called ideal prices) whether the input-output tables, constituting the basis of the initial equations, are compiled in forints, roubles, or for that matter, dollars. However, we can raise the question: how much are the "ideal" prices and price ratios improved, if the current input is calculated in some external foreign exchange. First of all, it must be emphasized that no change occurs on this account in the following:

a) — *the technical aspect of the input structure* of the individual branches; in order to produce a unit of a final product the same amount of coal, electric energy, etc. is needed both at dollar and at forint prices,

b) *the technological composition and volume of the fixed and liquid capital* employed in production,

c) *the natural (physical) quantity of live labour* (man-hours etc.) used in any individual branch,

d) finally, the *volume of the new product* created, the physical set of products.

That means that no matter which foreign currency we use to reprice our tables, all those factors which, according to the Marxian fundamental thesis,

determine the value of a commodity, remain unchanged, and these are the factors which should be used to form the "ideal" prices in the true sense of the term.

However, practical price formation is never completed with the material form of the above resources, but always with a combination of them, calculated at some price: they appear as wages for live labour, as costs of technological inputs, as interest on fixed capital, amortization and as rent. These are the forms under which the calculations appear in the actual prices, in concrete price ratios. However, the world market may develop evaluation norms for them which deviate from the national ones and, in fact, in practice these ratios are different. Per unit inputs, the requirements for live and embodied labour are different in the different price systems, and the residual, the net income, this typical commodity category finally becomes the dominant yardstick of the price system in which the result of the production process appears on the market. In other words, as a result of repricing to foreign currencies, the *changes* in the economic sense will appear in the following:

a) the *value aspect* of the input structure of the branches,

b) *the value of fixed and liquid assets*, and their *ratio* by branches (sectors),

c) *the value of live labour* used by the different branches, the level and *proportions of wages paid* and incomes of a wage nature,

d) *the value of the product-mix* created, as well as its value and price ratios.

If, however, the latter statements are true we can ask the question: is it truly expedient to recalculate the input structure of an economy into the market prices of some foreign country? How should we evaluate the new input, price and profitability ratios which would emerge in this way, and what should be done after that? Many replies could be given to the question, so let us simply have a look at the most obvious one. For a completely self-sufficient country, in the hypothetical case it produced all its products at least as economically as any of the other countries (meaning that none of the latter was capable of producing a single product more economically then the country we are discussing here) — a taking over of any kind of an external price system, or price ratio would only be a handicap. However, for an open economy like the Hungarian, we may realistically raise the question: how would the input structure of a product, sector or branch develop, and what is more, what would happen to their profitability, if, instead of the strongly autarkic domestic prices, the different resources used were evaluated on the basis of the prices of some external market. Does a calculation like this change the production, or input structure, profitability, productivity etc. relations of the given year by itself? In the material, physical sense, naturally, no change takes place.* However, it can be shown what new profitability structure would be

* The value-type price e.g. is determined on the basis of the relations of $p^* = p^* A + (1 + \alpha)v^*$ (where p^* = the price vector, $\mathbf{A}$ = the technological matrix, v^* = the live labour vector, α = the uniform key for the distribution of net incomes) which would be independent of domestic or world market prices if the A and the v^* were determined in natural units (kWh/to, man-hours/to, etc.). The problem is caused by the fact that in order to receive a price, both live and embodied labour must appear in a uniform dimension: in the same one in which the surplus value, net income. This is how actual prices get into the calculations, and this is the explanation for the deviation between ideal prices calculated at domestic and world market prices, which is a direct consequence of the differences between the input and price ratios on the two types of market.

formed at those prices which we would like to approach (or at least where the theoretical possibility of an approach emerges). This, once the effects are recognized by economic management, might have a reciprocal effect on the concrete production and simultaneously on its technological aspects too. In this way the value indices (input calculated in foreign exchange) would provide an indirect incentive for changing the material, technological side of input. Apart from the effect of input and price ratios on production policy, they will also affect investment policy, inspiring a new allocation of fixed assets and labour, which will again have a reciprocal effect on the physical input structure and on that calculated at domestic prices, in forints, as well as on profitability calculated equally in forints. Naturally, "world market" profitability indices formed in this way will be unfavourable, in more than one case, compared to the earlier "autarky" they would provide incentives for substituting imports for home production in a given branch, group of products, or even a product with imports, or for channelling a larger proportion of sales towards the external markets.

The following two tables support what has been sketched above, showing the ideal prices (price indices) calculated on the basis of the 1961 and 1965 forint, rouble and dollar prices.

Analyzing the calculated ideal prices, the following major comments can be made:

a) On the *national economic* level the price indices of the tables compiled at forints, rouble and dollar prices show minimum deviation. Regarding the whole of socialist industry, particularly as regards domestic prices *versus*

Table 2

Value type (ideal) prices on the basis of input-output tables compiled in forints, roubles and dollars*

Fact price = 100

Branch	1961			1965		
	forint	rouble	dollar	forint	rouble	dollar
1. Mining	97	116	117	104	100	112
2. Electric energy	83	113	114	80	90	94
3. Metallurgy	75	92	88	77	90	90
4. Metal-working industries	76	72	77	87	78	104
5. Building materials industry	87	99	111	86	79	96
6. Chemical industry	88	72	85	70	79	101
7. Light industry	85	91	112	74	89	118
8. Food industry	103	105	103	98	105	104
9. Socialist industry, total	85	89	94	84	89	104
10. Building industry	93	109	98	100	100	97
11. Agriculture	127	102	104	132	107	108
12. Transport	91	94	76	115	95	81
13. Home trade	91	121	98	117	120	80
14. Foreign trade	78	85	65	99	86	57
15. National economy, total	94	96	95	96	97	100

* Distribution of net income: in proportion to wages.

Table 3

Production price-type (ideal) prices based on input-output tables compiled in forints, roubles and dollars*

Fact price = 100

Branch	1961			1965		
	forint	rouble	dollar	forint	rouble	dollar
1. Mining	96	116	117	102	99	112
2. Electric energy	96	137	137	91	104	113
3. Metallurgy	78	97	93	79	94	94
4. Metal-working industries	76	71	76	84	77	104
5. Building materials industry	87	101	113	87	81	99
6. Chemical industry	90	73	88	72	82	105
7. Light industry	86	86	108	71	86	114
8. Food industry	103	106	104	96	104	103
9. Socialist industry, total	87	89	98	83	89	105
10. Building industry	87	101	91	93	93	91
11. Agriculture	122	98	100	127	103	104
12. Transport	100	106	85	134	103	89
13. Home trade	98	134	107	131	135	85
14. Foreign trade	87	96	72	117	96	63
15. National economy, total	94	94	97	96	95	100

* Distribution of net income: 5 per cent on tied-down capital, the rest supplemented in proportion to wages.

dollar price, the variance is substantially greater (10—15 per cent on average). The branch differences themselves approach and even reach as much as 50 per cent in some cases.

b) The ideal prices calculated in rouble and dollar terms are substantially closer to *each other* than to the ideal prices in forint.

c) *The dollar-based ideal prices are substantially farther away* from the ideal *forint prices* than are the *rouble prices.*

d) The ideal *dollar prices* in the branches of *industry are above the ideal domestic prices,* and particularly *in agriculture,* but in the non-industrial branches in general, they are *below the latter.*

As can be seen from the numerical results, the *two types of price* gave results comparatively close to each other both for the whole of the national economy, and for socialist industry. The indices calculated from the tables in foreign exchange also behave similarly. At the same time, the deviation of some more important branches deserves special attention. A study of the *behaviour over time* of the branch price indices again leads us to a series of interesting conclusions. The ideal prices show a rising trend on the national economic level, and a stagnating or even a slightly decreasing one on industry level. (The exception is the dollar dimension, where the prices regarding socialist industry also increased.) On the branch level, in general, the rise in the forint prices ran together with changes in a similar direction in the price indices calculated in foreign exchange and the same holds for the decreasing of the former. There are exceptions here too; e.g. in mining and trade, where according to the forint table the ideal prices between the two periods

increased while, at the same time, in foreign exchange they showed a decrease (in the chemical industry the case is the opposite).

These calculations require greater accuracy than could be achieved and hence the concrete price indices are rather informative than precise, it would be incorrect to treat them as some sort of an optimum price. In fact, with this entire calculation we only wanted to call attention to the highly different results obtained in calculating an ideal price if we switched over from a national price system to the valuation system of the socialist or the capitalist world market. The question raised in the article by Imre Vincze we quoted [4] (that the ideal prices of Hungarian agriculture, as worked out in price-type calculations, are unrealistically high) has been answered at one blow by the above calculation, while at the same time, an entire series of novel problems, never raised before, have appeared. This means that we have met with the well known phenomenon of modern science: the greater the number of resolved problems, the more again will appear in the form of new ones.

The brief historical review given above, the mental experiment regarding further development, the experiences of the first price-type calculations with tables in foreign exchange are, in our opinion, a first step in the direction of using these methods in a form which satisfies today's requirements. In essence, similar concepts are characteristic of the endeavours of specialists dealing with price formation in the other socialist countries too and, as far as we know, these methods are being studied in a number of western countries with certain informative purpose, for orientation. With respect to the mathematical calculation and econometric description, even if the individual solutions deviate, the goal is mostly identical: endeavours to confront the price system, subject to state intervention and the market effects, central measures as well as supply and demand, with some sort of more exact, quantifiable price system. We may expect further results in the course of this work.

Explanation of terms

(a) *Centre of prices:* is the ideal price of a product established through the consistent application of the individual types of prices, serving as a basis for the formation of concrete prices.

(b) *Production price* in the Marxian sense is: production cost plus average rate of profit.

(c) *Tying down assets* (capital engagement) is the prolonged use of fixed and circulating assets for production. It thus corresponds to the term of capital outlays.

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BOOK REVIEWS

HÁY, L.: *A megváltozott világgazdaság.* (Die veränderte Weltwirtschaft.) Budapest, 1970. Kossuth Könyvkiadó. 123 p.

In diesem Werk, das von relativ geringem Umfang ist, fasst der Autor auf eine sehr gedrungene Weise die Veränderungen zusammen, die in der Weltwirtschaft in den letzten 25 Jahren vor sich gingen. »Meine besondere Aufmerksamkeit konzentriere ich auf die Wirtschaftsentwicklung und versuche die Frage zu beantworten, wie die Weltwirtschaft zum Zeitpunkt des Lenin-Zentenariums aussieht«. (S. 5.)

Das erste Kapitel gibt ein allgemeines Bild über das Wachstum der Weltwirtschaft und über die Ungleichmässigkeit ihrer Entwicklung. Als hervorragendste Tatsache des ungleichen Wachstums bezeichnet der Verfasser die sehr rasche Entwicklung der sozialistischen Länder. »Zum grössten Teil macht die grossangelegte Investition es verständlich, dass *sich die sowjetische Wirtschaft in einem viel beschleunigterem Tempo entwickelte, als die der Vereinigten Staaten*«. (S. 10.) Als Ergebnis dessen verringerte sich das Niveau zwischen der Industrieproduktion der Sowjetunion und der Vereinigten Staaten bedeutend. Im Jahre 1950 machte das Gesamtvolumen der sowjetischen Industrieproduktion 30% des Volumens der Vereinigten Staaten aus, in 1968 war dieses Verhältnis nach der Aussage des Buches 65—70%. In einem gegenüber den entwickelten kapitalistischen Ländern rascheren Tempo erhöhte sich auch die Industrieproduktion der RGW-Staaten.

Die Struktur der Weltwirtschaft ist heute viel komplizierter als vor einem Vierteljahrhundert. Es entstand das sozialistische Weltsystem, dessen Bevölkerungszahl heute bereits 35% der Bevölkerung der Erde übersteigt. Die Machtsphäre der imperialistischen Länder engte sich bedeutend ein. Der Kreis der abhängigen Länder erweiterte sich infolge des Zerfalls des Kolonialsystems. Ihre gesellschaftliche und wirtschaftliche Entwicklung ist von verschiedenem Niveau und sie werden kurz Entwicklungsländer genannt. Endlich sind noch Bruchstücke der Kolonialwelt zu finden. Einer der charakteristischen Züge der Änderungen ist, dass sich die Zahl der Staaten erweiterte. »Im Kreis der Grossmächte dagegen traten zwei Riesen hervor: die Sowjetunion und die Vereinigten Staaten; die Rolle Englands und Frankreichs verringerte sich, Japan stiess vor, die beiden deutschen Staaten und auch die Chinesische Volksdemokratie nehmen heute bereits eine relativ bedeutende Rolle unter den mächtigsten 10 Industriestaaten der Welt ein. Die ungleiche Entwicklung macht das Bild sehr farbenreich: denken wir nur an Japan, oder daran, dass die Südafrikanische Republik vor unseren Augen aus einer Kolonie zu einem neuen imperialistischen Staat wurde; Länder, die vorher Agrarländer waren, werden zu mittelmässig entwickelten Industriestaaten, z. B. einige europäische Volksdemokratien; die Industrialisierung begann auch in einigen Entwicklungsländern. Obwohl mit verschiedener Intensität, verstärkten sich doch

in den Entwicklungsländern die antiimperialistischen Bestrebungen, deswegen wäre es nicht richtig diese Länder einfach zur kapitalistischen Welt zu rechnen.« (S. 15.)

In einem gesonderten Kapitel befasst sich der Autor mit den Entwicklungsländern. Háy betont, dass *der Zusammenbruch des Kolonialsystems eines der wichtigsten neuen Kapitel in der Geschichte der Weltwirtschaft ist*, obzwar sich dessen Folgen erst jetzt zu entfalten beginnen.

Die Lage der Entwicklungsländer untersuchend stellt der Verfasser fest, dass »*sich bei den entwickelten kapitalistischen und den Entwicklungsländern die wirtschaftliche Kluft, der Abstand zwischen ihrer Entwicklung nicht vermindert, sondern wächst*, und wenn das Wachstumtempo in der Zukunft dasselbe bleiben würde, wie es zwischen 1960 und 1967 war, sich diese wirtschaftliche Kluft noch erweitern würde. Bis zum Ende des Jahrhunderts würde das Verhältnis der auf je einen Kopf entfallenden Produktion 20 : 1 betragen, in 1950 war dieses Verhältnis 10 : 1, und in 1967 13 : 1. Das Elend der Bevölkerung in den Entwicklungsländern ist heute ein Hauptproblem der Weltpolitik und Weltwirtschaft. Háy betont »*die Berufung auf demographische Gründe lenkt die Aufmerksamkeit von den wirklichen Problemen ab:* und zwar von den sozialen Verhältnissen, die einer tiefgehenden Änderung bedürfen um die Ernährungs- und anderen Probleme der Entwicklungsländer lösen zu können«. (S. 19.) Die den Entwicklungsländern gebotene Hilfe ergab nicht die erwartete Erhöhung des Nationaleinkommens, weil diese Hilfeleistung zum grössten Teil nicht der Entwicklung der Produktivkräfte diente. Auf diese Länder drückt als ausserordentlich schwere Last ihre sich immer mehr erhöhende Verschuldung. Die daraus entspringenden Verpflichtungen verzehren in vielen Entwicklungsländern einen bedeutenden Teil der aus der Warenausfuhr und den Dienstleistungen stammenden Einnahmen· Sehr bedeutende Verluste entstehen für diese Länder aus der Verschlechterung der Terms of Trade, das einen bedeutenden Teil der von den entwickelten kapitalistischen Staaten erhaltenen Hilfe aufzehrt. Auf Grund all dieser betont der Verfasser mit Recht, dass »*mehrere Entwicklungsländer ihren Zahlungsverpflichtungen bereits heute nicht mehr nachkommen können.* Immer mehr wird von Konsolidation, Moratorien, oder Konvertierung der Schulden, von einer Verlängerung ihrer Fälligkeit gesprochen. Mit Indonesien, Pakistan, Indien werden bereits Verhandlungen geführt. Die weiteren Aussichten sind noch weniger verheissungsvoll.« (S. 23.)

Die Gestaltung der ungünstigen Wirtschaftslage der Entwicklungsländer zeigt sich auch darin, dass *ihr Anteil am Welthandel abnimmt.*

Die wirtschaftlichen Schwierigkeiten spornen diese Länder zu einer gesteigerten Zusammenarbeit an. Háy stellt auf Grund dessen fest, dass die lateinamerikanische Koordinationskommission, der Andenblock, die ostafrikanische Kooperation, der arabische gemeinsame Markt darüber aussagen, dass man »bezüglich der Integrationsbestrebungen der Entwicklungsländer von einem Umschwung sprechen könne: *die dem Interesse der Imperialisten dienenden wirtschaftlichen Kooperationen beginnen zu zerfallen und es entstehen Zusammenschlüsse, die dem Fortschritt dienen.* Auch diese Erscheinungen zeugen davon, dass sich im sozialen und politischen Leben der Entwicklungsländer bedeutende Veränderungen vorbereiten.« (S. 27.)

Die imperialistischen Mächte haben zur Wahrung ihres Einflusses in vielen Ländern eine Militärdiktatur ins Leben gerufen. Zugleich kann aber auch beobachtet werden, dass in mehreren Ländern sich die Macht bereits in den Händen von *fortschrittlichen* militärischen Gruppen befindet. Diese Prozesse untersuchend kommt der Verfasser zum Schluss, dass in den Entwicklungsländern ein sehr bedeutender politischer und militärischer Umschwung vor sich geht, dies aber nicht den Beginn des Aufbaus des Sozialismus bedeute. »Man sucht den Weg aus dem Würgegriff des Neokolonialismus

mit grosser Unsicherheit. Die Entwicklungsländer können wir in drei Gruppen unterteilen: solche Länder, die auf einem antikapitalistischen Weg schreiten; solche, in denen sich ein Anwachsen der antiimperialistischen Kräfte zeigt und solche, in denen die Ausbeutungspositionen des Neokolonialismus noch unangetastet sind. Zweifellos ist eine Verminderung der Zahl der zur dritten Gruppe gehörenden Länder und ihre Verschiebung in Richtung des sozialistischen Fortschritts zu bemerken.« (S. 28.)

Das nächste Kapitel des Buches enthält die neuen Erscheinungen der Entwicklung des staatsmonopolistischen Kapitalismus. Der Verfasser betont, dass sich das System des staatsmonopolistischen Kapitalismus stetig entwickelt, neue Züge annimmt. Unter diesen Faktoren misst er dem *Anwachsen der Monopolien* eine bedeutende Rolle zu. In den letzten Jahren handelt es sich aber nicht nur um eine Beschleunigung der Konzentration des Kapitals und um eine Zentralisierung der Produktion, sondern auch darum, dass Unternehmungskolosse von früher unbekannter Grösse entstanden, wie z.B. die Konglomerate. Weiters kommt neben den internationalen Kartellen den multinationalen Unternehmungen eine steigende Bedeutung zu. Nicht nur das Anwachsen der Monopolien, sondern auch andere Faktoren tragen zur Erweiterung des Tätigkeitskreises des staatsmonopolistischen Kapitalismus bei — schreibt Háy. Von der zweiten Hälfte der Fünfzigerjahre an rückte das Problem des wirtschaftlichen Wachtumstempos immer mehr in den Vordergrund. Trotzdem zeigt aber die Bewegung der gesellschaftlichen Gesamtproduktion in den Sechzigerjahren, dass »kein einziges kapitalistisches Land von einem Abflauen der Produktion verschont blieb«. (S. 33.) Im weiteren stellt Háy fest, dass »die einzelnen Phasen der Reproduktion nicht verschwinden, wenn auch die den Ablauf des Prozesses bestimmenden . . . Faktoren ihr Erscheinen in grossem Masse modifizieren und ihre Zeitdauer verkürzen oder verlängern, was zur Folge hat, dass die Phasen öfters nur schwer voneinander abgegrenzt werden können«. (S. 35.)

Die Beschleunigung des Tempos der Wirtschaftsentwicklung wurde nicht vorwiegend durch die wirtschaftliche Intervention des monopolkapitalistischen Staates ausgelöst. Bei der Beschleunigung des Tempos spielten viele andere Faktoren mit; die technische Struktur, die damit einhergehende Veränderung der Produktionsstruktur, usw.

Im vierten Teil des Buches fasst der Verfasser die Änderungen der technischen Entwicklung und der Weltwirtschaft zusammen. Er geht davon aus, dass bei der radikalen Umwandlung der Weltwirtschaft die Beschleunigung und Verflechtung der technischen Entwicklung einer der grundlegenden Faktoren ist. Heute kommen die Errungenschaften der Wissenschaft wesentlich rascher in der Produktion zur Anwendung als in früheren Zeiten.

Die Aufwendungen für Forschung und Entwicklung haben sich in den entwickelten kapitalistischen Ländern in grossem Masse erhöht. Ähnlich ist die Lage in Hinsicht auf die Zahl der sich mit Forschung und Entwicklung befassenden Personen. Der kapitalistische Staat deckt einen stetig anwachsenden Quotienten dieser Ausgaben. Charakteristisch ist auch die Militarisierung der Forschungs- und Entwicklungsarbeiten. Dieser Prozess greift auch auf den Hochschulunterricht über. In den USA z.B. deckt ein Grossteil der Universitäten einen bedeutenden Teil der Kosten aus Beträgen, die sie als Gegenwert für kontraktlich gesicherte Forschungen vom Pentagon erhalten. Weiters kann eine Verstärkung des *Internationalisierungsprozesses* der Forschung erwartet werden. Dies wird aber — weist der Autor hin — den Konkurrenzkampf nicht aufheben. »Eine neue Erscheinung bei den Wechselbeziehungen der imperialistischen Länder ist, dass dieser Kampf bereits in den Forschungslaboratorien beginnt.« (S. 49—50.)

Die technische Entwicklung hat zur Folge, dass einzelne ältere Produktionszweige verkümmern, andere einen Auf-

schwung erleben, oder neue Produktionszweige entstehen. In der Zukunft kann eine rasche Änderung der Produktionsstruktur erwartet werden. Háy betont, dass als Ergebnis der technischen Entwicklung ein grossangelegter Aufbau von Atomkraftwerken in Angriff genommen wurde. Dies zeigt sowohl in der Weltwirtschaft, als auch bei der weiteren technischen Entwicklung den Anfang einer bedeutenden Wendung. Die ausserordentlich rasche Entwicklung von Wissenschaft und Technik bringt auch in der gesellschaftlichen Sphäre tiefgehende Änderungen mit sich; die Gliederung der Erwerbsbevölkerung nach Berufen, sowie deren Klassenstruktur verändert sich.

Das fünfte Kapitel des Buches gibt über die neuen Züge des Welthandels, das sechste Kapitel aber über die anwachsende Rolle der Kapitalausfuhr ein Bild.

Háy stellt in Abrede, dass »in unseren Tagen die Kapitalausfuhr in den Hintergrund gedrängt wird, weil ihr Anwachsen bei der Verwendung des Nationaleinkommens langsamer ist, als es zu Beginn des XX. Jahrhunderts — in den beiden, damals grössten kapitalexportierenden Ländern — in England und Frankreich war. Diese letztere Feststellung ist richtig, die Folgerung ist aber trotzdem falsch, weil sich das Volumen der Ausfuhr in grossem Masse erhöhte und auch das Nationaleinkommen unvergleichlich grösser als in früheren Zeiten ist.« (S. 73.) Heute nehmen unter den kapitalexportierenden Ländern die Vereinigten Staaten den ersten Platz ein. Eine bedeutende Veränderung beim Kapitalexport besteht darin, *dass sich die Richtung der Ausfuhr bedeutend veränderte.* Früher waren die Kolonial- oder Halbkolonialländer das Hauptgebiet der Auslandsinvestitionen, heute können fast 70% der direkten Investitionen der USA in den entwickelten kapitalistischen Ländern gefunden werden. Den grössten Teil der Kapitalausfuhr wickeln zwar — dem Verfasser nach — die grossen Monopolien ab, aber auch der Export des Privatkapitals steht unter staatlicher Kontrolle, und der Staat lenkt die Kapitalausfuhr den politischen Gesichtspunkten entsprechend. Heute ist die Kapitalausfuhr eines der wichtigsten Mittel der neokolonialistischen Politik.

Im siebenten Teil des Buches analysiert der Verfasser die Krise des internationalen Zahlungssystems des Imperialismus. Er geht davon aus, dass »eine der augenfälligsten Erscheinungen der Krise des Weltkapitalismus die schweren Störungen im internationalen Zahlungssystem des Imperialismus sind«. (S. 83.)

Das nach der weltwirtschaftlichen Krise von 1929—1933 gebildete Golddevisensystem ist durchgefallen. Da die Gestaltung der Zahlungsbilanz eine der bedeutendsten Charakteristiken der Währungslage ist, untersucht der Verfasser eingehender die Entwicklung der Zahlungsbilanz in den USA und in England, weil diese Zahlungsbilanzen vom Gesichtspunkt der internationalen Zahlungen aus die wichtigsten sind. Um ein Zusammenbrechen des internationalen Zahlungssystems zu vermeiden, hat sich das Finanzkapital *»eine Defensivstellung ausgebaut, die in erster Reihe der Unterstützung des Dollars dient«.* (S. 92.)

Der Autor fasst seine Folgerungen darin zusammen, dass im Mittelpunkt der Krise des internationalen Zahlungssystems der Dollar steht. Heute ist es bereits klar, dass der Dollar allein die Rolle einer Reservewährung nicht ausfüllen kann, trotzdem verteidigt das internationale Finanzkapital den Dollar. Dies geschieht nicht aus irgendeiner Grossherzigkeit, sondern ist eine Folge der Befürchtung, dass ein Zusammenbruch des Dollars in der kapitalistischen Weltwirtschaft unübersehbare Folgen nach sich bringen würde. »Was für mächtige Mittel auch die westeuropäischen Finanzmächte in ihren Händen halten mögen, zur Sicherung der Stabilität des Dollars sind sie doch zu schwach, weil dazu vor allem eine grundlegende Änderung der Wirtschaftspolitik in den Vereinigten Staaten notwendig wäre. Die imperialistischen Konkurrenten wünschen auch garnicht, dass die monopolistische Rolle des Dollars erhalten bleibe. Trotz der Zusammenarbeit besteht ein Wettstreit um die Neuordnung des in-

ternationalen Währungssystems der kapitalistischen Welt, dessen Verwirklichung auch durch diese Gegensätze Schranken gesetzt werden. Aus diesem Kampf werden im Endergebnis, infolge der Veränderungen der Machtverhältnisse, die Vereinigten Staaten und der Dollar im Vergleich zur Zeitspanne des Golddevisenstandards geschwächt hervorkommen.« (S. 98.)

Háy hebt endlich, die neuen Erscheinungen der Weltwirtschaft untersuchend die Integration hervor, die bei den sozialistischen, den imperialistischen und den Entwicklungsländern gleicherweise zu beobachten ist. Näher befasst er sich mit den beiden entwickeltesten Gebilden der Integration, mit dem Rat für Gegenseitige Wirtschaftshilfe und mit der Europäischen Wirtschaftsgemeinschaft. Er beschreibt in welcher Phase sich diese Organisationen in unseren Tagen befinden.

Das letzte Kapitel des Buches enthält die Folgerungen und Prognosen des Autors. »Bei der Ausgestaltung von Prognosen — schreibt er — werden zwei ausschlaggebende Fragen aufgeworfen. *Die eine ist die Verteidigung des Weltfriedens, die Vermeidbarkeit eines Atomkrieges, die andere ist das zu erwartende Tempo der wirtschaftlichen und technischen Entwicklung in der vor uns stehende Zeitspanne.*« (S. 113.) Obzwar die kriegslüsternen Kräfte bedeutend sind, beweist der Autor überzeugend, dass ein Weltkrieg vermieden werden kann. Háy hält die Kräfte des Friedens, trotz des Verhaltens von China, für genügend zur Zügelung der Kriegabenteurer. Dies ist eine der Grundthesen seiner Folgerungen. Demgemäss: 1) In den kommenden Jahrzehnten werden die Produktionskapazität und die technische Entwicklung der sozialistischen Länder das Niveau der imperialistischen Länder in einem grösseren Masse als bisher annähern. 2) Die Folgen des Zusammenbruchs des Kolonialsystems werden sich in den Siebzigerjahren stärker zeigen als im vorhergehenden Jahrzehnt.

Was die technische Entwicklung betrifft, ist es eine grundlegende Frage, ob wohl die Entwicklung in den Siebzigerjahren in einem solchen Tempo fortgesetzt werden könne, wie in den Sechzigerjahren. Dies ist nämlich in Bezug auf das Wachstumstempo der Produktion eines der ausschlaggebenden Probleme. Der Verfasser betont, dass *vom technischen Gesichtspunkt aus die Möglichkeiten der Entwicklung im wesentlichen unbegrenzt sind.* Man muss aber auch die gesellschaftliche Seite der Frage in Betracht ziehen. In den kapitalistischen Ländern führen die Disproportionen zwischen Produktionskapazität und Märkten zu immer grösseren Spannungen. Auf Grund dessen ist der Autor der Meinung, dass es nicht wahrscheinlich ist, dass die technische Entwicklung im nächsten Jahrzehnt die Entwicklung der Sechzigerjahre überflügeln könnte, »sogar ein gewisser Rückgang würde mich auf diesem Gebiet nicht überraschen«. (S. 119.) Dagegen bestehen in den sozialistischen Ländern, wo die Hauptaufgabe der Volkswirtschaftspläne die technische Entwicklung ist, keine solchen Schranken.

In den entwickelten kapitalistischen Ländern ist der staatliche Monopolkapitalismus heute die Daseinsbedingung des kapitalistischen Systems, aber den Gang des Reproduktionsprozesses durch die staatlichen Eingriffe zu entscheiden kann nicht erreicht werden. Die finanziellen Mittel der Eingriffe in die Wirtschaft bringen in jedem entwickelten Land eine Inflation mit sich. Dies ist eine ständige Erscheinung des staatlichen Monopolkapitalismus.

Háy hebt hervor, dass der Reproduktionsprozess verschiedene Phasen enthalte. »In Bezug auf die Benennung und Abgrenzung dieser besteht derzeit noch eine grosse Konfusion.« (S. 120.) Zur Abschaffung dieser Konfusion leistet aber der Verfasser in dem besprochenen Werk keinen Beitrag.

Im Zusammenhang mit der konjunkturellen Rolle des Aussenhandels kommt der Verfasser zur Folgerung, dass diese in den Siebzigerjahren schwächer als im vorhergehenden Jarzehnt sein wird, weil sich im Verhältnis zum Anwachsen der Produktionskräfte die Lage auf dem Weltmarkt verschlechterte. »Der überwiegend grosse

Teil des Welthandels wird sich auch weiterhin (wahrscheinlich in einem verlangsamten Tempo) unter den imperialistischen Ländern abwickeln und die dortigen verringerten Auftriebskräfte werden im Welthandel vorläufig weder durch das Anwachsen des Umsatzes des RGW, noch durch die Vergrösserung des Anteils der Entwicklungsländer ersetzt werden können.« (S. 123.)

Zusammenfassend kann festgestellt werden, dass das Buch von Háy — obzwar in mehreren Fällen nur skizzenhaft — über die wichtigsten Änderungen der heutigen Weltwirtschaft ein analysierendes Bild gibt.

A. Sipos

Gy. Becsky: *Hosszú lejáratú tőkemozgások Nyugat-Európában, különös tekintettel az Európai Gazdasági Közösség helyzetére a hatvanas években.* (Long Range Movement of Capital in Western Europe with Particular Respect to the Position of the European Economic Community in the 1960's.) Budapest, 1970. Akadémiai Kiadó. 199 p.

The Publishing House of the Academy of Sciences, as part of the series "Economic Dissertations", has published a fascinating monography for those interested in international economic issues. The author has provided a good and concise summary, completed after processing a tremendous amount of literary and statistical material, of one of the most complex forms of the international flow of capital, of the long range movement of capital.

The book consists of five parts. The first and second ones provide a historical introduction, while the third and fourth include the substance of the material, and the fifth is a review of the European Investment Bank.

The goal *of the first part* is to introduce the activities of the OEEC in the post-World War II years. The OEEC made tremendous efforts to end restrictions on commodity and foreign exchange turnover, and to liberalize the international long-range movement of capital. The author correctly exposes the interests which caused the United States to liberalize West European economic processes. He devotes a substantial portion of this part to show the roles played by the International Monetary Fund, the Marshall Plan, and the European Payments Union (EPU) in this process of liberalization. He also provides a factual listing of the contents of the OEEC liberalization code, and explains the different categories of capital movements.

In this chapter, above and beyond a simple review, the reader is treated to an interesting analysis of direct and portfolio investments, one of the most highly debated issues in the literature and practice of international capital movements. Becsky's analysis is interesting not only from the literary point of view, but also is useful for the practice of socialist-capitalist monetary cooperation.

In the second chapter we find a brief review of the monetary effects and role of the European Coal and Steel Community (ECSC) and the foreign exchange prescriptions of the Rome Treaty. The theoretical problem of financial integration is dealt with in an interesting way, and in greater detail. The author shows the diametrically opposed views represented on the one side by Hallstein, and on the other by de Gaulle. Becsky presents a very logical critical analysis of both views, and in doing so, in essence, he takes a stand on the possible ways of financial integration. After this, we are given a compact review of the work of the EEC Committee. The author deserves praise for finding the optimal length at which to discuss this tremendous complexity of problems, and for not getting lost in the seductive maze of detail.

The essence of the book is in parts III and IV. In the *third part* the author first — correctly — discusses the general conditions for the operation of the capital market, and then very briefly shows, as a function of these conditions, the most important international capital markets.

Following this, the study reviews the special features of the national capital

markets of the Common Market member countries. On this point the author provides very rich statistical illustration. He shows how state influence, and all characteristic features of state monopoly capitalism take effect on the national capital markets of the EEC countries. He points out that regulation of the capital markets is one of the cornerstones in the business policies of the capitalist states. He shows the size and structure of capital supply and concludes that no large amount of free capital flows in the markets of the EEC countries from the outset. He also points out that that the importance of the capital market in the EEC countries is small in financing, when compared to direct advances on capital and to self-financing. One of the major barriers in the way of the integration of the Common Market capital market is that foreign capital demand and supply avoids the domestic one, because of the monopolizing activities of the state and certain banks. He deals with the national deviations in the interest level, and with their effects on the integration of capital.

Becsky emphasizes: one of the factors limiting the integration of capital is that the EEC countries do not have a common currency.

In a highly exciting part of this chapter he discusses the possible roads toward the integration of the capital markets. Here his analysis of the bond market deserves particular attention, since this phenomenon is now in the stage of development, and no economic evaluation of it has yet been made.

A special merit of the author is that he could provide a summary evaluation and draw independent conclusions on this field comparatively so poor in statistical data. He gives an interesting analysis of the Italian ENEL loan structure, which also appears as an example used by P. Einzig, when he discusses the questions of applying a flexible interest rate. The author provides a separate study of the problems of the accounting unit, which is closely connected with the uncertainty of today's capitalist currencies and the lack of confidence in the US dollar. He discusses the advantages and disadvantages of loans made in accounting units, and the techniques for its application. Finally, he summarizes the major questions in connection with the European capital market, and the major features of the Eurobond market.

In the *fourth part* we find the further development of this sphere of ideas. Here we can gain a picture of the size and directions of the capital movements. In writing on relations between the flow of capital and enterprise dimensions, the author concludes that within the EEC the comparatively smaller average enterprise dimensions are not favourable to the development of long-range capital movements. But aside from this, he also points out that qualitative changes began to appear in this field in the 1960's.

The author shows the net capital exporter and importer positions within the EEC, and provides a diversified analysis of the reasons why the individual countries play their given roles. He deals separately with the regularities of the capital movements between the EEC and third countries, and with experience in this field.

He provides an interesting study of the factors affecting the movement of capital: of business trends, the limits of the legal superstructure, etc. Finally, he shows the weight and importance of direct foreign capital investments on national economies by countries. The research material used in the book was completed in 1968, and for this reason many new phenomena, such as the flow of West European private capital into the markets of the United States, the change in the trend of the Eurobond and Eurodollar market, the planned common currency of the European Economic Community, etc. could not be treated.

The *final part* of the book discusses the European Investment Bank. As far as I know, this rich supply of information on this financial organ is unmatched in Hungarian literature. This is the reason why this chapter does not appear too large in

comparison with the proportions of the book. The description and evaluation are correct, and can be put to good use in other research projects as well.

I. WIESEL

LÁNG, I.: *Nemzetközi gazdasági és pénzügyi szervezetek kialakulása és tevékenysége a II. világháborút követő években.* (Formation and activities of international economic and financial organizations in the years following World War II.) Budapest, 1970. Akadémiai Kiadó. 360 p.

By way of introduction, the author deals with the general problems of the fundamental contradiction in the period under study, i.e. the conflict between economic nationalism and economic internationalism (liberalism).

In the *first part* the reader is given a picture of the development of foreign exchange economy in Britain during the war and of related contradictions and conflicts of interest. The author describes the process leading to the establishment of the "dollar pool", and its operation.

He shows the contradiction emerging between the United States and Great Britain in connection with the American "Cash and Carry" Act. For Britain the fact that the government of the United States was only willing to ship her war materials for cash was a very heavy burden also from the viewpoint of the outcome of the war. The book also discusses the series of diplomatic exchanges which, as a result of the changes in world political power relations, and in the grouping of forces, led to the Lend and Lease Act.

The work analyzes the way in which the United States made use of the Lend and Lease Act for developing the expected system of international relations, and establish an economic foundation for the endeavours of American power relations in their ambition for world rule.

The *second part* deals with the beginning of "post-war planning". A committee was formed within the United States State Department on January 8th 1940 (!) to deal with the questions of *post-war* economic order. It is clear that the United States already had claimed to rule the post World War II world economy.

In 1942 it became clear that one of the most important fields in the solution of post war economic problems was that of monetary questions, and plans were worked out by the British Keynes and the American White. The book analyzes the common features of the two plans together with the different conflicting interests.

In the *third part* the author discusses the events and main points of debate at the Hot Springs conference. He sketches out the main features of the British stabilization plan, with which Britain desired to maintain its world economic hegemony. These included e.g. the International Commercial Union plan, an international organization for the purpose of handling raw material "buffer stocks", the International Raw Material Stock Office, etc. which could not be realized because of their being opposed to United States interests. An interesting part of this, chapter is the way we get a picture of the sharp conflicts developing between Britain and the United States in connection with Article 7 of the Mutual Aid Agreement. With the broad-scale proliferation of the principle of non-discrimination, the United States openly attacked the preferencial tariff system of the British Empire.

In the *fourth chapter* the reader gets acquainted with the procedure of the Bretton Woods conference which has since become famous in economic history. The book provides a highly detailed description of all events at the conference, and its review of the stand taken by the Soviet delegation is of particular interest. The author then goes on to discuss the goals and regulations of the so-called Bretton Woods financial bodies.

In the *fifth chapter* we receive interesting information about the contradictions formed within the United States, in connection with the establishment of the Bret-

ton Woods organizations. The attacks of American bankers and leading business circles were particularly strong. In expressing its opposition, the banker organization proposed the creation of a Bank which, together with the American Export–Import Bank, would have provided also for the activities foreseen for the International Monetary Fund. The author then describes the reasoning with which the government dissolved the standpoint of the internal opposition. On August 21st 1945 the United States ended its Lend and Lease operations. This hit Britain's sensitive spot, and for this reason she entered into talks in the United States for a new credit agreement. The United States tied the new credit to very strict economic conditions. Among other things, it prescribed that Britain should make the pound sterling convertible, end the dollar pool, liberalize American commodities on the British market, etc.

The *sixth chapter* provides a picture of the problems of the years in which the Bretton Woods institutions began to take shape (1946–47). A separate point deals with the failure of sterling convertibility in 1947.

The *seventh chapter* introduces the London and Geneva talks which led to the establishment of GATT.

The *eighth part* primarily discusses the interrelations of the turn which began with the establishment of the different United Nations bodies and the Marshall Plan. It deals in detail with the establishment of the Organization of European Economic Cooperation with its function and with the role it played in the development of international political tension. In conclusion the author analyzes the reasons for the failure of the Havanna experiment.

The author has written a work unmatched in Hungarian literature on economic history, a work which can justly demand an important place also in international literature on economic history.

J. WIESEL

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* We acknowledge the receipt of the following books. No obligation to review them is involved.

** To be reviewed in Acta Oeconomica.

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M. TIMÁR: The Structure of the Hungarian National Economy and its Development Trends
L. SZAMUELY: Major Features of the Economy and Ideology of War Communism
J. ÁRVAY: The New System of National Accounting in Hungary
E. O. HEADY: Farm Planning for Modern Agriculture and Large Units
J. GOORMAGHTIGH: Some Thoughts on Economic Policies and International Organizations

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I. LÁSZLÓ: The National Management Training Centre

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GY. BECSKY: Critical Comments on J. K. Galbraith's Book (The New Industrial State)
Á. SCHMIDT: Zur Typologie der Planungssysteme (P. Knirsch: Strukturen und Formen zentraler Wirtschaftsplanung)

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CORRIGENDA TO THE PREVIOUS ISSUE

Much to the regret of the Editor in Vol. 6. No. 4. Acta Oeconomica the following printing errors have been made:

page 345	line 8	printed: great	correct: meat
358	19	consumer	consume
359	31	wide	wise
406	3	talns	talks
	13	ineormation	information

AUTHORS

LAJOS KÓNYA, b. 1928. Head of Dept. of the National Planning Office. Author of several studies on the financial aspects of the new economic mechanism.

DR. RUDOLF ANDORKA, b. 1931. Senior officer at the Department of Social Research, Central Statistical Office, former research worker at the Demographic Research Institute, Central Statistical Office. Co-author of "Alcoolisme et culture en Hongrie." in Toxicomanico, Vol. III. No. 3. (1970) pp. 371—381. Author of "Demographic factors in the planning of location of economic activity." in Regional Science Association Papers, Vol. 22. (1969) pp. 149—158; "Micromodels." Budapest, 1970. Közgazdasági és Jogi Könyvkiadó. (in Hungarian, to be reviewed in the next issue.)

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Luis Escobar C.	*El financiamiento externe de América Latina. Comentarics al artículo de Felipe Pazos.*
Simón Teitel y Victor Tokman.	*Acerca del Informe Prebisch: Transformación y desarrollo*
Alberto J. Yarza C.	*El futuro del procaso de industrialización en México*
George E. Feiwel.	*Planesción para el crecimionto. El Bienestar del consumidor y Contabilided económica. (Ensayo en honor de Michal Kalecki, un economista universal).*
Luisa Montuschi.	*Suztitución de factores y dietribución del ingreso: réplica a Silvestre Damus.*

DOCUMENTOS:

Ley para el control de los Organismo Descentralizadon y Empreras de Participación Estatal.

Acuerdo para el establecimiento de unidades de programación en cada una de las Secretarías y Departamentos de Estade, Organisme Descentralizados y Empresas de Participación.

Texto del discurso pronunciado por el señor licenciado Antonio Ortiz Mena, al tomar posesión de la Presidencia del Banco Interamericano de Desarrollo, en la ciudad de Buenos Aires, Argentina, el día 10. de marzo de 1971.

Texto del discurco pronunciado por el secretario de Hacienda y Crédito Público, licenciado Hugo B. Margáin, en la ceremonia insugural de la XXXVII Convención Nacional Bancaria, calebradas en la ciudad de Guadalajara, Jul. el dia 10. de Abril de 1971.

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REVISTA DE REVISTAS

PUBLICACIONES RECIBIDAS

ABSEES

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Volume 1 number 4 — April 1971.

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Acta Oeconomica, Vol. 7 (2), pp. 121–142 (1971)

M. TIMÁR

THE STRUCTURE OF HUNGARIAN NATIONAL ECONOMY AND ITS DEVELOPMENT TRENDS

In his introduction the author defines the concept of structure. He deals with the major features of the interrelationship between the economic pattern and economic development, and describes the major characteristics of the structural transformation of the Hungarian economy in the past 25 years. The study outlines the effects on the structural transformation of the system of economic regulators. In the concluding section the author reviews the relationship between general socio-political goals and the transformation of the economic pattern, and finally deals with the programme for structural transformation in the fourth five-year plan, and its prerequisites.

The structure of the national economy can be studied from a number of angles:

— the different *ownership forms*, the shares of the state, cooperative and private sectors,

— the *sector* structure of the economy, the importance of industry, agriculture, the building industry and the service trades,

— the share of the different industrial branches *within industry*,

— the *labour force* pattern which can be classified by the different sectors and branches, professional qualifications or income brackets,

— the pattern of *fixed assets and investments* by branches and by types of capital goods,

— the *pattern of foreign trade*, where the division of the imports and exports of a country among the socialist, developed capitalist, and developing countries is of great importance. The commodity pattern of foreign trade is no less important, i.e. the shares in exports and imports of materials, machines and consumer goods, or of agricultural and food industry products,

— the *pattern of consumption by the population*. The structural changes taking place here can be analysed from several points of view. The best known is the pattern of total consumption by use, showing major categories of consumer goods: food, clothing, education-culture-recreation-sports, household goods and home furnishings. We can also study the income sources of consumption, the part played by various products and services, as well as the various sources of procurement such as retail trade or the free market.

It would be expedient to separately emphasise the role of *infrastructure* in the national economy because of its great importance. This concept has become well known in recent years. In the economic interpretation infrastructure denotes fixed and liquid assets which ensure the preconditions for the operation of an economy; although they do not participate in the production process, they nevertheless play a determinant role in socio-economic development. Generally, these are the fixed assets of branches in direct relationship with production; such as transportation, telecommunication and energy supply are included here, together with certain fixed assets and equipment not directly related to production, such as education, the health service, the commercial network, the fixed assets of public utilities, and the housing stock. Opinions in professional literature tend to deviate as to which means and branches it is expedient to list here.

Economic development — Economic structure

There is a certain relationship between the economic structure of a country and its level of development as characterized by per capita national income. This interrelationship, according to experience is not always predetermined; it operates with a great degree of probability, but deviations may appear from the pattern which can be expected on the basis of the development level.

Although the economic structure does not rigidly adjust itself to development level, certain fundamental trends can nevertheless be observed. The less developed countries are characterized by a comparatively large weight of *agriculture* and a low share of the *manufacturing industry*. For example, in India, Indonesia and Pakistan, where the per capita national income is less than 200 dollars a year, 60—70 per cent of the labour force work in agriculture, and only 10 per cent in industry.

The role of agriculture is smaller in the more advanced developing and the moderately developed countries. Major role within the manufacturing industry is played by the light and the food industry, but the engineering industry, and to a certain extent, the chemical industry also appears. For example, in Brazil, Portugal, and Mexico where the per capita national income is between 300 and 500 dollars, the ratio of agricultural employment is 40—50 per cent, while that in industry is about 15—20 per cent. Finally, highly developed countries are characterized by a low share of agriculture and a high share of industry. Within industry the major feature of a high level of development is the leading role of the chemical and the engineering industries, and within the latter, the gradual growth of electronics. The importance of agriculture is, to some extent, depending on natural conditions. In certain developed industrial countries agriculture plays a comparatively larger role, as for example in Denmark, Norway and France, where the ratio of those employed in agri-

culture is 12—15 per cent. In other developed industrial countries the role of agriculture is smaller than this. E.g. in Holland, Switzerland, Sweden and the Federal Republic of Germany it is 7—10 per cent and in the United States and Great Britain is as low as 3—5 per cent.*

Thus, in the course of socio-economic development the number and ratio of those employed in agriculture decreases and in industry it grows. Another interesting rule of this process is that on a certain — quite high — level of development the growth of industrial employment slows down, and while the slow decrease of those employed in agriculture continues, the ratio of those working in commerce and the so-called "*tertiary*" or *service sector*, begins to grow. This process can be well characterized by the fact that the combined share of wage earners in commerce and the tertiary sector is in general about 15—20 per cent in countries at low development levels, 20—30 per cent in countries at medium levels of development, and about 30—40 per cent in countries at high development levels, while in the most highly developed countries this ratio is even higher.

The undeniably traceable interrelations between development level and structure in the process of economic growth provide important help in formulating our medium and long-term economic development plans. Of course, the general trends in this field are to be applied to concrete conditions, since in assessing the interrelations we must never ignore the difference in social systems, the specialities of our position, economic geography, and other natural conditions. Nevertheless, the idea put forward by Marx a hundred years ago has remained topical until this day: "One nation can and should learn from others. And even when a society has got upon the right track for the discovery of the natural laws of its movement . . . it can neither clear by bold leaps nor remove by legal enactments, the obstacles offered by the successive phases of its normal development. But it can shorten and lessen the birth-pangs." [1]

The economic structure changes gradually in the course of development, and this change is primarily caused by scientific and technological advance. New needs appear continuously, certain needs can or must be met in a more up-to-date manner, and all this affects the pattern of the ecomony. Therefore, the structural transformation can never be considered as completed, nor can it ever be removed from the agenda. This is a permanent process concomitant with economic growth which is determined by trends in domestic and foreign demand and by the most efficient forms of production that may be realized within the given economic and social framework. This, in turn, influences the rate of socio-economic progress in a way and to an extent which changes with time. One of the most important tasks of economic control and management is related to structural transformation: that is, the areas most suited to accelerate

* *Source:* OECD Observer. February, 1971.

development must be continuously identified. It is self-evident that *correct selection of the direction of development, and a faster development of the most efficient economic branches increases — while conservation of the structure and toleration or extension of the inefficient economic branches hinders economic growth, and brakes the growth of living standards, while simultaneously impairing the efficiency of the economy.* At the same time, there is a reciprocal effect between growth rate and structure: the rate itself reacts on the structure, and faster or slower advance has an impact on the possibilities for changing the economic pattern.

Quite naturally, both political factors and economic specialities play a role in the economic growth of a country and in the formation of its structure. For instance, in the past 20 years the average annual growth rate of the national income in Hungary was 5.6 per cent, while in neighbouring Austria with a similar size and geographical location, it was 5.3 per cent. If we compare the development of the two countries with different social systems, several essential special factors must also be taken into consideration. E.g. at the post-war starting point (1950) the stock of Austria's per capita productive and infrastructural fixed assets were estimated to be 30 per cent greater than that of Hungary. There were also several other factors, favourable from the economic point of view. In the past 20 years important additional foreign capital investments took place in Austria while in Hungary investments of this origin were negligible. The total income from tourism in the average of the past five years was about 300 million dollars in Austria, in contrast with Hungary's average annual income from tourism of just under 30 million dollars.

Problems in the structure of the Hungarian national economy prior to the reform

The economic growth rate is a very important question for a country. In the period between the two world wars the national income in Hungary grew at an annual average rate of 2 per cent only, while in the past 20 years the average growth rate was 5.6 per cent a year. The acceleration of the growth rate may be primarily attributed to the change in production relations, to socialist ownership, and to the introduction of economic planning. Apart from this, but mostly related to it, an essential part was played in the acceleration of the growth rate by the transformation of the economic structure.

The economic growth of the past 25 years has completely changed the structure of the Hungarian economy compared to the pre-war period. The major feature of this development on the *production* side was the advance of industry and the relative reduction of the role of agriculture. Changes in the employment ratios provide a good illustration of this change: in 1938, the ratio

of those employed in industry was not even one fifth of total employment, while the ratio of those engaged in agriculture approached 60 per cent. By 1970, the share of labour force in agriculture dropped to 29 per cent while the ratio of industrial employees grew to 34 per cent of total employment.

In the past 20 years the two most dynamically developing branches of industry were the chemical industry, which increased its production fifteen-fold, and the engineering industry, whose production rose ninefold. Production in the electricity industry also rose more rapidly than the average of industry, while in the building and construction, food and mining industries the growth rate of production was below average.

The changes in the *consumption pattern* over the past 20 years show further signs which are typical for a rise in the development level. The most characteristic feature is that in line with the large-scale expansion in commodity and money relations, consumption by the peasantry of their own production has sharply decreased. Another characteristic feature is the growing importance in production of industrial goods and services, and which are parallel with this, the drop within total consumption of the ratio of food consumption (from the 59 per cent in 1938 to 46 per cent in 1970).

Economic growth has been accompanied by the expansion of *international economic relations*. Hungary's intensive participation in the international division of labour among the socialist countries and the strengthening of ties with the developed and developing countries have substantially increased the role of foreign trade. This process can be clearly seen in the ratio of total exports to the national income, which rose from 18 per cent in 1950 to 36 per cent in 1970. Changes in the pattern of foreign trade indicate the major trends in Hungary's participation in the international division of labour. The share in total imports of industrial products has increased and that of raw materials has fallen; while the share in total exports of raw materials and semi-finished products was higher, and that of foodstuffs and processed food was lower in 1970 than in 1950. This change in pattern reflects the endeavour to accelerate, as far as possible, production in those industries which are most favourable to us, and to export their products, while covering domestic demand by imports in those areas which are less economic.

In the course of the 25 years since the Liberation, as in so many other respects, positive and negative trends in structural transformation occurred simultaneously. Immediately following the war, fundamental changes occurred in *ownership relations*. In the course of the 1945 land reform the state expropriated a total of 3.2 million hectares* of land, amounting to 35 per cent of the area of the country. Part of this land was distributed among the landless agrarian proletariat and the owners of dwarf plots, whereas a part remained

* This equals 8 million acre. 1 hectare = 0.4047 acre.

under state management. As a result of the 1948 nationalization, industrial plants and factories employing four fifths of all industrial employees were taken over into state ownership by 1950. By the same year the role of the socialist sector increased substantially, and at that time two thirds of the national income originated the socialist sector.

In essence, the structural transformation of the national economy began with the first five-year plan: in that period, as a result of substantial industrial development, the weight of industry in the economy increased. However, considering that the goal was the maximum utilization of production capacities, efficiency was pushed to the background, and this — together with other factors — had detrimental consequences to structure as well. In those years, coal mining production grew at a very rapid rate, and the unfavourable composition of energy sources placed a substantial burden on the national economy. The marked *extensive development* of the engineering industry took place in this period, and it did not sufficiently concentrate on the industries and enterprises which operate under the most favourable conditions. The negative effects of this development were apparent for a long time, and in fact they can still be felt to a certain extent. Economic management correctly recognized that the share of engineering production is an important criterion of development. However, this industry was developed at a forced rate and did not properly serve the future. This era was also characterized by the neglect of reconstruction — particularly in the manufacturing industry, and within this primarily in industries producing directly for the consumer — and this too had damaging consequences. The extremely slow rate of agricultural modernization was another feature of this period.

In the years following the 1956 events the major goal of the party and government was consolidation, but this process did not simply mean re-establishment of the earlier situation. The new management endeavoured to make changes in industry and agriculture, which could serve as starting points for a more efficient development. The success of consolidation contributed to the dynamic development of industry, to the fast rate of the socialist transformation of agriculture, and provided a sound basis for the second five-year plan.

The most important structural change in the second five-year plan period was in ownership relations, i.e. the socialist transformation of agriculture. This process was supported by the state with substantial financial means, for it spent huge sums to investments aiding to provide a basis for large-scale production. However, the fast rate of this change involved many improvised features in the allocation and scheduling of investment.

In this period the industry policy was rather pragmatic, lacking development concepts and alternatives prepared on the basis of suitable scientific analysis. Along with the substantial achievements, tension increased in the economy — particularly in foreign trade, inventories and investments.

The reform and the economic pattern

In the midst of the third five-year plan period, 1968, a *change took place in the system of economic control and management.* The reform took into consideration all the disproportions which appeared in the course of implementing the previous five-year plan and, by guiding the pattern in the correct direction, it endeavoured to lessen their effects. This endeavour had a favourable impact primarily on the individual industries, in transforming the product pattern. This was the period when a substantial part of the programs for the perspective development of the economy was worked out and approved on government level.

Since 1968, when the new methods became valid, the system of economic regulators has played an important role in realizing the goals fixed in the annual and the medium-range plans, together with direct central decisions. With respect to the fundamental problems of socio-economic progress the role of central planning remains determinant. Within this framework the indirect mechanism of the economic regulator system is used on a broad scale channelling by means of incentives the enterprises and cooperatives into a definite behaviour in their economic actions.

The economic regulators are not only a more liberal but also a more powerful and more efficient means than the old forms of administrative directives were. They influence trends in the economic pattern primarily through the price system, through enterprise income regulation, and a system of preferences.

Correct *price policy* is of great importance for the transformation of the economic structure: prices may stimulate or hinder the increase in efficiency. Given price relations and expected price changes affect production through profitability differences and act also as factors regulating demand. This is the point in our system of regulators where the requirements of stability and changes in the pattern confront one another most directly, for a policy aimed at raising living standard requires price stability while production policy requires price changes from time to time.

The endeavour for complete price stability is countered by rapid changes in the production pattern. If central regulation intended to ensure unchanged prices of certain products or groups of products it would also limit economically justified changes in relative prices. And there are, in fact, a great number of such cases. We only have to think of the advance of new products. Fixing prices and relative prices for a long period would be unavoidably accompanied by rigidity in the pattern of production and consumption, which would render modernization of both the production and the consumption patterns more difficult, involving greater difficulties in achieving the desirable structural transformation.

Economic growth continually modifies the national economic pattern, and the proportionality requirements continually change during the process of development. The upsetting of established proportions and the emergence of new ones in essence means a series of disequilibrium situations which cause smaller or larger price movements, and certain rise in the price level with the advance of new products to meet a higher level of demand. With the acceleration of economic growth certain products, particularly effected by these price fluctuations, may find themselves faced with particularly intensive movements if improvement in the efficiency of production due to increased productivity and technological development did not counter-balance it. According to experience, under Hungarian circumstances this situation does not come about and therefore the improvement in productivity does not completely balance the trend towards rising prices.

There is no doubt that incentives to economic growth under socialism cannot include inflation as a means. It is a fact of economic history that the socialist economy strives towards price stability, which however–because of the development requirements mentioned — does not mean complete immobility of prices. The requirement of stability refers to the general price level, and insofar as the average rise in the price level — stemming from the reasons given above — is not higher than one or two per cent annually, this process cannot be considered unhealthy.

It is obvious that efficiency, as a requirement, can only operate if the approach is based on a price system which correctly reflects differences in efficiency and in market relations. Our producer and consumer price system is developing in this direction, but today it is not yet completely in accordance with this requirement. The present income content of prices to a great extent reflects given conditions and the established economic pattern, and does not sufficiently show the differences in efficiency — and these precisely are the differences which could enable the system of regulators to help more forcefully in promoting the improvement of the country's economic structure.

The disproportions in consumer prices are indicated by the subsidies provided by the state, which are showing an increasing trend: in 1968 they amounted to 13 thousand million forints under the same heading. The majority of the price subsidies are for staple foodstuffs, passenger transport, fuel and various services. Government keeps these prices on a lower level because of considerations of the living standard policy; this inflates demand which, for certain products (e.g. meat) sometimes leads to tension between production and consumption. On the other side, the state has a substantial income in turnover taxes from the consumers. A part of the turnover tax — e.g. those on luxury foodstuffs, beverages and tobacco — functions in accordance with its goals. In other fields, however (e.g. regarding clothing) the price level is high because of the comparatively high turnover tax, and this brakes growth in consumption.

In the course of improving the system of regulators we must endeavour to achieve that prices — as well as the price subsidies supporting and turnover taxes supplementing them — shall be formed in accordance with the fundamental principles mentioned, and that the broad sphere of different supports be limited to a narrower field. This process requires great circumspection particularly in the field of consumer goods. Here gradual and carefully devised modifications are needed which, in compliance with economic requirements, guide production and utilization in the direction more in line with the global interests of society. These modifications are also meant to serve another important purpose: that *the rise in living standards called for in the plans be ensured to each and every stratum of the population.*

Besides the price system, the structure-shaping effects of income regulation are also noteworthy, particularly from the point of view of the extent to which it creates favourable conditions for later progress in the form of development funds. Apart from this, the income regulation system, through the general economic requirements it raises, also serves as an incentive for the enterprises to change their product pattern. As a result of the changes made in 1971, the major directions of incentives are related to improving enterprise efficiency and to the mobilization of existing reserves — primarily in the use of live labour and work organization — and in this sense the help transform the product pattern within the enterprise.

By means of the *preference system* the *operation* of regulators affects the formation of the structure as well. The preferences are a necessary supplement to economic policy even under conditions of ideal price and income regulation: in principle, non-profitable production which is likely to develop into efficient activity in the future must be given stimulus even in a perfect price system and, in fact, the main function of the subsidy system should be increasingly the connection between present and future profitability.

Economic policy differentiates between preferences. In certain areas it endeavours to achieve a more rapid transformation of structure, while in other cases, frequently based on aspects of social policy or living standard aspirations or because, for the time being, uneconomic production cannot be replaced by a more efficient one, the goal is the transitional maintenance of the present pattern, sometimes even for a comparatively long period. Therefore the preference system includes elements which accelerate the pattern transformation, simultaneously with those hindering it.

No small part of the present preferences is of a nature of reimbursing losses, and can be considered a social sacrifice for the temporary maintenance of the present pattern. The magnitude of these supports is substantially larger than would be desirable. For example, in industrial production and foreign trade — apart from consumer price subsidies — supports will amount to almost 20 thousand million forints, in 1971. The only road to development can be to

reduce the sum of supports for loss reimbursement and thereby provide incentives for increasing efficiency.

As to export subsidies, an analysis of the years 1968—1970 indicates that the system of state reimbursement, in essence lived up to expectations. As a result of its effects, substantially increasing exports were achieved with a decrease of per unit reimbursement, and in an improved pattern. This process is most comprehensively indicated by the change in the costs of earning a unit of foreign exchange which dropped by 1.8 forints in two years for the rouble, and by 2.6 forints for the dollar.

In the past three years the system primarily provided incentives for the transformation of the product pattern within the enterprises. With the introduction in 1971 of uniform subsidies at branch level, the more profitable exports will oust the less profitable ones within the same branch. Further improvement of the export support system — which of course is expected to ensure a volume of exports necessary for the national economy — will provide incentives to raise the efficiency of exports through the relative reduction of supports in a way similar to those in earlier years.

We expect much in the coming plan period from the system of regulators in realizing our development goals, and in following our guide-lines for structural transformation.

Development goals

A qualitatively distinct feature of socialist, in comparison to all other societies is that the centre of its order of values is *man* and consequently its most important economic policy goal is caring for *man*. In this context certain important criteria of economic policy, such as the growth rate or economic equilibrium, are only intermediate goals, which must be subordinated to that major objective. The sole true qualification of economic growth is whether it suitably serves man, his welfare and security, and whether it serves to reinforce the socialist society which is at the service of man.

Beside the political points of view, economic considerations also call our attention to the *consumption of the population*. It is an indisputable fact that economic growth is an essential pre-condition for the growth of consumption while consumption by the population has simultaneously a reciprocal effect on economic growth as an accelerator. This reciprocal effect is convincingly supported by the fact that 70 per cent of the national income, and almost 50 per cent of industrial production for final use, together with 70 per cent of agricultural production, are destined to serve consumption of the population. It can be concluded that the building of socialism requires a developing level of production and comparatively high living standard. The development expected by the end of the fourth five year plan, will have many consequences for the patterns of production, consumption and foreign trade.

When reviewing the implications of the development expected in the plan period before us, there are two factors which must not be neglected. To begin with, it is expedient to make it clear that it is *not the goal of our economic policy* to copy the development, production or consumption patterns of the developed capitalist countries. Socialism does not have to follow all Western trends in mass consumption. Since we are building a new society, our task is more complex than simply approach or attain the consumption levels of the developed capitalist countries through raising living standards. The perspective realization of such a goal itself requires substantial effort; nevertheless, *it is the comparatively simpler part* of the tasks to be solved. This must necessarily be linked with the formation of the new socialist personality, that is, with developing a man whose advanced work, activity in public life, and high consumption harmonically complement each other. This forming of the character is a truly difficult task. It cannot be indifferent to economic policy, since, in both the production and consumption interrelations, it must provide incentives for the development of socialist man characterized by high ideological, cultural and consumption levels; at the same time, it must follow this development.

The effects of differences in social systems on consumption habits, way of life, and eventually, on the pattern of production and consumption should not be over-estimated, for certain trends can be observed to be at work independently of social differences. One of these is the decrease in the ratio of food consumption on a high level of development and, parallel with this, the growth of demand for durable consumer goods, and for products and services in the areas of education, and culture, as well as the purposeful use of leisure. This trend can be observed in the socialist and the developed capitalist countries alike.

The changes in the pattern of private consumption are determined on the one hand by trends in incomes, and on the other — in the long term — by technological progress. Social advance requires a modern consumption pattern and this, at the same time, is an important precondition for economic growth. Accordingly, in the period of the fourth five year plan, demand for more valuable products and services of higher standard will increase within total consumption. The ratio of food consumption will drop somewhat and within this, demand will shift towards more nutritive, more valuable proteins. To a certain extent, spending on clothing will relatively increase, particularly demand for more modern, better quality, fashionable articles. Demand for durable consumer goods will grow at a particularly fast rate, primarily for furniture and home furnishings, cars, and household appliances. The shifts in demand stemming from growth in income were demonstrated by a survey conducted in the Soviet Union: in their answers to the question which items they owned, or what they would like to purchase, the vast majority of people responding listed cars, refrigerators and furniture first. [2]

Trends in the consumption pattern are also characterized by the increasing share of services. Accordingly, measures must be taken to meet growing cultural demand on a high level; and although literature, theatre, cinema and television must primarily satisfy this demand in the framework of cultural policy, the economic preconditions must be ensured by development. These trends have a powerful effect on the production pattern, on imports, and to a certain extent on exports, too.

The export pattern is formed under the continuous impact of the reciprocal effects of the endeavours of the Hungarian economy determined by our interests on the one hand, and by the demands of foreign buyers, on the other. We are endeavouring to develop a more economic export pattern than the present one, to reduce the share of products requiring large subsidies, and to simultaneously increase the ratio of our most economic products. These endeavours can, of course, be realized with certain limitations only, for the final proportions emerge partly under the effect of the socialist market demand, and partly through capitalist demand.

We must reckon with the fact *that the adjustment of the production pattern to the demand pattern* does not take place from one day to the next. This can only be conceived as a result of a long process, since a single five year plan is not sufficient to solve more than one or some of these questions in a satisfactory way. Our past experience has reinforced the thesis that in order to develop a modern economic pattern — particularly in the case of a country starting from as low a level as Hungary, where in 1938 the per capita national income was about 250 dollars — time must be measured in historical dimensions. This, on the other hand, increasingly underlines the importance of providing for the desirable transformation of the economic pattern in good time, on the basis of long-term plans.

Our strategic goals in the perspective can be summarized in brief: we are striving to develop a production pattern which adjusts to demand, and through which optimum production value can be attained on the basis of the aggregate working time available to society. Before turning to several major goals, let us look at those factors which influence our freedom of management in a decisive manner.

First of all the schooling level of the people, and in this connection the *professional training of the workers,* must be emphasized as a factor which to a certain extent determines an economic pattern, and substantially influences the speed of its changes as well.

Having recognized this, we have already made great efforts, and will continue to make them, in order to expand the capacity of education and professional training, and to raise their standard. This process can easily be seen from the data which show the schooling of the population of a definite age. More than one half of the population over the age of 15 in 1970 completed at

least the eight years of primary school, as compared with only 21 per cent twenty years ago. The percentage of those aged 18 years or over who have completed at least secondary school almost tripled from the 5.5 per cent of twenty years ago to 15.5 per cent today, and the ratio of those aged 25 years and over who have obtained degrees in higher education rose from 1.7 per cent to 4.2 per cent, that is, to nearly two and a half times its former level. According to long-range forecasts, by 1980 the rise in the secondary education of the population will be particularly sharp. Here the growth is, of course, more than simply numerical. In general, the knowledge and education is much more up-to-date and wider today, than at the time when fathers and mothers of the present generation were at similar age.

Structural changes are substantially influenced by *the size of the financial resources available.* In theory this depends on three factors: the growth rate of the national income, the share of the national income which can be used to increase the technological level of fixed assets, and the size of available foreign resources.

According to ten-year forecasts the growth rate of the national income will be on average about 5.5—6 per cent a year which, if purposefully managed, can finance a suitable growth of investments and within this, of development serving technological advance. Naturally, investment capacity enabling us to solve *all* tasks within a short period, in order to meet *all demands*, is simply not available. This is why investment demands must be considered and ranked by order of importance. We must also reckon with possibilities of raising further investment loans, and also of granting investment credit, for the procurement of certain products from other countries through credit or investment contributions is more rational and more economic than their domestic production.

An important question in development policy, in the transformation of the national economic pattern is the *proportion between continuity and discontinuity*, that is, how much we spend on developing the existing elements in the structure, and how much is used for definitely new development. The majority of the resources and capacities available are tied down by investments such as the development of the infrastructure, the building materials and building industry, the necessary modernization of existing production equipment, and certain tasks which aim at ending our historical backwardness. Thus, e.g., the housing programme together with its subsidiary investments accounts for about 70 thousand million forints, while 60 thousand million forints were set aside for advancing transportation and telecommunication, and a total of nearly 90 thousand million forints will go for developing agriculture, forestry and water management.

Therefore, there is no clear reply to the question whether continuity should be placed into the forefront of development policy, or rather the new tasks, for in the given situation we cannot decide for either one or the other.

To a certain extent the ensurance of continuity is essential in investment policy. In the 1950's the policy of voluntarism neglected the reconstruction of certain branches of industry, and we had to pay high price for this later. Political and economic arguments equally favour the allocation of adequate sums for the development of certain backward branches in justified cases, and one can simply not concentrate merely on advancing the most dynamic new branches of industry. At the same time endeavours must be made — and this is one of the most important tasks of economic management — to allocate the investment resources and capacities in the most optimal way possible both to ensure the continuity for necessary investments (which may be justified by social requirements) and to develop the newest, most dynamic, most modern branches and enterprises as well. This refers to the control of the centrally managed large investment projects and to investment financed from enterprise resources as well. In this field we face a particular contradiction between partial and global interests which is very difficult to solve. It is a highly responsible task of economic control and management to channel the partial endeavours, which in themselves may be justified and respectable, into the (often quite narrow) stream of national economic interest, to select among investment-development demands, and to rank them by order of importance. An elementary precondition for the improvement in economic efficiency is to achieve agreement for eliminating the tension which can still be experienced in this area.

In connection with our economic development we must speak of the *expansion of our international economic relations*, as a precondition intended to solve the well known dilemma of the progress of an economy with a small domestic market. In the long range it is in our interests to make the economy more "open" and to rely on increasing international cooperation in product-sales and purchases for domestic demand. Development in this direction may have favourable effect on the pattern of production, and thereby on the growth rate as well.

From the point of view of the transformation of the structure of national economy the division of labour among the socialist countries is of extremely great importance. Proposals intending to promote the socialist integration: comprehensive plan coordination, coordination of large-scale development programs, modifications which may take place in the turnover and financial sphere — such as e.g. the creation of more flexible forms of trade, improvement of the socialist international price system, of the bank and credit system, the expansion of multilateralism, and the steps to be taken in the direction of a convertible currency — are all factors which can play an important role in the transformation of the economic structure of the socialist countries, and in accelerating their development rates. Integration, all over the world where it has been brought about, has led to an acceleration in the growth rate. Nowhere

are there such great possibilities in this respect as in the socialist countries which work on the basis of plans. As a result of the reform which has become necessary in international economic relations, the attraction of the economies of the socialist countries would become stronger, they would be in a better position to enter into a more vigorous development of trade with the countries of the third world, and with all countries interested in developing trade with the socialist countries. And this — we can safely say — is in the interest of every country, since the economies of the socialist countries are the most rapidly developing among all the different groupings throughout the world; in 1950 their industrial production accounted for only 20 per cent of total world industrial production, while in 1970 this figure was close to 40 per cent.

Structural transformations in the period of the Fourth Five-Year Plan

In the Fourth Five-Year Plan we are counting on changes of varying intensity and velocity in the different areas of the economic structure. The most dynamic part of the economic structure is the product pattern. Here is where relations with consumption, investments, and exports are most direct and this is the field where, relatively, the most rapid changes can be attained. In coming years our system of regulators will provide incentives for the desirable transformation primarily in this field. In contrast the product pattern, the branch structure of the national economy will only change slowly, under the effects of a heavy concentration of forces. The graduality of this process will be clearly seen from the fact that in the coming five years the contribution of industry to the national income will rise from 41 to 43 per cent, while that of agriculture will drop from 25 to 22 per cent.

The infrastructure is also one of the gradually changing fields of the national economy. Here, in coming years investments well exceeding those of the earlier plan periods will substantially accelerate the development rate.

Three major directions can be observed in the structural programme of the fourth five-year plan: 1) major programmes to serve large-scale, fundamental structural changes, 2) the programmes for transformation within industrial branches, and 3) product pattern transformation programmes within the enterprises. In working out these programmes, alongside the requirements of development, increased attention has been paid to the general state of equilibrium of the national economy, to the balance of foreign trade, of the investment needs, and to the balance of the state budget as well.

The large-scale, fundamental structural changes required to achieve our goals are primarily realized by plans and measures approved by the government. In this respect an important historical experience is that certain tasks

require a long period of preparation; design and preliminary work on them must therefore start in good time, often many years earlier, before they can be put into operation. In these cases the flexibility of management is by necessity limited and great damage can be caused if, as a result of belated recognition, the neglected economic goals appear with pounding force, and require a large concentration of forces. In order to avoid this, the agenda of the Fourth Five-Year Plan contains preparations for a more rapid development of the infrastructure, which, to a certain extent, will become more important in the coming decade.

The *infrastructure* plays an outstanding part in social and economic policy, and greatly affects living standards as well. The development of infrastructural supply improves national economic efficiency. This effect operates to some extent directly, it is sufficient to refer in this context to those calculations which showed that improving the quality of the road network could yield substantial annual savings in maintenance and running costs of passenger cars and trucks. However, the indirect economic effects of infrastructural supply are far more important. A good example of this is the target of increasing the capacity for education and vocational training, which — as already mentioned — is a condition for accelerating the structural transformation. Hence, education is one of the most important parts of the productive infrastructure and, in addition, education and culture in the broad sense of the term are also related to socio-political goals. The gradual attainment of an open society is an important goal. An essential precondition for this is to ensure identical conditions at the start for every studying youth, which is inconceivable without the construction of a large number of modern schools and student hostels. Both general economic and living standard policy aspects support the requirement for improving the housing supply. The regionally differentiated increase in the housing stock is essential for the transformation of the economic pattern and at the same time, is of outstanding importance for demographic policy and living standard policy as well.

A special feature of infrastructural investments is that in comparison to other fields of the economy they are extremely capital intensive, and are paid off very slowly. In many cases, pay-off period can be no more than roughly estimated because of their indirect relationship with production. At the same time, these institutions have extremely long lifetime (in the majority of cases they last for decades) and their obsolescence is slower than, say, that in industry which develops much more dynamically in the technological sense. Since they represent a fundamental condition for socio-economic development, we have called for a substantial step forward in the period of the Fourth Five-Year Plan: infrastructural investments will exceed 50 per cent the level of the previous Five-Year Plan, and will be close to 30 per cent of the total investment of the national economy.

Because of their importance we must also remember some structure-transforming development projects, partly within the *industries*, in our long-range programmes. It is here that the transformations aimed at improving efficiency can bring faster results during the coming plan period. This process can best be characterized by the expected changes in the structure of energy utilization, the chemical industry, the building and building materials industry, the light industry as well as to some degree in the engineering industry and in agriculture.

For several years now the role of hydrocarbons, oil and gas, has been gradually increasing in our energy pattern. At the same time, the ratio of coal utilization has become more moderate; nevertheless, the coal mines, while operating at a somewhat reduced level, will become more modern and efficient and will continue to play a very important role in the national economy for a long time to come. The continued increase in the use of hydrocarbons will affect the entire economy, the different fields of production and consumption, and will result in a substantial increase in fuel efficiency. The costs of both domestically produced and imported hydrocarbons are substantially more favourable than the average production costs of the domestic coal mines. Taking the latter as 100, the costs of domestic hydrocarbons are 35—50 per cent, while the costs of imported oil 60—70 per cent, and that of imported natural gas 75—80 per cent. There is a further substantial saving on costs in the transport of hydrocarbons. The use of hydrocarbons in electric energy production is also extremely advantageous, for the change in the fuel pattern led to a 26 per cent reduction in the volume of thermal utilization in the past ten years. The use of hydrocarbons in railway haulage also has many advantages, for it enables us to save many million tons of coal. In 1970 the savings, due to the change from the traditional coal-based to more up-to-date energy pattern may be put at some 2.5—3 thousand million forints for the national economy and this saving will rise to a magnitude of about 5—5.5 thousand million forints by 1975.

In other fields of industry, the major goal of the structural transformation create new capacities to ensure the optimal processing of the raw materials used. Following this guide-line we are endeavouring, through large-scale investment, to utilize our bauxite resources in the most economic vertical stages possible. The increase in value stemming from the utilization of bauxite at its different processing levels can clearly be seen in the fact that from one ton of bauxite, valued at about 5—6 dollars, 22—25 dollars worth of alumina can be produced; or from one ton of aluminium ingots, valued at about 500 dollars, if the product-mix is favourable, semi-finished products valued at 700 dollars can be turned out. The difference in value between the semi-finished product and the finished product can again multiply, depending on the product composition. In order to realize this difference in value a large-scale development

of the Hungarian semi-finished aluminium product capacity is already under way and we intend to continue it at a rapid pace in the near future.

The large-scale long-term development directives for the chemical industry rest on similar concepts, meaning mainly the "olefin" programme. Here our endeavours are to connect crude oil processing with the different vertical stages of petrochemistry, in other words, to go from the direct refining of oil towards higher valued chemical processing. The goal in the first stage is ethylene production, in the industrial agglomeration surrounding Leninváros. The effect of further processing is evident from the fact that the value of one ton of gasoline can be trebled when processing it to the degree of ethylene while from ethylene to the degree of synthetics the increase in value is about fourfold, and if we produce synthetic fibres, a further fourfold rise in value is possible.

In the engineering industry, the transformation of the production pattern is primarily expected through the coach building programme, for the most part completed. Besides, in accordance with new requirements we have placed further development projects in the forefront — which also ensure a high degree of utilization of labour — such as modern calculation techniques, automation and regulation technology, computer techniques, and the technology of integrated circuits. This development coincides with certain major trends in the scientific-technological progress taking place in the engineering industry.

In light industry the processing of modern basic materials — such as man-made fibres, synthetic leather — and the corresponding production processes are in the centre of interest. The reconstruction of the clothing industry which will take place in the period of the Fourth Five-Year Plan serves a dual purpose: partly the transition to the increased use of modern materials, and partly the introduction of a commodity pattern which is better adjusted to demand and produce higher value. The product pattern of the pulp and paper industry will also be influenced by the planned development and more semi-finished cellulose and paper will be produced, partly from domestic raw materials, i.e. broad-leaved trees.

Without the fast advance and modernization of the building industry and of the building materials industry, we would not be capable of achieving our development goals in the coming decade. For years there has been marked tension between demands for construction and building capacity. For the coming years we are planning faster development of the infrastructure; this will result in even greater increase in the demand for new construction, which is high enough as it is now. This is further increased by the demand of the productive industries. The high level of construction demand expected in the Fourth Five-Year Plan can partly be met by the use of more modern materials, the application of light building structures, and partly through a simultaneous increase in the capacity of the industries producing traditional building materials as well as a substantial increase in the capacity of the building industry

proper. Our development efforts can be illustrated by the fact that the share of these two branches in total investments is expected to increase by one fifth in comparison with the previous plan period.

Marked structural developments are expected within *agriculture*. One of the important criteria of modern agriculture is the development level of animal husbandry, and its share in agricultural production. In Hungary, in the years 1967—1969 the share of animal husbandry in the gross value of agricultural production was 42 per cent. We want to increase this ratio in coming years, and for this reason we are making substantial efforts to develop cattle and pig breeding. In the course of this advance we must first increase the use of fertilizers in order to raise the production of fodder crops, this being an essential condition for the advance of animal husbandry. A structural problem of great importance for agriculture and also for modern nutrition is to provide the country's protein requirements. A special program for the production of protein and allied questions, including the review of perspectivic tasks, is now under preparation.

In the interests of a modern, efficient animal husbandry, and because of the dynamic increase in demand, we are implementing a complex programme amounting to several thousand millions of forints. Utilizing untapped and substantial agricultural reserves, making better use of the possibilities inherent in the common lands and household plots, as well as the improved application of fixed and operative assets, can all contribute to the success of the programme.

An important guide-line of the development policy geared to the shaping of the economic structure is the *transformation of the product pattern within the enterprises*. The initiative of the enterprises plays a decisive role in this process and, according to our experience, this is the secret of the progressive enterprises enabling them to compete on the market. They recognize what is modern, what has to be developed and how, and when they should launch a new product. Unfortunately, for a long time we did not make sufficient use of these creative forces, though there is a tremendous hidden incentive here to mobilize intellectual and productive capacity. Frequently, it is precisely by using existing capacities, perhaps with slight adjustment, that they can produce multiple results in the shortest possible time, and of optimum value. This, of course, is not achieved solely through changes in the product pattern, but through the combined contribution of innumerable other factors, such as work organization, market research, after-sale service, international cooperation, etc., and in any case, the enterprise's drive aiming at the perfection of its product pattern, and adjusting it to the market, must be behind it. In this field we have — and we can say this without exaggeration — almost immeasurable reserves, and tapping the reserves would not simply be of advantage to the enterprises but to the national economy as well, for it would reduce the investment intensity of growth.

No doubt the trends in our investment policy outlined above will have a marked effect on the economic pattern, but this is not the only effect. An important part in the process of structural transformation is played by reducing uneconomic, less efficient production. This is partly done directly, through the reduction of the central investment funds for this purpose, and partly indirectly, through the subsidy policy, with the differentiated, gradual reduction of various state supports.

An essential precondition for the desirable transformation of the economic pattern is that economic management institutionally ensure *structural mobility*. This requirement provides the opportunity on the one hand, for an undisturbed regrouping of the labour force, and on the other, for a similar regrouping of capital.

With the transformation of economic structure the demand for labour changes will differ in individual sectors of the national economy, in the various branches of industry, and in enterprises. For instance, in the past 20 years there was a substantial drop in the agricultural labour force, and migration to the cities was high. In recent times an essential question in connection with the change in the energy pattern — although not comparable with the former in magnitude — is the reduction in the number of miners. A marked migration of the labour force can also be experienced in connection with the transformation of structure within the manufacturing industry.

The structural transformation taking place in the sphere of the employees does not run completely smoothly, which is understandable if we remember that here economic policy finds itself in direct relationship with human destinies. The continuous transformation of the economic structure and within this, of the employment pattern must be seen and accepted as an objective law of socio-economic development. Maintenance of a production and labour pattern which has been made obsolete by development, and is not adapted to needs, takes place at the expense of living standards, and for this reason its transformation is in the elementary interest of society. Therefore, the structural mobility of the labour force is a precondition for balanced, dynamic economic growth.

The socialist state must pay far-reaching attention to these movements. It must assess expected and desirable directions for structural transformation, their size and social consequences, it must work out the rate of transformation, and ensure conditions favourable to this development. It must do so in a way not preventing healthy labour force movements — indeed promoting these with suitable wage, social and other measures. A good example of this was the resolution passed by the Hungarian government in connection with coal mining which, in essence, successfully solved the large-scale regrouping of the labour force which has been taking place in this field. The regrouping of the labour force is an important socio-economic goal which (though in some cases indirectly through the improvement of the efficiency of the national economy)

serves the interest of those involved in it. For this reason our political and social organizations should help the regrouping made necessary by national economic interests; at the same time, they should cooperate actively in preparing solutions to problems arising in the course of implementation, for instance, through the organized retraining of workers.

Structural mobility is not restricted to the movement of the labour force, but extends to the movement of capital as well. Adequate distribution of investment resources, their relative stability and in case of need their flexibility must be ensured since the movement of capital in the correct direction promotes dynamic development. In formulating the system of regulators our governing bodies take this requirement into consideration. For the period of the Fourth Five-Year Plan, a number of new regulators have been introduced in order to aid a better distribution of investment resources, and a healthier movement of capital.

The continuous transformation in the economy raises increasing requirements on both producers and consumers. Producers must adjust to new production and demand conditions, to more modern technology. Managers must permanently renew their own body of knowledge, in order to be able to keep pace with the general advance in their own field. The consumer also faces the structural transformation directly, for he must become acquainted with newer and newer products, and learn how to use and operate them. The velocity of these structural changes carries the possibility of a social conflict. If the transformation is slower than changes in living standards or in social expectations, or if it is faster than what the social understanding and the adjustment ability of individual customers can follow, social tension may arise. Increased attention must be given to this interrelation in planning socio-economic development, and in devising the economic regulators.

A new factor has gradually appeared alongside the traditional factors (such as natural conditions, and the capacity and development level of industrial fixed assets) which determine the pattern of the economy and its output capacity and this is science. Together with general education science has today a decisive influence on development, and is creating a revolution in the structure of production. The speed of these changes and the rate and quality of socio-economic development depend on our flexibility to bring about cooperation between science and the economy, especially production and on the rapidity and efficiency of the introduction of the latest scientific achievements into our economic practice.

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СТРУКТУРА ВЕНГЕРСКОГО НАРОДНОГО ХОЗЯЙСТВА И НАПРАВЛЕНИЯ ЕЕ РАЗВИТИЯ

М. ТИМАР

Автор сначала дает определение понятия структуры, излагает возможные подходы в структурных анализах и рассматривает взаимосвязь между экономическим развитием и структурой народного хозяйства. Он отмечает, что между структурой экономики и уровнем ее развития, характеризуемым величиной национального дохода в расчете на душу населения, имеется определенная — весьма четко проявляющаяся — взаимосвязь. Раскрытие таких взаимосвязей оказывает большую помощь разработке среднесрочных и долгосрочных планов экономического развития.

Автор указывает на то обстоятельство, что в ходе развития происходит постепенное изменение экономической структуры. Следовательно преобразование структуры экономики никогда нельзя считать законченным, потому что это — перманентный процесс, сопряженный с экономическим развитием. Одна из важнейших задач хозяйственного руководства заключается в выявлении тех участков, которые являются наиболее пригодными для ускорения экономического прогресса.

Автор настоящего очерка излагает важнейшие характерные черты происшедшего в течение последних 25 лет преобразования структуры венгерской экономики в области отношений собственности, производства и потребления, а затем останавливается на воздействии, которое система экономического регулирования оказывает на экономическую структуру. Он отмечает, что система регулирования воздействует на экономическую структуру в первую очередь через систему цен, регулирование доходов предприятий и систему преференций (льгот).

Подвергая анализу общие общественно-политические целеустановки автор указывает, что цель венгерской экономической политики не может состоять в копировании структуры производства или потребления развитых капиталистических стран. Наша задача состоит в таком формировании социалистического общества, в развитии которого гармоничным образом сочетались бы труд, активное участие в общественных делах и изобильное потребление. В то же время нужно внимательно следить за тенденциями, которые действуют независимо от общественного строя. Автор суммирует и анализирует факторы, влияющие на долгосрочные стратегические целеустановки, как, в частности, уровень профессионального образования трудящихся, величину имеющихся в распоряжении материальных ресурсов и расширение международных связей. В связи с четвертым пятилетним планом автор отмечает, что в различных областях изменения структуры не одинаковы по интенсивности и быстроте. Наиболее подвижным является ассортимент выпускаемых изделий и здесь ожидаются наиболее интенсивные изменения. В противоположность этому отраслевая структура народного хозяйства изменяется медленно и требует большой концентрации сил. В этот период во весь рост встанет задача развития инфраструктуры, которая в предстоящем десятилетии будет иметь исключительно важнее значение как с экономической точки зрения, так и с точки зрения социальной политики и жизненного уровня.

Среди содержащихся в четвертом пятилетнем плане программ преобразования структуры, направленных на улучшение эффективности, автор упоминает преобразование структуры энергетического баланса, развитие алюминиевой промышленности, обеспечивающее оптимальное использование отечественных бокситов и, далее, программу производства олефина, составляющую основное звено перспективного развития отечественной химической промышленности.

В заключительной части очерка автор подчеркивает, что в интересах преобразования экономической структуры в намеченном направлении хозяйственное руководство должно в организованном порядке обеспечить структурную подвижность, что означает возможность перегруппировки как производственных фондов, так и рабочей силы.

Подводя итоги, автор указывает на тот факт, что в последнее время в ряд факторов, определяющих структуру и потенциал народного хозяйства, включилась наука, оказывающая совместно с уровнем образования решающее влияние на экономический прогресс. Наука вызывает революцию в экономической структуре. Быстрота изменений и, соответственно, темп и качество отечественного общественно-экономического развития зависят от того, в какой мере мы сумеем обеспечить сотрудничество между наукой и экономикой, в какие сроки и с какой эффективностью сможем внедрять новейшие достижения науки в производство.

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MAJOR FEATURES OF THE ECONOMY AND IDEOLOGY OF WAR COMMUNISM

Fifty years ago, in the spring of 1921 Soviet Russia switched over from the so-called war communism to a new economic policy (NEP). This was the first socio-economic reform in the history of socialist societies and one involving consequences of highest importance. In order to make aware of the real significance of this step, the author attempts to analyse war communism as a specific functional model of the socialist economy.

Handbooks of political economy and economic history published in the socialist countries in the last decades usually sum up the economic history of the first years of the Soviet state according to the following pattern: a) immediately after the October Revolution, i.e. in the spring of 1918, the Bolshevik Party intended to build up socialism by relying on commodity exchange and monetary economy, that is, in conformity with the principles of the NEP; b) this was hindered, or rather interrupted, by the civil war and foreign military intervention; c) thus war communism is no more than constrained war economy, brought about by the random coincidence, as it were, of historical circumstances; d) it was abolished owing to the termination of the civil war.

In a narrower sense we aim to answer the question whether war communism was really only war economy inevitably imposed upon by civil war; whether its founders really held it to be a temporary phase, a historical détour as it were. On the answer to this question depends indeed the solution of a problem of much wider interest, namely, which of the functional models of socialist economy was theoretically and practically the initial form of the socialist socio-economic system: a centralized subsistence economy, managed by instructions, based on egalitarian principles, or the model implementing regulated market economy, relying on material incentives. If this problem is satisfactorily cleared up, the substance of the NEP will also appear in another light, and the mode of transition to it will be transformed from a problem of party history into one of the history of economic thought, but in no way merely a "historical" issue: not even half a century of socialist economic development could reduce the significance of this problem to a purely historical one.

Principles of the economic system of war communism

True enough, war communism had "military" character *in statu nascendi*, evidenced, among other things, by the fact that economic activity was focussed on *distribution* and not on *production*, the main problem being to allocate the scarce goods available; the decrees and measures known to us deal almost exclusively with distribution. Yet, it would be of little avail to look upon war communism merely as a proletarian socialist pattern of war economy, since such an approach would fail to take into account that war communism was aimed at laying the foundations of socialist economy and has its own established ideology.

The *first basic tenet* of the system of war communism may be held the *maximum extension of state ownership, the direct authority of the state.* After the socialist revolution, the working class conquering power seized the key positions of the economy — socialized the great banks, railways, shipping, mining, large-scale industry, foreign trade etc. This is what happened up to now wherever socialist transformation took place. In the autumn of 1917 and the spring of 1918 the Soviet government had put the emphasis on controlling private capital, on applying certain forms of state capitalism, with respect to both domestic and foreign capital. The further course of events, the outbreak of the civil war, the sharpening of class conflicts and, last but not least, the spontaneous initiatives of the masses accelerated the process of expropriation and very soon drove it beyond the sphere of large-scale production. In virtue of one of the last measures of socialization, the decree of the Supreme Council for National Economy (dated November 29, 1920) on the socialization of small-scale industry, the state took over the industrial plants employing more than five workers if they had engines, and those employing more than ten workers if they had none. In reality, however, great many plants smaller than these were socialized. According to the industrial census of 1920, 13.9 per cent of the state enterprises employed one worker, 53.7 per cent 2—15 workers, 10.9 per cent 16—30 workers [1]. Thus, one seventh of the state "enterprises" employed only one single worker each! But even so, socialization was not complete, because, according to the industrial census quoted, the workers of state enterprises comprised only 53.3 per cent of all industrial earners. The rest worked in private and co-operative industrial enterprises as wage earners (21.5 per cent) or were self-employed (25.2 per cent). But if we consider that co-operative and private enterprises most certainly could not be assigned to large-scale industry and that under the circumstances of war mobilization they produced according to instruction of, and for the government, it may be said that the government control over the means of production in industry was practically fairly complete. In agriculture, the means of production — excepting land — remained

the private property of the peasants but as a result of the obligatory delivery of surplus the state already laid its hand upon a substantial part of the products.

The *second basic tenet* of war communism may be held the *forced allocation of labour*. This is understood to imply the general extension of the administrative methods of organizing public works to the sectoral and regional allocation, the utilization and disciplining of labour, or, as it was termed in those days: the "militarization" of labour. It is a strongly emphasized objective of all socialist revolutions to abolish exploitation and parasitism. The slogan: "he who does not work, should not eat" had, for centuries, been a demand proclaimed with elementary force by the plebeian masses in every revolutionary movement. This slogan is carried out by the socialist revolution in such a way that the general obligation to work is proclaimed before fully liquidating the economic foundation of parasitism, capitalist private ownership. This is what also happened in the October Revolution.

The introduction of the general obligation to work may be explained — beyond the general aims of the socialist revolution — also by the actual circumstances of war: by the need to carry out extraordinary and occasional public works, as was done during World War I in most belligerent countries. What makes the general compulsion to work a specific feature of the system of war communism is its being conceived as a regular operative principle of socialist economy. Therefore, the "manpower mobilizations" starting at the end of 1918 played subsequently an ever growing role.

At the beginning of 1920 the whole system of forced allocation of labour was regulated. The decree on the general obligation to work issued by the Council of People's Commissars on January 29, 1920 lists the cases whenever compulsory work should be imposed upon. In addition to occasional and periodical public works, to the utilization of the labour force of the army and to the employment of people not performing socially useful work, the enumeration contains two items of interest for our investigation. One of them prescribes that "indispensable skilled workers should be detached from the army and people employed in agriculture and small-scale industry should be transferred to state-owned enterprises, institutions and farms", while the second mentions the "necessary re-allocation of available manpower" [2]. The decree also created the apparatus to deal with the forced mobilization and distribution of the labour force. This was the High Commission for General Obligatory Work, subordinated directly to the government, with representatives of the commissariats for labour, internal affairs and defence. The High Commission had also local bodies: the commissions in the provinces, districts and towns, which had official authority: they could mete out punishment to those shirking the obligation to work or committing other offences (leaving their jobs, falsification of documents, perfunctory organization of work, etc.).

The *third basic tenet* of war communism *is the far-reaching central management of economic activity* (production, trade, distribution). This is perhaps its best known feature, although usually only one of the aspects: the necessary centralization of distribution — the allocation of scarce material goods — is emphasized. As a matter of fact, centralization also involved that the operative management of production — as far as regular production could be carried on under the prevailing condition of those times — was performed by the central authorities, thus the productive units ceased to be enterprises but in their denomination. Their activity was financed by the state budget: the expenses of the enterprises were covered by the People's Bank in accordance with the centrally approved plan and the cost estimates of the enterprise, while the products turned out were at the disposal of the central bodies. (Owing to the ousting of inflating money turnover, central financing was soon replaced by central supply in kind.)

Productive enterprises were controlled by the industrial sectoral boards (high commissions, directorates, departments), the *glavki*, directly subordinated to the Presidium of the Supreme Council for National Economy or to one of its departments. By the end of 1920 they numbered about 50. In full command of their field, the sectoral boards were practically independent even of the Supreme Council. At a first glance it may seem startling and contradictory as to the logic of the system that the activity of the *glavki* was not surveyed by any central body and that there was no uniform central plan either. According to the prevailing concept, central control was to be performed by the Supreme Council for National Economy attached to the government. A decree issued in the second month of the revolution described these functions as "regulation", "coordination", "planning" [3]. (Similar functions were to be discharged by the local councils for national economy established in the countryside.) But, with economic relations rapidly becoming "naturalized", it proved practically impossible to fulfil this role and the Supreme Council for National Economy turned into some kind of Ministry of Industry. It follows namely from the logic of centralized "naturalized" economy that the tasks are to be prescribed in the greatest possible detail, in physical units of measurement. This, however, is only possible on a sectoral level in case the pattern of production is relatively homogeneous but is unfeasible on a national scale, even with present-day computer technology, since solutions have limitations not so much of a technical as of a conceptual kind, depending on the level of production. Thus, organizational fragmentation came into being not despite the system of war communism, but because of it.

However, what could not be achieved in the field of production, was attained in broad outlines in distribution. On November 21, 1918 an interdepartmental body, attached to the Supreme Council for National Economy, was established under the name of Committee for Utilization which was not engaged

in production control or planning but – relying on information received from the various authorities – assessed the existing and expected reserves, drew up balance-like allocation plans which were then approved by the Supreme Council for National Economy. On the basis of these plans the Committee for Utilization allocated the ever widening number of products subject to central distribution first directly to the final users, but later only to the main authorities. According to the then prevailing ideas [4], it was assumed that planned central control is going to develop from the activities of the Committee for Utilization or some similar body by extending its operations and making them comprehensive.

The *fourth basic tenet* of the system of war communism *consists of the class and social principles of distribution.* Since during the war and owing to inflation, distribution became almost completely "naturalized", and money incomes lost their determinate role in distribution, the workers of the state sector and the urban population were supplied mainly by way of rationing and in general allocations in kind. In distribution – owing also to the emergency situation – the principle of egalitarianism prevailed, departures from it occurring initially only when taking a class-approach. But this principle could not be consistently adhered to since the war effort soon imposed the introduction of "special" rations. Thus, special rations were granted to the workers in the enterprises, sectors and regions vital for the war effort (as in the Ural mines and factories). In the second half of 1919 additional rations were granted to families of Red Army soldiers. Beside the People's Commissariat for Food a Committee to provide workers with food was created, which set up special norms; soon there were some 30 of them. Later, on April 30, 1920 the government made an attempt to unify and simplify by decree the various distribution norms, but the system of differentiated rationing subsisted right to the introduction of the NEP. The hierarchical character of distribution was strengthened by the fact that one person could claim several rations under different titles [5].

Finally, *the fifth basic* and perhaps most characteristic *tenet* of war communism was the *"naturalization" of economic life,* the abolition of commodity and money relations.

This process was started by discontinuing commodity exchange between the towns and the countryside when the Soviet government felt constrained to decree the compulsory delivery of surplus grain. Collection and distribution were taken over by the People's Commissariat for Food and its local bodies. The number of products the collection of which was the monopoly of the Commissariat gradually increased and practically covered every produce and animal product. It was a logical outcome of this evolution that the government decree issued on November 21, 1918 conferred upon the People's Commissariat for Food the task of the collection of all products necessary for per-

sonal consumption [6]. The decree merged the cooperative shops into the network providing for the supply of food and municipalized the private shops. Thereby private trade was in fact liquidated and all market transactions prohibited. Hereafter every citizen had to be registered in some state shop or co-operative shop to obtain his ration. This was tantamount to bringing about the compulsory organization of the population into consumer co-operatives.

Thus, the legal free market was abolished but so was the state-regulated market too since economic relations lost their exchange-character: the relationship between state enterprises was — as we have seen — of a quite different kind, and as far as small-scale agricultural producers were concerned, it was a one-way movement: the state gave for their products, more often than not, only paper money of no value.

Settlements in money terms between the state-owned enterprises, as well as between the state as seller and the workers and employees as buyers were made illusory owing to the cessation of market relations, the more so since fixed prices lost their meaning in a world of rapidly inflating money. They could not play for long even the role of fictitious accounting unit. It was only natural that the state deliberately shifted to distribution by-passing money. Thus, in the second half of 1920, the postal and telegraphic charges were abolished one after the other, the use of flats, telephones, water, gas and electricity was made available free of charge for workers and employees. On August 16, 1920, the tariffs for passenger and freight transport by rail and water were abolished. In principle it was decided that foodstuffs should also be supplied free of charge by the People's Commissariat for Food.

But the measures enacted by the authorities did not do away with the market by abolishing it, they only made it illegal. Since small-scale commodity production subsisted in towns and villages, the exchange of commodities persisted too and assumed distorted forms such as: black market dealings, huckstering etc.

This illegal market played a surprisingly great role in the supply of the population. According to various official statistical surveys and estimates, the urban population acquired one third to one half of the food it consumed from the black market.

All this seems to evidence that the "defetishization" of economic life, the obliteration of market relations in reality hardly scratched the surface. This duality manifested itself also in the fact that while the Soviet state practically abolished commodity relations within the state sector, it resorted to the emission of money to cover its expenses on the — legally non-existent — free market. As a matter of fact, the state could not renounce this market. True, the ongoing naturalization of the economy narrowed the market and, accordingly, also the sphere of money circulation, but the war could not be "financed" exclusively by means as the compulsory delivery of surplus products and by

nationalized industry. Money was needed to enable public authorities to perform their duties, for the operation of the industry and the railways. Since the tax offices were dissolved, the system of taxation abolished, and the activity of the state enterprises was carried out — as we have seen — in "naturalized" form, the only source of money was to print banknotes. The emission of money enabled the state to procure products of substantial, though diminishing, value through the mediation of the free — mainly rural — market.

Resorting to this source of financing, however, strengthened the tendency of naturalization in the economy. Under the economic conditions outlined above, e.g. the functions of the bank system were not only modified but inevitably withered away. Only one of the functions of the earlier State Bank survived (and became thus exclusive): the emission of banknotes. And even this function was formal: as to its substance it consisted simply of the emission of fiscal paper money. And since the latter provided practically the only cover for all government expenditures, the financial organization of the state budget became superfluous and died away: it amalgamated with the People's Bank. Thereby, however, the People's Bank too gave up its proper role as bank, since it practically ceased granting credit excepting the small amounts the cooperatives could avail themselves of. It was quite consistent that a government decree of January 19, 1920, also formally abolished the People's Bank and amalgamated it with the People's Commissariat for Finances under the name of Budgetary and Accounting Department [7].

Thus, the system of war communism had its own logic. Its main features outline the model of the centralized directive system of planned economy in purest historical form ever implemented. (Let us remember that since then not even the most rigidly centralized mechanisms have abolished monetary economy or — apart from war and other extraordinary circumstances — the free movement of labour.) The history of its short three-year existence — amidst incessant change and modification — does not, however, yield a satisfactory reply to the initial question: was it really brought about by the requirements of war economy, and did its founders really conceived of war communism as a temporary, a historical détour?

The ideology of war communism

The extremely hectic revolutionary period hardly rendered possible its protagonists to bequeath their economic and social theorems to us in a carefully elaborated framework and expound them in polished treatises. The literary product of the era consists of articles in newspapers and periodicals, of speeches, decrees and a few thin brochures. Therefore any attempt at a syste-

matization of the views, frequently just hints, contained in them implies the risk of arbitrary distortion and misinterpretation. Another difficulty we have to face is that it is hard to distinguish the ideas of the era from views of socialists, Marxists professed in the preceding decades. In this sense war communism did not bring any new ideas. Nevertheless, war communism had its own particular — though not original — ideology, an image and operational concept of the socialist economy to be built up, which they attempted to put into practice. A detailed investigation of this concept is bound to be instructive even today.

We choose as our point of departure *The economics of the transition period* by Nikolai Ivanovich Bukharin [8]. Our choice has been a forced one — no other contemporary work can be found which is comparable as regards either intellectual standards or size — but it is by no means irksome: the book published in early 1920 summarized the relevant Russian and foreign literature of those years. (And it did this on a very broad scale indeed, ranging from *The economic consequences of the peace* by J. M. Keynes to the Hungarian Gy. Hevesi's book published in Vienna in 1919: *Die technische und wirtschaftliche Notwendigkeit der kommunistischen Weltrevolution.*) Thus it serves as a really authentic source on the then prevailing ideas among Russian (and foreign) communists.

Analysing the transition from capitalism to socialism, Bukharin emphasizes at the outset that the expansion of state monopoly capitalism means the liquidation of commodity production:

"Now the question arises which are, indeed, the consciously operating parts of capitalist world economy. Theoretically, world capitalism is conceivable as a system of individual private enterprises. Yet the structure of contemporary capitalism is such that what appear as economic subjects are the collective-capitalist organizations — 'state-capitalistic trusts'. — Within the major capitalist countries, *finance capital* has liquidated the anarchy of production. The monopolistic associations of enterpreneurs, combined enterprises and the penetration of bank capital into industry have created a new type of relations of production by turning the unorganized commodity-producing capitalist system into a finance-capitalistic *organization* . . . Therefore, the exchange relations reflecting the *social* division of labour and the breaking up of the social productive organization into autonomous capitalistic 'enterprises' is replaced by an organized *technical* division of labour within the 'national economy.'" [9].

In the building up of the organization of state-monopolistic war economy during World War I and in the growing centralization of surplus value by the state Bukharin correctly perceived a modification of capitalist relations of production. But he attributes to this process a specific trend. As he writes: "The mathematical limit to this trend is the transformation of the whole 'national

economy' into an absolute monolithic *combined trust* in which all individual 'enterprises' would cease to exist and would be turned into mere plants, into *divisions* of the trust, within which, as a consequence, the *social* division of labour would change into the *technical* division of labour and the whole economy would become an absolutely homogeneous enterprise of the *relevant group of world bourgeoisie*" [10].

As a summary of his analysis of the entire process, Bukharin emphasizes: "Thus, the reorganization of the relations of production of finance capitalism proceeded towards a universal state capitalistic organization that liquidates the commodity market, turns money into an accounting unit, organizes production on a national scale and subordinates the whole 'national economic' mechanism to the aims of world-wide competition, that is, above all, of war" [11].

It is not difficult to see that Bukharin repeats his theses on "pure imperialism", defended in the discussion of the program of the Bolshevik Party in 1917—19. (As against Lenin, Bukharin then alleged that in the age of imperialism small commodity producers and non-monopolistic capitalists would disappear and, therefore, there would be no market competition in the old sense. Thus, the denial of the existence of simple commodity production led Bukharin to the denial of commodity production in general.) The theory of "pure imperialism" has so often been criticized in the course of the past half century that — after the scholastic battles fought regardless of time and space — it would seem that nothing has remained of it but dry bones. Still the only topical bearing on the subject seems to have got lost.

From the excerpts quoted above it may be seen that Bukharin (just as many others) considered the establishment of state-monopolistic war economy an irreversible process of absolute validity which — in the framework of capitalism — necessarily liquidates the market, abolishes money and turns the whole economy into a "combined trust". This was, naturally, a hasty conclusion. It has not materialized even half a century later, at a much higher level of development of the forces of production. However, the model of state-monopolistic war economy understandably determined the model of socialist economy to be created. If, namely, we look upon the specific organization of war economy — serving non-economic objectives by non-economic methods — as a form of appearance (though a distorted one) of historical necessity, then the specific features of this particular organization will become the embodiment of objective rules, and all socialism got to do is to let these rules evolve to the fullest possible extent.

On reading Bukharin's book today, it is striking how far some characteristic features of war economy merged, and were identified in the currents of thought of those days, with the essential criteria of socialist economy. Two theses can be traced right through the book: a) after the proletarian revolution

economic relations must turn into naturalized ones; b) until proletarian consciousness develops, the main tool of organizing and controlling the socialist economy is force, coercion by the state. Let us have a closer look at these theses.

The necessary naturalization of economic relations organically followed from the interpretation of commodity and money relations as categories of capitalist economy alone. Bukharin devoted a separate chapter to what should happen to commodity and money categories after the socialist revolution. (Co-author of the chapter was Y. Pyatakov.) His reasoning runs as follows:

The category of *commodity* assumes the existence of the social division of labour and the lack of conscious regulation of economic processes. Thus, as a general category, commodity can exist only if the set of production is anarchic: "As soon as the irrationality of the production process disappears, that is, as soon as the instinctive element is substituted by conscious social regulation, the commodity turns into product and loses its commodity character." [12] *Value* and the *law of value* are the equilibrium laws of anarchic commodity production. Since in the period of transition commodity production largely vanishes, the law of value loses its validity.

It is interesting to read Bukharin's reasoning about the fate of *prices*. His starting point is that price, on the one hand, does not necessarily coincide with value even under capitalism, while, on the other hand, it may be the imaginary form of value of commodities which have no value (as e.g. the price of land). If the price becomes entirely detached from value, it becomes an imaginary form. And "in the period of transition, the case of imaginary form necessarily becomes closely similar to the typical case" [13].

According to Bukharin, the fate of *money* will be the same: "Money is the material-social link, the node that knits together the entire developed system of *commodity* production. Understandably, in the period of transition, in the process of destroying the commodity system as such, also the process of money's 'self-denial' will take place. This finds its expression, firstly, in the so-called 'depreciation of money' and, secondly, in the fact that the distribution of tokens of money detaches itself from the distribution of products, and *vice versa*. Money ceases to be a universal equivalent and becomes a conditional sign — and very imperfect one, at that — of product turnover."

The final conclusion of Bukharin: "Generally speaking, one of the main tendencies of the period of transition is the *rupture of commodity-fetishistic shells*. With the growing social-natural system of economic relations, the corresponding ideological categories burst too. If this holds true the necessity arises for the theory of economic process to switch over to a natural-economic reasoning, that is, to an approach looking upon society and its parts, as a system of elements in their natural form." [14]

But even Bukharin's book contains indications that economic reality does not obediently conform to theoretical dogmas. In the above reasoning on prices we have seen that certain categories — though in an imaginary form — perhaps subsist also in a socialist economy. Bukharin is unable yet to give a theoretical explanation for the phenomenon, but registers — in a captivating way — the contradiction between reality and theory: "Already at the first serious attempt to grasp, in a really scientific manner, this so restless concrete phenomenon called the economy of the period of transition . . . we come up against an interesting contradiction. The old categories of political economy persist to be forms of the practical generalization of the constantly changing vigorous economic reality. At the same time, these categories offer no possibility whatsoever to penetrate behind the 'surface of phenomena', that is, to discard vulgar reasoning and grasp the economic process in its entirety and in its evolution. And this is understandable. In reality the elementary relations of which categories like those of commodity, price, wages, profits, etc. are the ideological expressions, which simultaneously do exist and do not exist. They do not exist, but in a way as if they were existent, and do exist in a way as if they were inexistent. They subsist in some queer, ghostly realistic and realistically ghostly manner, as the souls of the dead in ancient Slav imagination or as the pagan gods in the pious Christian religion. Therefore, the old and tested arms of Marxist ideas which had been forged by Marx on the basis of the very realistic existence of the corresponding relations of production, begin to fail. In everyday practice, however, they are still uncritically considered the tools for real understanding of the phenomena of economic life" [15].

But sparkling as this formulation is, it does not convince us of the unfitness of the "old, tested" tools of Marxian analysis to be used under new conditions. This impression is only strengthened by the concrete example quoted by Bukharin to illustrate his statement. He mentioned a study, published in 1919, on the evolution of the costs of railway transport (computed, of course, in roubles) in the preceding decade. "Can we use the rouble as a unit of measurement?" — asks Bukharin. — ". . . What do these figures tell if the regulating role of the market disappears? But the market has not quite disappeared: *partly*, the 'free market' and 'free prices' do exist; partly, there are 'fixed prices'; and partly, resources are obtained 'free of charge'. But this is not the whole story. What do these figures tell if many articles *cannot be had at all* in additional quantities, that is, if money value becomes a magnitude absolutely void of contents?" [16] With his good economic instinct Bukharin here hits upon, and almost formulates the real problem: whether to abolish the monetary relations or the shortage of goods? But his doctrinaire zeal still carries him away and, as we have seen, he advocates the former one.

Of course, who reads his essay today is fully justified to put the question: to what an extent do Bukharin's statements represent the thinking of

Russian communists in those days, and to what an extent this ideology was a guide to action in his time? After all, the aforementioned measures aiming at the "naturalization" of economic life may also be considered emergency solutions imposed by the momentary economic situation.

The answer will be unequivocal if we study other literary sources of those days. First of all, the programme of the Bolshevik Party, adopted in 1919, described in § 15 the abolition of money as a desirable and final aim: "In the first period of transition from capitalism to communism, when communist production and distribution of products are not yet fully organized, it is impossible to abolish money. Under such conditions, the banknotes remaining in private property will continue to be used by the bourgeois elements of the population for speculation, profiteering and the plundering of workers. Relying on the nationalization of banks, the Russian CP strives to introduce several measures to expand the scope of cashless clearing and to prepare the abolition of money" [17].

From this angle, the raging inflation does not appear as a necessary evil but as a possible way of liquidating money. Liquidation of money — and thus, putting an end to inflation — was the unconcealed aim of economic policy. In support of this let us cite of the diverse sources available the very characteristic exposition by a little known author. As *L. Obolensky* writes in an article of his: "Our financial policy has been aimed recently at building up a financial system based on the emission of paper money, the ultimate objective of which is the natural transition to the distribution of goods without using money (at least within the country) and to transform the tokens of money into accounting units. Thus, when introducing the system of cashless clearing, our financial policy does not wish to restore thereby the disorder of money circulation. Its main aim is to create normal conditions of exchange without money between the parts of the uniform and mostly socialized national economy" [18].

The actual subject of Obolensky's article is a favourite idea of the period — which was from an economic point of view naïve even then — namely, that the extension of cashless clearing — the replacement of cash circulation by bank money — is almost identical with abolishing money circulation. We have seen that the quoted passage of the Party programme also emphasizes this presumed point, and not what was the real sense of the process: the rationalization of money circulation, its acceleration, the reduction of its costs, the strengthening of the checking and regulating activities of the central bank etc. Obolensky believes the substitution of book-keeping for cash circulation is equal to the abolition of accounting in money terms and he does not even raise the question of what will be the unit to be used in book-keeping. His contemporary scholars (A. Chayanov, A. Vainshtein, M. Smit, S. Strumilin, the Hungarian E. Varga) were more consistent when discussing the methods

to be used for accounting in an economy without money and proposed the most diversified, sometimes quite fantastic, physical indicators, working hours, etc. to be used as units of measurement [19].

Another feature of the "war-communistic" concept of socialism we have mentioned already is the thesis that the *main tool of building and controlling socialist economy is force, coercion by the state.* This thesis is perhaps not be found *expressis verbis* in contemporary literature, but we can make a well-founded conclusion based upon the measures and methods that the ideologues of the period mainly *talked* about and also upon the methods they did *not* mention.

In Bukharin's book, for instance, we cannot find the faintest allusion to, or mention of, the material interest of workers in building socialism, the role of material incentives. The richer and the more interesting are the reasonings on the role of violence and coercion. The latter are given, as it were, a theoretical framework in a separate chapter. (Chapter X: "*Extra-economic*" *coercion in the period of transition.*)

At the beginning of the chapter Bukharin summarizes the well-known Marxian theorems on the role of violence in history. He emphasizes that violence may accelerate but also may put a brake on economic development. A particularly important role is played by violence in the "critical" periods, when one mode of production is supplanted by another one. But, in creating a new society, the task of the revolutionary forces is — emphasizes Bukharin — not only to break the fetters on social progress, i.e. the obsolete relations of production, but also actively to shape the economic structure of society. "On the one hand, violence thus plays the role of a destructive factor, on the other, it is a factor of coupling, of organization, of construction" [20].

This force is, of course, the political power of the proletariat, the dictatorship of the proletariat. Wherein does Bukharin perceive its economic role? "Since this political power, as 'concentrated violence' against the bourgeoisie, is itself an *economic* power, it is a force that breaks asunder the capitalist relations of production, handing over the material skeleton of production to the proletariat and gradually fitting *non-proletarian* human elements of production into the system of new socio-economic relations" [21]. Up to this point — in spite of its circumstantial formulation — this statement is valid and historically proven. But let us see how he continues: "On the other hand, the same 'concentrated violence' partly turns *inward*, since it is a factor *of the self-organization and coercive self-disciplining of workers.* Therefore we must analyse both sides of coercion: coercion applied against the non-proletarian strata and against the proletariat itself as well as to the social groups close to it" [22].

The introduction of "coercive self-disciplining" in the economic field means, above all, the liquidation of the labour market. As Bukharin writes: "One of the main coercive forms of a new type in the sphere of the working

class is the liquidation of the so-called 'freedom of labour'. In the capitalist society, 'freedom of labour' was one of the many fictitious concepts of this society since in reality the capitalist monopoly of the means of production *compelled* the workers to sell their labour force. This 'freedom' boiled down first to the relative possibility of *choosing* the employer (migration from factory to factory), to the possibility of mutually giving 'notice' to quit; secondly, this 'freedom' meant *the competition of workers between each other* . . . Under the dictatorship of the proletariat the problem of the 'employer' is irrelevant since the 'expropriators have been expropriated'. On the other hand, the remnants of disorganization, of individualism, of guild-like seclusion, lack of solidarity, the vices of capitalist society come to expression in the lack of understanding of *general proletarian* tasks condensed in the tasks and requirements of the Soviet dictatorship, of the workers' state. Since, however, these tasks must be fulfilled at any price, it is understandable that the so-called 'freedom of labour' should be liquidated precisely in the interests of the proletariat, in the name of the real and not fictitious freedom of the working class. As a matter of fact, 'freedom of labour' is irreconciliable with a correctly organized, 'planned' economy and with a similar allocation of the labour force. The obligation to work and the system of allocating working hands by the state under the dictatorship of the proletariat indicates thus a relatively high degree of the organization of the whole apparatus and, in general, of the strength of the proletarian power" [23].

It is hardly necessary to underline that such a "soil-bound" concept of labour has little to do with the theory of revolutionary Marxism. The freedom of labour contract is not worthless for workers even in capitalism, and serves not only the interests of capitalists, but also the economic fight of the working class, its organization and its growing consciousness. The classics of Marxism — while pointing out also the limitations — never handled the bourgeois rights of freedom in capitalism in a nihilistic manner. And as regards the socialist society such "soil-bound" treatment of workers directly contradicts the substance of this society: the development of man's many-sided faculties. But even apart from the humanistic objectives of socialism, it will be obvious that forced labour does not pay even from the strict "economic" viewpoint: without any material and intellectual incentive the workers — whatever the degree of their class consciousness — cannot for a long time and above a certain development level of the forces of production propel the growth of production, the rise in productivity. Any assumption to the contrary leads — in the best case — to purest utopia involving invariably the payment of heavy penalty.

But, why did Bukharin — and others as well — resort to such quasi-Marxistic reasoning? The answer is that they hoped to find in this way an ideological foundation for the war-communistic methods of socialist economy. Namely, in the consciousness of the ideologues of war communism the frontier

between the temporary character of coercive measures taken under the pressure of an emergency and the basic principles of socialist economy became indistinct.

This can be well observed in the argumentation of *Trotsky* in March, 1920, at the IXth Party Congress, when in his speech on economic tasks he defended the forced allocation of labour, the "militarization" of labour (as a matter of fact, the theses of Trotsky were adopted by the Party Congress): "The organization of work is essentially the organization of the new society, since every historical society is an organization of work. We organize or start organizing work on new, socialist foundations. If our old society was a coercive organization of work for the benefit of a minority, where coercion was extended by the minority to the overwhelming majority of workers, then we now make the first attempt in world history to organize the work of the toilers in the interest of this working majority. This, however, does not mean the abolition of the element of coercion. This element will not disappear through the trap-door of history. No, coercion plays and is going to play a great role yet through a considerably long period of history. As a general rule, man tries to avoid work. We could say that man is a rather lazy animal, and human progress essentially relies on this property of his, since if man did not strive at an economical use of his force, did not make efforts to obtain more products with less energy, neither technology nor social culture would make progress. In this sense, human laziness is a progressive force. Of course, we must not conclude that in his agitative activity the party should advocate this property as a moral duty. We are abundant of it anyway, and the task of social organization is to insert laziness into a definite framework, to discipline and stimulate it with the help of the social organization of work" [24].

Of course, the allusion to the old hedonistic principle is merely a witty rhetorical trick, but it lends, as it were, an "eternal human" touch and a historically necessary character to the measures considered by the orator to be principles of socialist management: "Who allocates now the labour force and directs it to where it is required by the economic tasks of socialist construction? It is the trade unions, who do it in accordance with the demands of the social and economic agencies. But what methods and procedures are applied to make sure that a worker directed to place A really moves to place A? Now the worker goes from factory to factory, from plant to plant not of his own free will, as it was called under capitalism, that is, not under economic pressure, the pressure of hunger, as it was the case under capitalist rule, but he is directed and must be directed by the central economic agencies in accordance with the general economic plan. Thus, the workers are now bound to the factories and plants . . . In the military field there exists the proper machinery to compel soldiers to perform their duty. In one form or other, this must also happen as regards labour. . . This militarization is inconceivable without the militarization of the trade unions, without establishing a regime in which every

worker feels he is a soldier of work and cannot dispose of himself freely; if instructed to move, he must obey, and if he does not — he will become a deserter and get punished" [25].

That this regime of barracks, forced labour was really considered by him a *conditio sine qua non* of socialist economy, will be clear from the further statements of Trotsky when retorting to the opposition which asserted that the operation of the labour armies, of forced labour results in low productivity, as a matter of fact, it is unproductive: ". . . the arguments raised here against the organization of the labour army are directed entirely against the socialist organization of the economy in our transitional period. If we swallow the old bourgeois prejudice, or rather, not the old bourgeois prejudice but the old bourgeois axiom turned into prejudice that forced labour is unproductive, then this relates not only to the labour army, but also to obligatory work as a whole, the foundation of our economic construction, and thus to our socialist organization in general. Of course, together with comrade Osinsky and his followers, we could outline the perspectives of the organization of socialist economy. There, coercion will gradually disappear and fade away entirely, and in a well organized socialist economy the elements of coercion will be no longer felt as such, since work — both physical and intellectual — will become a need for every member of society. But there are many marches until then and here the elements of coercion will work with full vigour. Thus, in the period of transition coercion plays a huge role in organizing work, and if forced labour is unproductive, this condemns our economy. If work is organized according to an incorrect principle, the principle of coercion, and if coercion is incompatible with labour productivity, however clever we are and whatever we do, we would be doomed to economic decline" [26].

This quotation seems to prove conclusively that war communism, as a specific economic model in general — and every one of its traits, in particular — had its own theoretical background. Not for a single moment did its ideologues consider the system of war-communistic economy as temporary or at least they thought its existence was indispensable until the complete building up of socialism.

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Thus the economic reform starting in the spring of 1921 meant a break with this economic system. What was the substance of the NEP, to what extent its introduction involved the revision of ossified dogmas concerning the socialist economy — and what is inseparable from it — what were Lenin's ideas as to the methods of socialist economy unfolding after the October Revolution, and what was his relation to the ideology of war communism — these questions will be dealt with in a separate essay.

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ОСНОВНЫЕ ЧЕРТЫ ЭКОНОМИКИ И ИДЕОЛОГИИ ВОЕННОГО КОММУНИЗМА

Л. САМУЭЛИ

Полвека тому назад, весной 1921 года в Советской России X съезд Коммунистической партии порвал с так называемым военным коммунизмом, и начался переход к новой экономической политике (НЭП). Это была первая и — по своим последствиям — наиболее значительная в истории социалистических обществ общественно-экономическая реформа-

Для выяснения подлинного значения этого шага автор в данной статье делает попытку анализа военного коммунизма как своеобразной модели функционирования социалистической экономики.

В первой части автор дает сжатое описание хозяйственного строя эпохи военного коммунизма. Им отмечаются следующие принципы, на которых зиждилась эта система: 1. максимальное распространение сферы государственной собственности, прямого государственного распоряжения материальными ресурсами; 2. принудительная организация рабочей силы, распространение методов трудовой повинности на межотраслевое и территориальное распределение, использование рабочей силы; 3. централизация оперативного управления хозяйственной деятельностью; 4. уравнительный характер распределения; 5. натурализация хозяйственной жизни, т.е. свертывание, ликвидация товарно-денежных отношений.

Во второй части статьи автор рассматривает идеологию военного коммунизма. В основе его анализа лежит разбор книги Н. И. Бухарина «Экономика переходного периода» (1920 г.). Автор отмечает, что Бухарин, исходя из практики периода I мировой войны, расценивал рост в развитых капиталистических странах государственно-монополистического военно-экономического комплекса как абсолютный, необратимый процесс, неизбежно — еще в рамках капиталистической системы — ликвидирующий рынок, упраздняющий деньги, превращающий всю национальную экономику в единый «комбинированный трест». Однако эта модель военно-экономического государственного капитализма детерминирующим образом повлияла и на модель создаваемого социалистического планового хозяйства. Ведь, если в специфической организации военной экономики видят форму проявления исторической необходимости, то и специфические черты этого специфического хозяйствования становятся носителями объективных закономерностей, которым, стало быть, следует дать простор и при социализме. Автор прослеживает, как отождествлялись в сознании идеологов военного коммунизма (Н. Бухарина, Л. Троцкого и др.) отдельные, свойственные военному хозяйству черты с существенными критериями социалистической экономики. Это рассматривается им на примере двух основных постулатов идеологии военного коммунизма: *а)* о необходимости натурализации экономических отношений после победы пролетарской революции; *б)* о насилии, государственном принуждении как главном орудии организации и управления социалистической экономикой — пока социалистическое сознание не достигнет должного уровня.

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THE NEW SYSTEM OF NATIONAL ACCOUNTING IN HUNGARY

Beginning 1968 the Hungarian Central Statistical Office introduced a new system of national accounting. The essence of the new system is that while maintaining the economic categories used hitherto, the accounting has been extended to many new fields. The new system includes the categories expressing the joint achievements of material and non-material production, in terms of both real flows and income processes. Estimates were primarily made for the years 1968, 1969 and 1970, but eventually these data were also worked out back to 1960. The study, on the one hand, reviews several important characteristic features of the new system, and on the other, it presents some important new information.

The system of national economic accounts and balances plays an outstanding role in the economic and statistical activities of every country. Its most important purpose is to regularly summarize data concerning the national economic development, the structure and general position of the economy, hence it is an essential tool of modern state management. In the past 10—15 years the role and importance of national accounting has rapidly increased, and many facts indicate that this role will continue to grow in importance. Initially just about the sole result of the national economic accounting system was that it expressed the final result of the economic activities of the country, that is, the national income in a single figure and the most important fields of its utilization. Today national economic accounting extends to all areas of economic activity, and *constitutes* a coordinated system of complex and diversified indicators covering all aspects of the economy. For this reason endeavours are increasing to extend the system of national economic accounting beyond autonomous information and to process and integrate the most important economic information.

Hungarian traditions in national income accounting are recognized throughout the world. Frigyes *Fellner* achieved outstanding theoretical and practical results as early as the turn of the century, and in the inter-war period the Hungarian Economic Research Institute, under the leadership of István *Varga*, completed valuable work in this field.

Following the Second World War, it became the task of the Central Statistical Office to develop a "System of National Economic Balances" on new foundations. Twenty years ago, this work began on the basis of the con-

cepts and methods used at that time in the Soviet Union. Since then this system has been improved in many respects. Valuable achievements were reached, even by international comparison, particularly in input-output analysis, and in the field of studies dealing with the income and consumption of the population. However, the demand was raised that not only the individual parts, but the whole of national economic accounting should be further developed. This demand increased with the introduction of the new system of economic management in 1968. Under the new management system the central plans prescribed for the enterprises were replaced by the introduction and coordination of financial regulators, which serve as incentives to the economic units for the realization of tasks prescribed in the national economic plan. For this reason regular study of the operation of these financial and income regulators and their effects has gained particular importance: it has become essential to provide a survey on a national economic scale.

Beyond this, for some time now, it has been felt that it is desirable to take account, along with the summary results of the material production of the country, of the service categories in order to gain full insight into the economic activities of the country. The summary production categories in Hungary and the rest of the socialist countries, such as e.g. national income, reflect the value of goods produced in the sphere of material production only.* It still is undecided the achievements of *which* activities should be included into the concept of the national income; this has been debated for a long time; discussion is still going on. However, among Hungarian economists there is full agreement that modern economic management must have comprehensive information, lending itself to a synthesis not only of material production but concerning all economic activities.

The realization of plans aiming at such a framework fortunately coincided with the large-scale work undertaken between 1964 and 1968, on the one hand, among the CMEA countries, and on the other, within the framework of the UNO. Hungary's delegates participated in this work with great interest, and made sincere efforts to adopt up-to-date international recommendations in domestic practice.

Based on these preliminaries the Hungarian Central Statistical Office worked out, in cooperation with other relevant institutions, the new system of national economic accounting, and beginning with 1968 provided information in this system for the government and the public on the economic development of the country.

* MPS system, as used in UN terminology. — Ed. Note.

Major development directions of the national accounting system

The major feature of the new national accounting system, in contrast with the former one, is that it accounts for *all* economic activities performed in the country, and for all important aspects of these activities, in a synthetic framework. The former system, in essence, showed material production alone, and was restricted to its real processes (the production and consumption of material goods). The extension of the scope of the accounting system was organized in a way which makes it possible to continue clearly and unequivocally the observation of the earlier categories of material production. Maintenance of these categories was necessary, quite apart from theoretical justification, since they provide the basis for a comparison between Hungary and the rest of the socialist countries, as well as the link with the earlier data of the country itself. Therefore, the advance of the national accounting system appears first of all in the many new concepts introduced and organically linked to the (still retained) old ones. Naturally, this large-scale methodological reorganization made it unavoidably necessary that certain modifications be made in the contents of the aggregates applied until now, and in some cases, in terminology as well.

The extension of national accounting took place in three major directions. One was that the new system renders account of the results of non-material production alongside that of material production, in a manner that can be synthetized. The other is that is shows the incomes originating in the national economy, their distribution and redistribution, and also their final use, parallel with and coordinated to real processes. The third direction for the extension of accounting is that the former, highly summarized national accounts (aggregated into five major division of economic activity) were replaced by a classification of 26 branches. This provides an opportunity for tracing the most important structural ratios and interactions within the national economy.

Thus, the detailed new system of national accounts shows year by year in a disaggregation by branches, the production of goods and services, the inputs, and the net material product, as well the net national product emerging. Furthermore, the system provides an analysis of the net national product in respect of the primary distribution among economic categories, the population and the budget, as well as, including other current transfer, the disposable income. It also reports on the savings remaining after consumption expenses, and their regrouping through the capital transfers and leadings, and the capital formation according to object and destination.

The outline given is sufficient to indicate that the new national accounting system, practically speaking, extends to cover the entire field of information of economic nature. This by no means wants to say that it replaces the informa-

tion systems developed in other areas. The system of national accounts, even if it studies the national economy in greater depth and more details than before, still retains its macroeconomic nature. It only presents the processes which are the most important from the national economic aspect and the interrelations among them. However, it differs qualitatively from partial information systems insofar as it constitutes a consistent approach, where the concepts and the classification are uniform throughout the entire system, and the data are related to one another logically and numerically as well.

This comprehensive nature of the national account system makes it possible to establish suitable connections and interrelations among the very ramified information systems which were developed in the different specialized areas independently of one another. It is an essential condition for economic studies to "speak the same language"; it is also a substantial aid in the sense that the information sources, when separated from one another, become reciprocally usable by ensuring the "passages".

The endavour for integration and coordination of the different information systems is a process which takes place all over the world, and the national accounting system plays a particularly important role in these efforts. Apart from this, the increased tasks of economic management and economic research in Hungary also justify a new, simpler, clearer and more complete system of information.

Practical introduction of the new system

Elaborating the new Hungarian system of national accounting has been completed. After the experimental calculations for 1968 and 1969, beginning with 1970 the Central Statistical Office worked the data on this basis. Simultaneously with the introduction of the new system, the 1959 prices used until now in measuring volume, have been replaced by 1968 prices. This transition was not required by the extension of the calculations. The sole reason was that beginning with 1968 the price ratios in the area of production changed to a great extent and thus the present national economic structure and its changes could no longer be reflected realistically by the former price ratios.

In order to ensure that the data in the new national accounting system should be applicable to broad analysis already in the beginning, time series going backward were prepared at current and constant 1968 prices for the most important production and utilization categories. In this way, since the preliminary calculations for 1970 are also available, the Central Statistical Office presents now comparative data for an 11-year period on the composition of the gross output and net material product.* These express the results of material

* According to MPS these categories are called "Global Social Product" and "National Income".

production by activities and by main utilization goals, as well as by the sources of gross output and net national product. They reflect the result of material and non-material production, together with the distribution by branches of fixed assets and capital formation. On the processes of income distribution more detailed data are available for the years following 1968.

The reworking, back to 1960, of the newly introduced categories did not cause any "statistical contradictions" since these were published for the first time; but the recalculation of the aggregates regarding material production involved that structural ratios, and to a certain extent even the earlier published index numbers, expressing development, have changed. These changes

Percentage share of major divisions in the net material product, 1965

Sector	Calculated with new methods		Calculated with old methods	
	at current prices	at 1968 prices	at current prices	at 1959 prices
Total	100.0	100.0	100.0	100.0
Of which:				
Industry	58.4	41.6	58.4	67.0
Agriculture and forestry	20.0	24.0	19.0	16.4
Home trade	6.1	12.3	6.9	6.5
Foreign trade	—1.9	1.2	—1.5	—6.0

were caused to a far greater extent by the revaluation of the constant price data at 1968 prices than by changes in methodology. This can be clearly seen from the following table which indicates the 1965 shares of the major divisions of net material product with identical content, but valued at different prices, as well as valued at identical prices but applying the old and the new methods. The new and old ratios calculated at 1965 current prices almost completely coincide, despite the fact that the final sum of the national income deviates from one another in the two calculations by about 9 thousand million forints (167 and 176 thousand million forints). This comes from the changes in methodology which effect the net value added of the different divisions to just about the same extent.

Transition to new constant prices causes in all cases a break in the time series of statistics. This break can appear in a form that, in order to avoid altering the data already published the new constant prices are only used from the year of the transition onwards. In this case, the structural data of the periods before and after the year of the transition cannot be compared. However, if comparison of the structural ratios, as well as many other analyses usually performed with absolute values (e.g. the relationship between produc-

tion and fixed assets, the study of the wages, or the operating surplus per unit of production) are considered to be important, it will be expedient to recalculate the data in the new price system for a longer period backward, accepting the fact that the index series will also change.

While at first glance the break in the time series may cast doubt on the reliability of the statistical data, for the experienced economist it is natural that indices measured in a new price system will deviate from the old ones. In fact, from the strictly professional economic point of view, it would even be desirable that the ratios comparing the most important national economic categories and their volume indices should be presented parallel in more than one price system, so that the effects stemming from re-pricing could be adequately considered in analyses. That this wholly professional solution, nevertheless, is never used in official statistical practice, needs certainly no separate explanation. Instead, the general practice throughout the world is to change over to the use of new constant prices at comparatively infrequent intervals, but if the transition is no longer avoidable, several years are generally revaluated in retrospect, and then the old time series are replaced by new ones.

This was the case in Hungary as well, regarding the period between 1960 and 1967. According to the new calculations, the contribution of major groups of activities to the national income (that is, to the net material product) changed as follows:

Shares of major division of economic activity in the net material product at 1968 prices

	Per cent of total net material product		
	Industry	Construction	Agriculture and forestry
1960	36	11	29
1965	42	11	23
1967	42	11	22
1970	43	12	18

Volume indices referring to the net material product and its individual components were also modified, though to a comparatively smaller extent. The degree of the change in the volume indices corresponds in essence to what is generally considered a natural divergence over such a time period between the Paasche and Laspeyres index numbers. The new index number of the net material product over the whole period 1960 – 1967 is four points (some 3 per cent) lower than the old one: 143 instead of 147. Accordingly, the annual average growth rate for this period changes from 5.7 per cent to 5.3 per cent. The deviations between the indices of net production of industry and construc-

Old and new volume indices of net material product

1960—1970

Year	1960 = 100		Year	1960=100	
	old	new		old	new
	index numbers			index numbers	
1960	100	100	1966	135	132
1961	106	105	1967	147	143
1962	111	111			
1963	118	117	1968	154[a]	150
1964	123	122	1969	165[b]	163
1965	124	122	1970	.	170

a) For 1968 and 1969 the old index was linked to the new 1967 figure by chain index.

b) Indices calculated from preliminary data. According to final calculations the growth in 1969 was substantially faster than provisionally estimated. The main cause of this improvement was that the final data for agriculture were much better than the preliminary assessment. Consequently, for the whole period 1960—1969 the difference between the initially published and the new indices was reduced.

tion are of similar magnitude and in a similar direction while, in contrast, the new index number of net production of agriculture is 6 per cent higher than the old one (107 instead of 101). The new volume index of material consumption by the population is four percent lower in 1967 when compared with 1960 than the old one (131 per cent instead of 136 per cent). The main reason for this is the transition to the new constant prices. In contrast, the change of the volume

New volume indices for the major aggregates of the net material product from 1960 to 1970

1960 = 100

	1960	1965	1967	1970
Total of net material product	100	122	143	170
Of which:				
Industry	100	141	168	202
Construction	100	114	137	177
Agriculture and forestry	100	97	107	101
Use in the domestic economy	100	120	142	171
Of which:				
Material consumption of the population	100	117	131	155
Material consumption for collective needs	100	150	159	182
Net capital formation	100	120	177	221

index of material consumption for collective needs from 133 to 159 was mainly caused by methodological changes.

The new indices for the main productive sectors which contribute to the net material product, and for the major categories of demand are as follows for the period between 1960—1970.

Since the most important indicators referring to living standards are estimated in coordination with the national accounts, the indices characterizing

New indices for the real income and consumption of the population, 1960—1970

1960 = 100

	Per capita		
	personal real income	total real income	total real consumption
1960	100	100	100
1965	117	118	116
1967	131	132	128
1970	158	159	150

the income and consumption of the population were also modified accordingly. As shown by the new calculations the per capita personal real income of the population increased by about 30 per cent between 1960—1967, in comparison to the earlier published 35 per cent. Accordingly, the annual average growth rate for this period changes from 4.4 per cent to 3.8 per cent. The deviation regarding the per capita total real income* is also similar in size. There is less change in the *total* consumption of the population (which includes services) than in the *material* consumption of the population. The reason for this is that the application of 1968 price ratios moderates the volume index of the consumed material goods while they increase the volume index of services rendered.

The role of non-material services in the national economy

The extension of the national accounting system to all economic activities performed in the country means that the value of "Net national product" includes the results of non-material services too. The net national product is 7 per cent higher than the net material product reflecting the net results of material production. However, the value of net material product cannot simply be added to the net value of non-material services. It must be taken into account

* The total income includes beyond the personal income the consumption by the population provided by the state free of charge.

that the sectors of material production use a part of the non-material services as intermediate consumption, which appears as a component of the net material product; to avoid duplication, this item should be subtracted in the broader concept.

The share of non-material services in the net national product was about 10 per cent over the whole period between 1960 and 1970. These value data

Net material product and net national product in 1969 at current prices

	Thousand million forints
Net material product	259.2
Minus: Non-material services used for material production	6.9
Net value added in material production	252.3
Plus: Net value added of non-material services	26.6
Net national product	278.9

show the share of non-material services to be substantially lower than what they reach by either employment or by the share of fixed assets. In 1969 about 16—16 per cent of all economically active earners and of fixed assets (excluding housing stock) belonged to the non-material services sector. The comparatively low level of value indicators is primarily due to the fact that the majority of this field consists of activities financed by the budget where neither tax, nor operating surplus is realized; furthermore, the price level of even the commodity-type services is so low that their average prices exceed inputs by a minimum only.

The non-material services are at a "disadvantage" for another reason as well. While in the branches of material production the physical volume of the products provides an objective basis for measuring the productivity, in the non-material services there is generally no basis for this kind of measurement of the change in productivity. Therefore, in the estimates relating to this field — following the general international practice — changes in the volume of value added are generally taken as being proportional with employment. Nevertheless, since the improvement in technological equipment and the increase in scientific knowledge also unquestionably increases productivity in the sphere of non-commodity services, the calculations at constant prices allowed for an annual 1—1.5 per cent productivity increase. This practically coincides with the annual growth rate of assets per employee in the non-material branches.

On this basis between 1960 and 1970 the net value added in non-material services grew by 46 per cent as compared with 24 per cent increase in employment. At the same time, the volume of net material product increased by 70 per cent.

Thus, while taking the production of non-material services into consideration, the total net value added for the national economy in 1970 was 7 per cent higher than that of material production, on the basis of the production index calculated in the broader concept the rate of economic development was somewhat more moderate than on the basis of the net material product.

Volume indices of net material product and net national product between 1960—1970

	Net material product	Net value added in non-material services	Net national product	Share of non-material services, in net national product, per cent
	Index: 1960 = 100			
1960	100.0	100.0	100.0	10.9
1961	104.6	103.2	104.5	10.8
1962	110.9	108.5	110.7	10.7
1963	116.8	113.4	116.7	10.6
1964	121.9	118.8	121.7	10.7
1965	122.0	121.7	122.0	10.9
1966	132.0	124.4	131.2	10.4
1967	142.7	131.0	141.3	10.1
1968	149.9	135.7	148.1	10.0
1969	161.8	138.7	158.6	9.6
1970	170.0	145.7	166.5	9.6

In the analysis of the use of the net national product, which includes the full value of material products and the services, the difference between the two kinds of measurement appears, by the nature of things in the final consumption. Surprisingly, the deviation in major utilization ratios is comparatively small: the shares of total final consumption and net capital formation deviate by barely 2 per cent in the aggregates calculated on the basis of the two concepts.

The explanation for these comparatively small differences is that the bigger half of the full value of non-material services, namely, the value of the material input, constitutes a part of the final consumption of the net material product already. The complement therefore affects total consumption to the net value added of services.

Major features of income distribution

The new national accounting system devotes great attention to the process of distribution. The study of this process becomes particularly important under the new system of economic management, when the state stimulates the production units through the means of income regulation to realize the goals of the central plan.

Final use in the domestic market of net material product and net national product according to purposes, 1960—1970

	Net material product	Net national product	Net material product	Net national product
	percentage distribution in the average of the years 1960—1970		index numbers for 1970, 1960 = 100	
Final consumption of the population	67.9	67.9	155.4	154.7
Final consumption for collective needs	8.5	10.3	219.4	181.6
Total consumption	76.4	78.2	160.9	157.8
Net capital formation	23.6	21.8	211.9	211.9
Total use in domestic economy	100.0	100.0	171.2	167.8

In order to analyse the economic interrelations of the income process the ownership relations of the society are to be remembered since these features of society are more clearly reflected in the system of income distribution than in the real processes of production. Thus, the fact that in Hungary the means of production are in public ownership and for this reason the state can regulate income distribution in a much more direct manner — and frequently by other means than in the capitalist countries — made it necessary to apply a number of income categories, which in general are characteristic of the socialist countries only. Some even refer to Hungary alone. Of course, despite essential differences in content, the fundamental income categories can be identified with the appropriate categories in the capitalist as well as in the socialist countries; this makes it possible to perform international comparisons regarding the essence of income distribution and its characteristic features.

What follows is a review of the process of income distribution in Hungary on the basis of actual 1969 data, within the framework of the new system of national accounting.

Income distribution is shown by presenting the distribution, redistribution, and final utilization of the net national product at current prices, as the total of income gained in the national economy resulting from both material and non-material activities. In 1969 this amounted to 279 thousand million forints.

In the first phase, and within this, as the first step of studying income distribution, the share in the net national product of the economically active population is examined. In 1969, 51 per cent of the net national product amounting to 143 thousand million forints was paid to the population in the form of wages and other personal incomes. This income is gross wages in the case of those employed (not including social security contributions to be paid by the employer), the guaranteed compensation of members of cooperatives and the net result of self-employed people, small-scale craftsmen and of the supplementary activities of the population. It does not contain employees' shares in operating surplus.

After deduction of wages and individual incomes, the remaining sum is the "net income of the economy". This sum was 136 thousand million forints, distributed in primary form between the budget and the economic unit.

The relative ratios of wages and individual incomes and of net income of the economy show considerable dispersion within the branches of the national economy partly owing to existing differences in productivity levels, and partly — even more — due to the effect of the price system. Above and beyond this, there is a sharp difference between the branches of the material and non-material sectors, for 98 per cent of the total net income of the national economy is realized in the branches of material production, and 2 per cent in the non-material sphere. At the same time, the two spheres share in wages and individual incomes in a ratio of 83 : 17 per cent.

An important phase in the distribution of "net income" is the flow of income between the economic sphere and the budget, which is the major means of regulation in connection with current production. Economic units paid 53 thousand million forints, that is, 19 per cent of the net national product into the budget. This sum is a balance of social security contributions and taxes on wages, charge on assets, turnover taxes, price supplements, other production subsidies received and other taxes paid. As the final result of these substantial income transfers both in positive and negative direction, in 1969 the economic units retained 83 thousand million forints, that is, 30 per cent of the net national product, which was equal to their operating surplus.

The aggregate of the processes of income distribution listed so far are termed as "Direct income distribution" and the final results as the "Direct income" of the individual income recipients. In other words: direct income distribution follows the pattern of the net national product.

The next phase of income distribution is the "Distribution of operating surplus". It shows that the economic units paid in 1969 over half of their operating surplus (47 thousand million forints) into the budget and about 10 per cent to their employees in the form of share in operating surplus. This means that roughly one third of their operating surplus was retained by them for development and reserve purposes. (Apart from this, for practical reasons,

Wages and individual incomes, and net incomes by branches in 1969

	Wages and other personal incomes	Net incomes of the economy	Wages and other personal incomes	Net income of the economy
	in per cent of total		percentage distribution	
Mining	55.4	44.6	3.6	3.0
Electricity	21.1	78.9	0.6	2.4
Metallurgy	34.2	65.8	1.8	3.7
Machinery and equipment	40.0	60.0	8.7	13.8
Building material industry	41.1	58.9	1.3	2.0
Chemical industry	24.9	75.1	1.7	5.5
Light industry	48.6	51.4	8.4	9.4
Food industry	35.0	65.0	2.7	5.3
Total industry	40.3	59.7	28.8	45.1
Construction	49.0	51.0	7.7	8.5
Agriculture	69.3	30.7	28.2	13.1
Forestry	60.2	39.8	0.8	0.6
Water economy	67.4	32.6	1.0	0.5
Transport and communication	59.4	40.6	6.4	4.6
Home trade	26.3	73.7	5.8	17.1
Foreign trade	18.2	81.8	0.4	2.1
Import duties and valuation differences	39.6	60.4	4.3	6.9
Material branches together	47.2	52.8	83.4	98.5
Non-material branches	92.3	7.7	16.6	1.5
Total	51.4	48.6	100.0	100.0

social security contributions paid by employers are also shown in this phase.)

The sum total of direct income distribution and distribution of operating surplus results in the income of all income recipients; this is the "net income stemming from economic activity". For the population this is equal to incomes stemming from work, while for the economic units it is identical with the sum of development and reserve funds formed in the year in question. The net national product was in 1969 divided in such a way that the economic units received 10 per cent, the budget 38 per cent, and the population 52 per cent.

Following this, the transfers of "other current incomes" are taken into consideration, the most essential item in this category consists of the social security benefits provided to the population by the budget in cash. After adding the balance of these income flows the result expresses the "Disposable income". This income category shows the distribution of the total income of the national economy "disposable" by the income recipients. This means that the incomes are shown by the recipient who decides on their spending, irrespec-

tive of the fact whose needs will be met by this allocation, e.g. the incomes spent on the maintenance of hospitals, schools, etc. appear as income available to and "disposable" by the state budget and not by the population. Naturally, parallel to the disposable income, another essential information is required: one which indicates who will benefit from these allocations that is, the share of consumption financed by the budget and used for meeting the personal needs of the population. For this reason, when studying income distribution and consumption the data are further regrouped.

The share of the budget in the net national product is 28 per cent, and that of the population 61 per cent on the basis of disposable income, in contrast with the 38 and 52 per cent shares in the net income stemming from economic activities. The disposable income of the population is equal to the concept of "personal disposable income" used in general practice.

The disposable income covers the final consumption expenditures of the individual income recipients and the remaining income is the "saving". The sum of final consumption in 1969 was 210 thousand million forints and the majority of this (158 thousand million forints) was covered by the population from personal incomes. The final consumption expenditure covered by the budget was also substantial (49 thousand million forints). Almost half of this amount was spent on products and services for the health and cultural requirements of the population, while the larger half (27 thousand million forints) went to meet the collective needs of society (administration, defence, highways, flood protection, etc.).

In 1969 the sum of national saving was 69 thousand million forints. Of this 29 thousand million forints were saved by the economic units, 28 thousand million by the budget, and 12 thousand million by the population. Savings form the financial rescources for the net capital formation of the national economy. However, in 1969 a comparatively substantial part of the savings, 7 thousand million forints were used to reduce foreign debts, for in this year the value of exports exceeded imports by about this amount. This means that the sum available for domestic net capital formation was 62 thousand million forints.

The budget and the population passed on its savings to the economic units partly in the form of credit and partly through capital transfers. Consequently, the total sum which can be used for financing net capital formation appears in the economic sphere. (In this context it should be noted that in the Hungarian national accounting system the budget institutions, the small-scale craftsmen and supplementary activities of the population are shown under the heading of the economic sphere not only from the point of view of production but also for the purpose of capital formation and capital finance. Hence the capital formation expenses of these units covered by the budget and by the population are treated as capital transfers.)

All this can be conveniently summed up in the table below.

Income distribution in the national economy in 1969

	Economic units	State budgets[b]	Population (households)	Total
	Thousand million forints			
1. *Net national product*	279			279
2. Wages and individual incomes	−143		+143	
3. Contribution to wages, charges on assets, taxes and subsidies	−53	+53		
4. *Direct income* (1+2+3)	*83*	*53*	*143*	*279*
5. Distribution of operating surplus	−55	+47	+8	
6. Employees' social contributions		+5	−5	
7. *Net income stemming from economic activities* (4+5+6)	*28*	*105*	*146*	*279*
8. Social security benefits and other current income	+4	−28	+24	
9. *Disposable income* (7+8)	*32*	*77*	*170*	*279*
10. Financing of final consumption	3	49	158	210
11. Savings (9−10)	*29*	*28*	*12*	*69*
12. Balance of capital transfers and credit operations	+33	−28	−12	−7
13. *Financing net capital formation* (11+12)	*62*	—	—	*62*
14. *Income used for final consumption and net capital formation*[a]	63	27	182	272
	Percentage distribution			
1. Net national product	100	—	—	100
4. Direct income	30	19	51	100
7. Net income stemming from economic activities	10	38	52	100
9. Disposable income	11	28	61	100
11. Savings	42	41	17	100
14. Income used for final consumption and net capital formation[a]	23	10	67	100

a) Consumption of the population, financed from budget and enterprise sources, regrouped to the population.

b) By the so-called "result approach" i.e. the 1969 incomes of the budget relate to the 1969 economic achievements of the enterprises, including those parts which will be paid into the budget in 1970 only (e.g. turnover tax, profit tax), while the sums related to 1968 economic achievements and paid into the budget during 1969 are excluded.

The above system of income distribution flows is suitable for a review of fundamental interrelations only. In order to make a more valuable and concrete study of this essential question, these processes are further broken down into different groups of economic units within the economic sphere, and into the different social strata within the population.

*

The methodology of national accounting which has now been developed, and is already applied in practice is a highly important step towards deepening the realistic and many-sided macroeconomic study of the economic situation of the country. At the same time, claims have already been raised both in domestic and in international economic circles in order to have these calculations further advanced in many respects, and to supplement them (e.g. with data on national wealth, technological development, etc.). The international statistical bodies have already included into their programmes the study of the approach to the statistics of many allied subjects. The Hungarian statisticians will continue to participate intensively in this work.

НОВАЯ СИСТЕМА БАЛАНСА НАРОДНОГО ХОЗЯЙСТВА В ВЕНГРИИ

Я. АРВАИ

В статье автор сообщает о введенной в Венгрии в 1968 году новой системе национальных расчетов. Основные направления развития новой системы можно обобщить следующим образом: *а)* прежняя система предоставляла информацию только о результатах материального производства, а новая система синтетизирует результаты всей осуществленной в стране хозяйственной деятельности, то есть включает также и нематериальное производство; *б)* новая система наряду с реальными производственными процессами многосторонне показывает также распределение, перераспределение и конечное использование доходов, возникающих в народном хозяйстве; *в)* новые народнохозяйственные счеты вместо прежней весьма сводной группировки (охватывавшей 5 народнохозяйственных отраслей) составляются в сравнительно подробной отраслевой группировке.

Одновременно с переходом на новую систему для измерения объема происходящих в народном хозяйстве реальных процессов стали применять цены 1968 года вместо цен 1959 года. Для того, чтобы облегчить анализ за период после 1968 года, Центральное Статистическое Управление разработало ретроспективно до 1960 года важнейшие синтетические показатели по народному хозяйству. Эти новые временные ряды отчасти относятся к таким категориям, которые публиковались и ранее. В этих случаях исчисленные заново показатели изменились по абсолютной величине, по существующим между ними соотношениям и по индексам физического объема.

Самое существенное различие между прежними и новыми временными рядами имеет место в области пропорций народнохозяйственных отраслей. Автор показывает на основе данных за 1965 год, насколько сильно зависит от системы цен представление о важнейших структурных пропорциях народного хозяйства.

Не только изменения структурных пропорций, но и изменения индексов физического объема, тоже в гораздо большой мере являются следствием применения новых неизменных цен, чем изменений в методологии. Различие между индексами физического объема, исчисленными по ценам 1959 и, соответственно, 1968 года, между прочим, как по направлению, так и по величине, соответствует масштабу, который на протяжении такого периода можно считать закономерным между индексами Паше и Ласпера. Автор приводит старые и новые индексы за 1960—1970 годы по важнейшим категориям производства и его использования.

Среди нововведенных производственных категорий автор проводит параллель между индексами национального дохода и чистого национального продукта за 1960—1970 годы. Из этого выясняется, что физический объем чистой добавленной стоимости нематериальных услуг возрос между 1960 и 1970 годами на 46%, в то время как прирост национального дохода составил 70%. Следовательно, выражающий совокупный итог двух сфер чистый национальный продукт рос медленнее (на 67%) национального дохода.

Автор на основе фактических данных за 1969 год сравнительно подробно излагает статистические методы, применяемые в исследовании распределения доходов и основные черты последнего в Венгрии. В сводной таблице — исходя из суммы чистого национального продукта, — можно наблюдать последовательные этапы макроэкономического распределения доходов.

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E. O. Heady

FARM PLANNING FOR MODERN AGRICULTURE AND LARGE UNITS

Developed countries are experiencing a strong trend to large and specialized farming units. This trend will accentuate as a result of the forces of economic growth, especially in countries where agriculture's response is oriented importantly to market forces. However, it also is the strong prospect in countries where farms already are large and more centrally planned as the farm sector is adjusted to (a) upcoming technologies, (b) relative real prices of resources, and (c) intersectoral employment patterns that emerge as consumer demand shifts with the stages of economic development.

Conformation of the resource structure to the stage of economic development also implies different sizes and degrees of specialization in farming, if the organization of the farm sector is to be consistent with economic development. Much of the increased capital, particularly that in mechanical forms, comes in lumpy units with high fixed costs attached. Per unit costs then decline sharply over greater volume. Larger farms are encouraged accordingly. These "lumpy" capital units also are specialized to particular tasks and crops, thus also encouraging specialized producing units in order that volume can be large and costs can be low. For example, large cereal harvesting equipment is not adapted to dairying, just as carousel equipment of a specialized dairy enterprise is not adapted to grain production. This is in contrast to labor as the main resource of less developed farms where manpower can readily switch back and forth between a few hectares of wheat and a dozen milch cows and scale economies of each enterprise are not obviated accordingly. Because of these interrelationships in resource proportions, capital specialization and scale or cost economies, a continuous progression towards larger farms and increased enterprise specialization can be expected under economic development. This process would occur automatically as a "natural law" of economic development even if public or government institutions were not used to speed it up under certain conditions of economic and social goals, and to restrain it under others.

The shift to large-scale and highly specialized producing units is highly synonymous with the adoption of advanced technological systems in all

phases of production — biological as well as mechanical. Agriculture then becomes adapted to advanced management systems. It is inconsistent that large-scale agriculture should develop as a physical progression without a parallel and simultaneous advance in management systems and planning techniques. Farming has catapulted from an occupation based on family-transmitted art and historic experience to a highly advanced scientific activity resting on continuously changing capital technologies and extending to the future. Its scientific complexity now approaches or surpasses the engineering characteristics of many industrial activities. In fact, large-scale farm units such as broiler and egg production or cattle feeding operations now are industrial activities, but add the complexities of biological phenomena to more conventional physical or engineering operations.

While of more recent advent, sophisticated management systems and planning techniques are now available and parallel the development of the other scientific technologies which have given rise to rapid progress in resource productivity and food supply of the agricultural sector. Yet, these management systems and planning techniques are not very fully utilized by large-scale farming units. Clearly, the size of farming units and enterprises frequently have been pushed ahead of the planning techniques which are available and applicable. While we find many large farms which energetically pursue all new biological and mechanical technologies, many (and perhaps the majority) employ planning techniques drawn from the dark, distant past — or at least which are highly obsolete in terms of currently available planning models. This statement is applicable to large units both in countries with production oriented to market conditions and those where it is in more central planned (i.e. both private and socialized agricultures).

The need for advanced scientific knowledge and applications has been recognized by employment of agronomists, zootechnicians, agricultural engineers and similar specializations on the expert staff of large scale farms. However, the use of a scientist with an engineer's or baccalaureate degree to provide recommendations on crop varieties, animal nutrition, fertilization or pesticide control, although an important element and a partial step, is not synonymous with farm planning. We can attain technological perfection in the culture of a crop or the husbandry of an animal, but still have absolutely the wrong plan in terms of farm objectives, resources productivities and availabilities, and economic weights of the farming environment. The supposition that the presence of technical experts on the large-scale farm staff is the equivalent of planning is a common condition in many countries. Clearly, however, expert technical guidance is not the full equivalent of planning. Further, there are management principles and planning techniques which can be used by technical experts, as steps in suboptimization in branches of the farm, which are highly applicable but seldom used by these personnel. I have found only a few

large-scale farms, especially in Eastern Europe but also elsewhere, which are sufficiently aware of these principles or are availing themselves of the opportunity to put them into use for purposes of improved management.

The evolution in planning and planning alternative has been this: First, in the period of simple resource restrictions, technologies and opportunities, planning was conducted as a simple mental exercise. The farmer of bygone days never wrote it down on paper, but he still had a plan. It was the mix of crops, technologies and livestock products he decided to (and did) engage during the year. Next, with the exhortations of extension specialists and advisers, advanced farmers conducted simple budgeting. This was a formal (if unsystematic) planning technique of limited scope. The arithmetic burden of this procedure limited the number of alternatives that could be compared. The system did not allow consideration of interactions between all specifically limiting resources and competing alternatives. Because of its arithmetic burden, budgeting as a planning method was seldom if ever carried to optimization. A form of budgeting is the main planning technique still used on most large-scale cooperative and state farms.

Next in the evolution of planning tools came linear programming, a method which can overcome the limitations of budgeting. Further, it is adapted to computer calculations which both speed plan computations and allow much more complex, realistic and broader alternatives to be examined. Of course not even all large-scale farms have access to computers. But even if done by hand calculations, linear programming can be carried to a stage of optimization for much larger plan problems than is possible by conventional budgeting or arithmetic iteration. And it allows application of "managerial judgement" as much or more than the older methods. For example, if the manager is subjectively certain that the workers cannot handle more than n cows, he can introduce this upper bound as readily in a programming model, and then let the system decide whether it should go this high, as to arbitrarily insert this number of cows in a "budgeted" plan.

Linear programming is a highly versatile planning method and few large-scale farms need look further for methods to improve their planning procedures. There are, however, numerous other recent or new tools or planning models which fall in the realm of operations research or systems analysis. Many of the more useful ones are simply extensions of conventional programming models — such as integer, stochastic, recursive, dynamic and polyperiod variants. It is unrealistic that management and expert staffs of many large-scale farms know so little about them (or, in some cases, even of their existence). In this day of scientific farming the managerial staff of a large-scale farm represents "unplanning" if it has agronomic experts who know and apply knowledge of plant genetics or zootechnicians applying animal physiology but lacks economists who can apply these newer but already well developed and broadly applied planning tools.

Meaning of farm planning

To help guide discussions down a systematic path, a definition of planning may be in order. Planning connotes different things to various people engaged in the organization and implementation of farming activities. It can, for example, refer to a work plan or sequencing of operations to be performed by members of a labor brigade; it can refer to a crop or rotational scheme over time; or, it can refer to an overall plan of farm operation which is only informal and is not directed towards any precise and well defined objectives or objective function. It can even refer to prescriptions handed down from a higher body to be implemented without particular regard to the resource restraints and production possibilities of the particular farm.

For purposes of a seminar on large-scale farms, however, a more systematic and universal concept of farm planning is necessary. Three levels of planning or recommendations are typically carried out on farms: (1) *Farm planning* in the sense of all resources and enterprises for the farm as a whole. (2) *Technical unit* planning, as in prescribing the amount and mix of fertilizer to be used per acre or the ration to be fed swine. (3) *Branch planning* where the entire set of resources and practices are considered for a specific enterprise such as the dairy or orchard, but the branch plan is not determined simultaneously with the plan for the farm as a whole. These three levels of planning are not very distinct for a small-scale cultivator. However, on a large-scale farm with a cadre of technical specialists and enterprise supervisors, as found in Eastern Europe, these three levels of planning or recommendations can be rather well defined activities.

Whole farm planning

We consider the activity of *farm planning* to be an economic or management activity incorporating all facets of the total farm and its resources. It is the process employed by management experts to maximize the objective function of the entire farm, subject to the restraints of (a) scarcities or supplies of each individual resource in each time period of the year (b) the interdependence or competition among all crops, enterprises, technologies and investment opportunities generally (c) the prices (or other objective function weights which serve in lieu of prices) for both commodities and resources and (d) the production possibilities (i.e. the relative yields or production functions) for each crop and livestock activity. This is an overall concept of farm planning which incorporates or embraces all other subphases or activities of the planning process. If refers to maximization for the farm as one overall or complete unit in the total time period of relevance. It is a concept of economizing, rather than of physical maxima or minima, since its purpose is to specify the alloca-

tion of limited resources among many competing alternatives to maximize the farm objective. Such an overall concept of management systems or farm planning does not preclude the need for, and application of, partial planning techniques which result in suboptimizations for particular parts or branches of the farm. It only emphasizes that farm planning has not been completed until the suboptimal plans, using techniques which are appropriate in an initial approximation apart from the farm as a whole, are integrated into a master planning technique or optimization model for the entire farm. In other words, we can direct the agronomist to make up an initial program for crop fertilization. It serves as an initial orientation, specifying general directions and eliminating irrelevant possibilities. But if capital funds or other resources are scarce, (or even if fertilizer is a fixed allocation to the farm but can be used alternatively on different crops), the modifications in the fertilization scheme to allow maximum farm returns cannot be determined until this facet of planning is incorporated with those of other opportunities which can use the same resources. Actually, at the level of subplanning for individual sectors, parts or branches of the farm, we believe it is more appropriate that the expert so involved be engaged in specifying alternatives in techniques or organizations (or in specifying alternative "subplans", if the process merits the latter term). For example, the agronomist could identify several reasonable technological alternatives. For example, even without application of refined economic models and calculation, it may be apparent that a new variety has dominance over the old one with respect to both resource requirements and yield; or that anhydrous ammonia has dominance over ammonium sulphate in both cost per unit of nitrogen and yield response. His specification would exclude the one set of technologies but incorporate alternatives in the other set. In other words, he would not specify an inflexible plan of precisely the one variety and x quantity of anhydrous ammonia for it. Rather, he would specify several alternative levels of fertilization and the expected yield forthcoming from each. The overall farm planning model then would be used to determine which level of anhydrous ammonia is optimal, when the final criterion is one of returns or outcome for the farm as a whole and there are competing alternatives for use of either limited (a) fertilizer allocations on other crops or (b) capital funds for numerous other investment opportunities.

Technical unit planning and suboptimization

At the other extreme of planning is the suboptimization for technical units. The term suboptimization is used because the procedures, while highly scientific and logical, do not necessarily result in optimization (returns maximization) for the farm as a whole. As mentioned before, technical unit planning refers to how a resource is to be used for a technical unit if the return is to be

maximized for the latter. Examples are (a) the amount and mix of fertilizer to be used, if return from fertilizer use is to be maximized per hectare of crop (or for a given supply of fertilizer), (b) the ration to be fed animals if the return above feed costs per animal is to be maximized, (c) etc. There are specific principles and procedures which can be used at this level of planning. These procedures are much more sophisticated, logical and economically consistent than conventional, rule-of-thumb procedures long applied but which are obsolete even in the most elementary application of modern management systems and concepts. The mere specification that a hectare of cereals should be given a dosage of 75 Kg. of 10—20—10 fertilizer is not an element of a systematic plan for a modern, scientifically-managed, large-scale farm. It is a rule-of-thumb procedure "pulled out of the air" without reason behind it, except perhaps that it increases yield or returns more than its costs. Principles do exist which allow suboptimal planning for such things as fertilizer systems, livestock rations and machinery complements. They are logical, internally consistent principles and rest on both scientific data and procedures. For example, if optimization of fertilization is prescribed apart from the farm as a whole, specific types of data and specific decision procedures are implied. In this case, we need to know a response function of fertilizer and the relevant prices of fertilizer and the product it produces. Then, computing the marginal response of fertilizer (either exactly as the derivative of response or approximately as the arithmetic increment associated with each potential level of fertilizer application) and setting it equal to the fertilizer/crop price ratio, we can solve for or specify precisely (within the accuracy and certainty of our basic data) the amount of fertilizer per hectare (and even the optimum mix of nutrients if appropriate data on response surfaces are available) which will maximize per hectare returns from fertilization. If the overall amount of fertilizer allocated to the farm is fixed, we can still use the same data and principles to determine an optimum fertilization program (plan in the framework of suboptimization).

Enterprise (branch) planning and suboptimization

Some large-scale farms have now become so highly specialized that they now include a single, vertically-integrated enterprise or branch. Examples are large cattle feeding, broiler and egg farms in the U.S., large swine producing units in Romania, huge dairy enterprises in Yugoslavia, specialized seed farms in Poland and others. In these cases, enterprise (branch) planning is highly synonymous with overall farm planning. However, the technical unit planning explained previously may be (or typically is) a separate activity. Further, if the farming activity is a highly integrated one, the typical *enterprise or branch planning* on a diversified or multi-enterprise may be replaced by *step or phase*

planning. In other words, separate persons are in charge of management and planning the breeding operations, growing and fattening phases, or processing or marketing steps in a specialized swine farm. Step or phase planning on a specialized, single enterprise farm parallels enterprise planning on a multi-enterprise farm because neither typically considers returns to (or is exactly meshed with) an integrated plan for the unit as a whole. In earlier times, the process of branch or phase planning was termed partial budgeting.

A range of scientific tools or methods do exist for enterprise (branch) and step (phase) planning. These range from the more precise and narrower models applicable for technical units (see Appendix A) to the broader programming models applicable to whole-farm planning. These methods can be very precise, given the availability and accuracy of the data which go into them. The point to remember for either (a) a step or phase plan devised for a multi-phase or vertically-integrated specialized farm, or (b) an enterprise or branch plan for a multi-enterprise or diversified farm is this: The plan is suboptimal to the farm as a whole. However, there are important reasons for phase or branch planning. Alone, they give some immediate guide to the enterprise or step which has been separated out for administration by a particular set of supervisory or management personnel. A further reason for prior planning at the phase or branch level is to eliminate trivial, unrealistic or unlikely enterprise alternatives to be evaluated in the overall farm plan. Planning procedures can be used which eliminate alternatives that are clearly dominated by others. Then, if the enterprise or step information is to be used in the overall farm planning process, the several alternatives for the enterprise should be inserted in the overall farm planning model. The farm planning model then can select which alternative for the particular enterprise is optimal when it is considered in competition with other enterprises for resources.

The best plan for a crop or livestock commodity, when it is considered in the context of an overall plan to maximize returns for the farm as a whole, frequently or typically will not be the same plan which is optimal for this commodity when it is planned apart from the entire farm. For example, an optimal plan devised for the swine enterprise alone may indicate that investment should be made in more farrowing equipment to provide more pigs for fattening and to lessen the seasonal fluctuation in labor requirements. However, if the swine enterprise is planned in conjunction with the farm as an entity, the optimal plan may indicate that a more profitable use of investment capital and labor is in expanding feed production, harvesting and storage to expand the dairy enterprise — the swine enterprise remaining fixed. These same differences may prevail for alternative steps within the framework of an integrated single-enterprise farm. It is my impression that on the large-scale farms of Eastern Europe, branch or phase planning is too often conducted independently of farm planning. The expected result when several suboptimal plans

are joined together as the farm plan is: Returns are not maximized from the scarce resources available to the farm as a whole.

Requirements in farm planning

Efficient farm planning implies availability of certain constructs, data and facilities. A relevant farm plan can be computed and specified only in (1) presence of a well-defined and explicit set of objectives (objective function) for the farm, (2) indication of the time period to which the plan refers or is relevant, (3) an inventory of resource availabilities in each relevant and distinct time period and (4) a complete array of the technologies, enterprises and methods (activities as represented by all production possibilities representing different economic activities and physical resource, ratios) and the yields (i.e. input-output ratios or production functions) which relate to them.

The farm objective and time period interactions

To mention the farm objective as an important consideration in farm planning may seem trite. We may ask: Isn't the objective obvious; for example, to maximize returns? Not all large-scale farms have this single, precise objective — although it is the most universal goal of large-scale, commercial farms. In Eastern European countries, certain prior restraints often are placed on the farm. After meeting these requirements, the farm then can devise a restricted returns-maximizing plan. Prior restraints may include a delivery quota for wheat or a given number of swine specified by central or district planners. In some countries, the farm then can make a contract at a specified price for various quantities of products. Thereafter, it can select a plan in terms of its free resources and market prices. A final restriction or objective also is frequently imposed or implied. It is the requirement that the farm provide continuous or minimum employment for workers.

Farm planning under these conditions entails maximization of an objective function such as farm profit or return, but subject to prior restraints in employment and acreage or output quotas. A resulting goal or objective function will generally (1) restrict the range of plans or production possibilities open to the farm, (2) force the farm into a greater extent of diversification than otherwise, (3) increase the computational burden (although this may be a trivial consideration if computers are used in plan calculations), and (4) restrain or lessen profit possibilities over certain ranges of prices (or other weights which might enter the objective function). We use a technical example to illustrate these points in Appendix B. Similar restraints on objectives or returns also are found for private farms where farmers must maintain a minimum

level of milk sales to safeguard their quota, supply control programs imply an upper limit on acreage or particular crops and forward contracts may be used for particular commodities.

These restraints on the objective function prevail quite widely in countries of socialized agriculture. They tend to cause both farms and agricultural regions to be less specialized than they would be under prevailing conditions of soil, climate and market locations. In other words, they obviate comparative advantage and cause the farm returns to be depressed and the aggregate economic product of farms and regions to be less than otherwise possible if agriculture were planned and operated in line with comparative advantage.

Other potential differences in objectives and conforming plans can also be mentioned. The private or state farm typically has a goal of maximizing returns to the unit as an entity. However, at least as implied in stated objectives, the goal of a cooperative farm more nearly is one of maximizing return per member. Under conditions where the objective is in fact this, the optimal plan will differ between a cooperative and a state (or private) farm even though prices, technical, climatic and all other conditions are the same. In other words, the difference in objective functions (maximizing returns per member for a cooperative and maximizing over the entity for a state or private farm) can cause the plans to differ in terms of size of the farm and mix of resources which is optimal. In the short run at least the cooperative farm should be smaller and use a greater mix of capital to labor than a private or state farm. We provide a technical discussion of these in Appendix C.

Other variants in objectives also prevail and can have important impact on both the appropriate planning model and the plan that involves. An important variant relating to the objective function can be time. The dominant planning activity over the world is that of annual plans. However, for a farm with limited resources, a plan for a single year, as a discrete period in time, will seldom coincide with an optimal plan for the same year incorporated as one of a sequence of interrelated time periods or years. Hence, an important question prevails: What should be the period of the farm plan? In other words, to what time period does the objective function refer? In earlier days of hand computations, it was almost impossible to compute a multi-year or poly-period plan incorporating several years with inter-year inter-dependence actually expressed. Modern computers do allow this alternative in poly-period or dynamic plans. The years must be interrelated in the sense that data outputs of one year serve as inputs for subsequent years.

Related to time and the objective function of planning is the discount rate to be used. Currently, much (or perhaps the most) planning of large-scale farms in Eastern Europe does not include a discount factor in the objective function. With this exclusion, all increments in output over the future have as much value as all increments at the present, even though this ranking is incon-

sistent with theory and experience in consumer utility; capital and interest theory and practical pressures of the population which fall on central planners. It would seem relevant, then, that appropriate discount coefficients be applied to the weights of the objective function for plans which incorporate a number of years. An important question which might be discussed is: What is the appropriate discount rate for large-scale farms and how can it be determined in countries of various economic and social organizations? In a country of small private farms responding to the market, the appropriate discount coefficient may be some internal opportunity cost rate. For large-scale farms which have broad access to capital markets, the appropriate discount coefficient is more nearly the market rate of interest. What is the appropriate discount rate for socialized agriculture where market prices of capital are not explicit?

Various other questions of the appropriate nature of the objective function arise but perhaps are not highly important to our discussion here. In some countries and for some farms and other firms where annual incomes of the participants and management is ample, the relevant quantity to be maximized is capital value. The capital value considers the income stream, discounted back to the present along with the stock of capital expected to prevail at the end of the planning period. I believe that an objective function of this nature also has relevance for large-scale state or cooperative farms where an important goal is agricultural development and firm growth.

Resource availabilities

Resource availabilities must be clearly identified and an equation of restraint specified for each in planning models which are to be computerized. Typically, especially on large farms where resources are seldom as underemployed as on small-scale units, the appropriateness with which resource scarcities are specified will have great relevance on the realism of the forthcoming plan. Older or conventional planning methods seldom detailed resource scarcities (supplies) beyond land area, labor force and perhaps building capacity on a whole-year basis. Accordingly, planning could never be very precise and the planning procedure simply involved several gross or crude iterations until a "reasonable match" evolved so that the plan and its resource requirements conformed roughly to overall resource supplies.

Planning of a modern, scientifically-oriented, large-scale farm requires, however, a more detailed specification of resource restraints. Time itself can be considered as a factor of production in highly specialized livestock units where several batches or droves of animals and birds are produced each year and the production process is continuous. Problems then arise around (a) the time sequencing of batches, (b) the trade-offs in more animals produced at

lighter weights versus fewer with longer production periods and heavier weights, and (c) the meshing of labor, machinery and building availability. Hence, it is necessary to specify building capacities, labor supplies and machinery availabilities in each specific period of the year. Or, if the planning process is to determine the preference among different plans with respect to time (e.g. should more hogs at a lower weight or fewer at a heavier weight be produced during the year; or for the same weight, should a higher cost ration with faster rates of gain be used over one of lower costs and greater time requirements), the resource restraints also must be defined to conform with alternative partitionings of the year into subperiods. Older conventional planning methods were not able, because of the limited number of alternatives they could consider and the computational impossibility of simultaneously related competing alternatives within and among time periods, to evaluate opportunities in this context of time and resource restraints.

Our reference has been to livestock opportunities, which time as both an added dimension of resource use and as a restraint around which activities compete in use of resources. Partitioning of time to allow more intensive use of physical resources and an increase in volume of production also is relevant for crops where climate and other conditions allow multiple cropping. Even in more temperate climates, this is a problem for large-scale vegetable farms. In the choice between multiple cropping alternatives where the range of choice is wide and individual crops have wide variations in time requirements, the planning method should be devised so that the model itself specifies how the year (resource availabilities) should be divided with conforming selection of crops. For example, should the year be divided into two long periods, two medium periods and a short period or four short periods (with conforming crop possibilities)? In specification of restraints, the supplies of land, labor, machine capacity and other agents of production also will have to be stated in terms of these time period alternatives. But in order that they are compared realistically, the resource restriction for each alternative used in time needs to be stated in integer form. In other words, if we are going to choose between (a) a year of production reflected in two longer time periods or (b) one of three medium-length periods, the opportunity can't come into the plan as a fractional part of both — it must be entered in the plan wholly as one or the other.

Alternatives in technologies, enterprises and opportunities

Any plan will be only as good as (a) the intellect which went into its formulation and (b) the data upon which it is based. The computer has no powers in magic which will convert shoddy and erroneous data into a set of accurate predictions of input requirements and corresponding yields. Two important and basic sets of data (parameters) for planning are those already mentioned;

namely, the establishment of the appropriate weights in the objective function and a realistic statement of resource availabilities by relevant time periods. A more difficult and time consuming activity for planning is the identification and quantification of requirement coefficients for the different crops, livestock enterprises and technologies which can be used for each. The problem involved is to accurately express the input requirements of labor, capital funds and physical materials and the output or yield forthcoming in a particular period. For conventional enterprises and technology, these data should come from the farm's records and reflect its experience. But for new technologies to be evaluated for application, with the possibility that the entire farm organization or plan can be changed through an important technological change for one crop or livestock, the search for data of the technical vector must turn elsewhere. It may be obtained from another farm which is advanced in its management. More typically it will come from experiments (or even trials on the existing farm). The quest of technical knowledge even sends a good many managers of large-scale farms, particularly commercial units, abroad.

One of the great dangers in planning new farm technology is the possibility that the outcome (the ratio of inputs to outputs) will not be that estimated when the technical coefficients are gathered and inserted into the planning routine. If the coefficients are based on experiments under highly controlled and excluded conditions, they may need to be discounted considerably for farm application. The task of discounting can be the responsibility of those who prepare the data for planning but aid can be obtained from scientists who are acquainted both with research and farm outcomes. The obtaining, adjusting and applying new technical data is a greater problem of large-scale farms who are at the forefront of adopting new technologies, than for small family units where the operator waits until many nearby farms have tried the practice and provide a "quantitative sample" of results. The large-scale farm may attain the same "sampling outcome" by trying the new practice on a pilot or small-scale basis for a year or two. The experiences then provide technical data more nearly related to the particular farm.

Managers and administrators of large-scale farms represent an appropriate group to interact with research workers, explain data needs and further the supply of results adapted to farm planning. They, more than other farmers or persons of the agricultural sector, are concerned in both keeping abreast with advancing technology and in implementing it through formal farm plans.

Other planning problems

Large farms have other specific planning problems. Conceptually, most of these could be solved in an appropriately formed overall plan for the farm. However, some also lend themselves to other (partial) planning techniques and

tools. I have been on farms with mammoth dairy enterprises at one corner of the farm while hay was transported from distant corners and cows were taken to pasture in remote fields. Before construction of this large-scale enterprise structure, a simple transportation model could be applied. It would determine whether several smaller units located at different places in relation to hay and pasture supplies might be better. The problems of storage and feed inventories to be carried might be specified by rather simple inventory models. Those of work sequences to assure completion of essential tasks might be tackled through queuing, critical path or similar models.

Aside from planning problems of these types and potential models for their solution, other problems of a somewhat different nature also might be tackled by "partial models". Most large-scale farms involve problems of returns to scale, both in the overall unit and in branches of it. A specific problem for farms with large enterprises, repetitive manual operations and many laborers is that of economies or diseconomies of scale for work brigades. The sources of scale economies and diseconomies relate to both physical and psychological or motivational factors. In a somewhat similar category is the consideration of submodels which relate to workers, their objective functions and payment or wage schemes which reward them sufficiently in terms of marginal productivity and incentives. This general set of problems also extends to the dimensions of entire enterprises and farms. Some large farm managements suppose that on-farm operations and enterprises need to be large enough to exhaust all scale economies of vertically integrated processing facilities. These considerations often pose the possibility of massive farms, for example, so that the supply of hogs is great enough for complete on-farm utilization of a modern packing plant. In a sense, these plans suppose that great scale diseconomies prevail in transportation of hogs and/or great economies prevail in packing operations and feed storage or handling.

The extent of scale economies can be quite readily assessed by rather simple cost function estimates, synthesized on an engineering basis, for enterprises and farms. An initial appraisal of the gains or sacrifices of larger units and branches could be made thus, without incorporation of all aspects of scale returns in an overall farm planning model. Appraisal of such relationships is an essential and crucial aspect of planning and managerial knowledge which is not forthcoming through conventional routines of farm planning. They could be used to indicate the limits in scale economies for a livestock unit at one location and whether a large unit is better composed of several smaller and physically separated branches. They also could indicate the range and extent of scale economies in each phase of farm or farm-processing operations and whether the size should be geared to those in one particular phase or step.

Long-run and short-run plans

Large-scale farms especially have need for both long-run and short-run plans. Because of their size and resources, they are expected to accumulate assets and grow. Hence, periodically, they need to formulate and compute a long-run plan directed to some relevant-time in the future. It is in this stage of "developmental or growth planning" that dynamic or poly-period programming with more complicated models may be most relevant. If the farm is limited on analytical personnel, it may well hire experts from a commercial firm or research institute to formulate an appropriate model and compute the plan.*

For annual plans of the farm unit, and especially for subplans of technical units or enterprises, the plan formulation can be of much simpler nature. A classical linear programming model (even one adapted to solution on a desk calculator if absolutely no computer services are readily available) might well serve for the annual farm plan. Partial budgets may serve for enterprises and classical optimizing principles can be applied to technical units, with the prices or capital supplies determining optimum quantities brought up to date from the previous year.

The future for large farms and planning

Two classes of large farms have prevailed over the last decade: (1) those which grew so due to their superior managerial processes, efficient planning and adaptation of advanced science to farming, and (2) those which are large not because of superior management and planning but because the tides of history created their scale through social reorganizations or the inheritance of assets. The latter category especially includes many farms which persist as large-scale units not because of planning efficiency but because the magnitude of their initial resources and bureaucratic protection has allowed them to prevail even under mediocre planning. The science of agricultural technology and planning will cause the ranks of the latter to thin more rapidly in the decades ahead.

The last decade of this century will be the era of management and planning premium in agriculture. Science will cause the changing resource structure and productivity of agriculture to accentuate. Land and labor, the two resources around which planning by past generations of small-scale operations revolved, will continue to decline in relative importance as new capital technologies serve as their substitutes. A large share of the rising productivity of agriculture

* Or, we might say "plans", since even a linear programming model can provide a series of plans. We may be as interested in the next-last as the optimum plan. The difference in return may be minute but the structure of the plan may be preferable for various reasons.

over the decades ahead will come from operating capital inputs (e.g. feed additives, new genetic strains, chemicals, and pesticides) because their productivity is much higher than the land and labor for which they serve as substitutes. Not only will farms use more of these capital items but also a greater proportion of their inputs will be purchased from firms outside the agricultural sector. With this further economic growth and commercialization of agriculture, management and planning will become even more the crucial ingredients of successful farming. Increasingly, farm production requires a complex bundle of capital items. These must be programmed or planned together, along with capital programs and efficient time use of resources, if they are to be most profitable; rather than considered or used separately as distinct individual items. The premium will be on this type of planning and the competitive nature of agriculture will increase in developed countries where food supplies are large relative to the population or ready access to imports prevails. The planning ability of farms will need to adapt accordingly. The informal and elementary planning procedures of the past are unlikely to meet the needs of the future. This seminar can serve as a launching pad, to hasten the day when large-scale farms adopt today's improved planning methods for their purposes, rather than to leave them as the fallow knowledge of economists.

Appendix A
Effect of planning restraints imposed by farm objectives

We provide a simple example to show how particular objectives affect the planning range for a farm. If, in addition to profits, the farm is given objectives of minimum employment levels and lower bounds for certain essential products, the modified objectives are reflected in restraints on planning (i.e. on the planning model formulated). We may suppose two farms: A, which has only the objective of maximizing profits from a given collection of resources, and B which has the same resources but has alternative objectives added to its goals. For simplicity, suppose that each farm produces only wheat and potatoes. Thus far, in terms of physical resources restrictions represented by capital, labor and land, the two farms will have the same feasible set of planning opportunities as illustrated in Figure 1A.

$$s_i \geq \sum_j a_{ij} x_j \quad \text{and} \quad x_j \geq 0, \tag{1a}$$

we denote (a) that the requirements of the plan for the ith resource, s_i, (as reflected in the sum of products of technical coefficients a_{ij}, multiplied by the quantity of the jth commodity, x_j) cannot exceed the availability of the ith resource, and (b) no variable or commodity can be negative. With only land and capital providing upper bounds on possibilities, the set of feasible plans

is the shaded area in Figure 1A. If the weights in the objective function are c_w and c_p for wheat and potatoes, respectively, the optimal plan will include (a) only potatoes if $c_p c_w^{-1}$ is greater than the slope of the capital restraint, (b) only wheat if $c_p c_w^{-1}$ is less than the slope of the land restraint or (c) the combination of wheat and potatoes denoted at the intersection of land and capital restraints if $c_p c_w^{-1}$ has a value between the two slopes. The same arithmetic or computational technique will define the optimum plan for either farm, even if c_w and c_p refer to prices for one farm and food quantities for the other.

Now suppose that a required employment restraint is added for farm B, represented by the minimum labor isoquant in Figure 1B. The set of feasible plans then is the smaller shaded area of Figure 1B. The set of feasible plans has shrunk greatly since the shaded area in Figure 1B is smaller than that in 1A. Too, it is apparent even for extreme ranges of the ratio $c_p c_w^{-1}$, the farm will always be forced to produce a mix of the two commodities represented at points a, b or c (depending on whether $c_p c_w^{-1}$ is, respectively, smaller than the slope of the land line, greater than the slope of the capital line or between these two levels). If $c_p c_w^{-1}$ is smaller than the slope of the land restraint or greater than the slope of the capital line, the objective function for the farm would always be greater if the minimum employment restraint were not included. In other words, the farm would have a greater payoff with less work.* For a collective farm, we have a situation where all members could be made better off (more profit or product available for distribution) through a broader opportunity in plans and the aggregate welfare of farm members would be increased.

Suppose farm B also is given a minimum delivery goal of op of potatoes and ow of wheat as in Figure 2A. The vertical line originating at p is the new lower bound for potatoes and horizontal line originating at w is the new one for wheat. With other restraints remaining as in Figure 1B, the two new minimum restraints cause the set of feasible plans to be the shaded area in Figure 2B. Or, lifting this set of feasible plans out by itself, the planning set is that represented in Figure 2B. The optimal plan falls at one of the three "upper corners", depending on the ratio of $c_p c_w^{-1}$ for the objective function, although any point within the boundaries of this convex set represents a feasible plan. The set of feasible plans now is much smaller than the initial set in Figure 1A, a general

* The level of payoff (profit or food production whatever the objective function) without the employment restraint would be denoted by an isopayoff line intersecting the wheat axis at the same point as the land restraint line while the income level with the employment restraint is denoted by an isopayoff line tangent to point a. The labor required without the minimum employment restraint would be denoted by an isolabor line of the same slope as the isoemployment line but intersecting the wheat axis at the same point as the land restraint line. In this case the payoff without the restraint is higher and the labor input is smaller without the employment restraint. The same would be true for an isopayoff line (objective function) with a slope such that it denotes an optimum by intersecting the potatoe axis at the same point as the capital restraint.

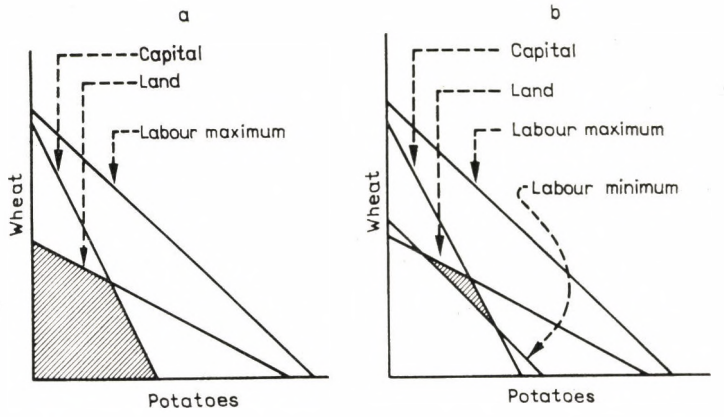

Fig. 1. Effect of a discrete plan objectives on production possibilities.

result in adding minimal restraints through discrete objectives for the farm. The manager of the farm now has a larger mathematical problem before him (more corners in the set) but he is faced with a smaller set of feasible plans than in Figure 1B and a much smaller set than in Figure 1A. The optimal feasible plans in figure 2B denote an even smaller profit than those in Figure 1B if the ratio $c_p c_w^{-1}$ is greater than the slope of the capital restraint and less than the slope of the land restraint. If farm B has the planning opportunities in figure 2B while farm A has those represented by the shaded area of Figure 1A, the latter will have a considerably greater value of production and profit when $c_p c_w^{-1}$ is greater than the slope of the capital restraint or less than the slope of the land restraint.

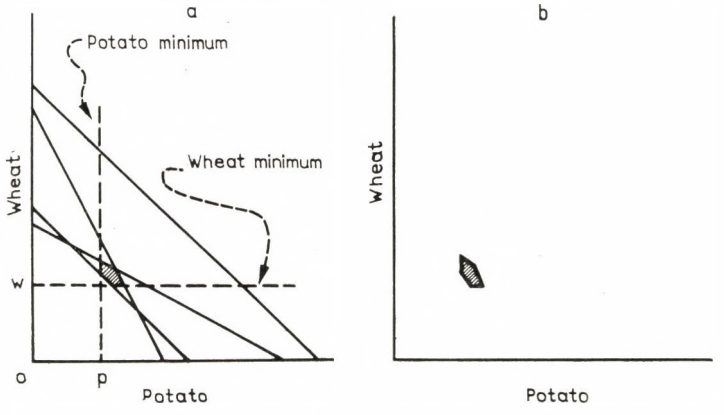

Fig. 2. Feasible planning set with wheat and potato minimum restraints.

Appendix B
Objective function and planning

We use a simple, compact model to illustrate how objective functions would differ between (a) a cooperative farm which in fact is organized, as conventionally stated, for the benefit of the members and (b) a state or private farm expected to maximize its profit. Then, we illustrate how this difference in objective function implies a different plan (i.e. farm size, ratio of capital to labor, etc.). We do so with a particular algebraic formulation and a single commodity. It could be illustrated with other models.

We assume that the objective of the individual or state farm is to maximize return or profit relative to the operating unit composed of all resources. For the cooperative farm composed of many members, we suppose the common and usually implied objective of maximizing return per member. For sake of convenience and clarity, we assume the long-run production function in (1b) and use Y to denote output and R to denote resource input.

$$Y = aR + bR^2 - cR^3 \tag{1b}$$

(we suppose $R = r_1X_1, \ldots r_jX_j, \ldots r_{n-1}X_{n-1}$ where X_j is an individual resource, r_j is the proportion in which this resource is combined with R and all inputs are increased in these fixed, r_j, proportions). We may suppose R is labor and the X_j are the $n - 1$ other resources. The function can be expressed as in (1c) because all other resources are increased in the same proportion. Let X represent the aggregation ($X = r'_1X_1, \ldots r'_jX_j, \ldots r'_{n-1}X_{n-1}$) of other inputs held in fixed proportion. Hence, we have the two input prices P_r for labor and P_x as the aggregate price of other resources ($P_x = r'_1P_1, \ldots r'_jP_j, \ldots r'_{n-1}P_{n-1}$). The private or state farm pays a price for all resources and has the objective function in (2b) where α is the ratio in which the aggregate resource X (nonlabor) is used with respect to R (labor).

$$\pi = P_yY - (P_r + \alpha P_x)\,R = P_y(aR + bR^2 - cR^2) - (P_r + \alpha P_x)R. \tag{2b}$$

If we assume the objective for the cooperative farm is to maximize returns for its members (R or labor as the reflection of the member) then its objective function is (3b). In the cost term, we include only P_x or the price of the aggregate nonlabor resources (used in α proportion to labor) since the members do not pay the labor wage,

$$\varnothing = (P_yY - \alpha P_xR)R^{-1} = [P_y(aR + bR^2 - cR^2 - cR^3) - \alpha P_xR]R^{-1} \tag{3b}$$

P_r, to themselves but expect to get the return for their labor wage, P_r, along with other returns above factor costs from the proceeds of the farm firm. Since

the objective of the cooperative is to maximize return per member, we divide the difference of revenue and nonlabor costs by the amount (R) of labor where R is the number of members. Maximization of the objective (profit) for the individual or state farm is denoted by equation (4b) where marginal profit (the derivative of equation 2c with respect to R) is equated to zero. Maximization of the objective for the cooperative farm is denoted by equation (5c) where the marginal labor (member) return also is equated to zero. Now solving for the value of R in (4b)

$$P_y(a + 2bR - 3cR^2) - P_r - \alpha P_x = 0 \tag{4b}$$

$$P_y(b - 2cR) = 0 \tag{5b}$$

and (5b) to determine the optimal magnitude of labor input and farm size (since $R = \ldots r_j X_j \ldots$) for individual and cooperative farms, we obtain the values in (6b) and (7b) respectively.

$$R = .33bc^{-1} + [.33ac^{-1} - (P_r + \alpha P_x)(3cP_y)^{-1} + .109b^2c^{-2}]^{.5} \tag{6b}$$

$$R = .5b_c^{-1} \tag{7b}$$

The optimum size (the magnitude of R since $R = \ldots r_j X_j \ldots$) for the cooperative is not related to prices of output or nonlabor inputs. (The value of P_y and P_x does not occur in equation 7b). As indicated in the cooperative objective function (3b), the magnitude of P_y and P_x does affect the magnitude of returns per cooperative member, but P_y and P_x do not affect the optimum size or number of members (R) in (7b). In other words, if P_r is lower, cooperative members will have a higher income, but the same size is optimal regardless of prices. In contrast, the optimal volume or size for the individual or state farm is a function of all prices. It will increase as P_y increases or as P_r and P_x decreases. In the short run, the optimal individual or state farm would always be as large or larger (R will be greater) than the cooperative, the extent depending on P_y, P_r and P_x. Also as is apparent under the latter conditions, the optimum plan for the state or individual farm will have a greater ratio of capital to labor than the cooperative farm.

Appendix C

Commonality of planning models

While the social and economic objectives and even the objectives of farms differ among countries, the same planning methods are applicable in all of them. The objectives (and hence the weights in the objective function) may differ. Restraints on production may be imposed on some by outside planners;

and on others, through the market. But the general logic, steps in formulation and computational solutions are still the same and involve the same principles.

In a general model of production, production functions for each commodity exist whether agriculture is socialized, or whether it is operated under private entrepreneurship and commercial markets. Costs, scarcity values and/or limited quantities of resources exist in both cases. The mathematical and economic conditions under which the objective function is maximized (a maximizing plan is determined) are identical. Hence, the same general knowledge, data and methods are needed for planning. The existence of different types of weights in the objective function does not alter the fact that all farms, regardless of the social and economic organization of agriculture, can be represented by a set of equations where: the left-hand sides represent a vector of resource supplies or even subjective constraints which define the maximum and minimum quantities of commodities which the farm can or must produce; the right-hand sides contain technical coefficients or requirements for these resources and restraints, multiplied by variables representing the commodities produced, the technologies used or the transactions conducted by the farm. The assignment of values to the variables on the right-hand sides of the equations to maximize the objective function, given the parameters represented by the technical coefficients, the restraints of the left-hand sides and the weights of the objective function, is precisely the same activity for an optimal plan of a state farm, a collective farm or an individual entrepreneur. Under certain national planning procedures, especially where food supply is low relative to demand, minimum delivery or acreage quotas are provided every farm as a spinoff from the national or central plan. In countries where food supply is large relative to market demand, farms have upper limits or quotas reflecting national agricultural policies. These variations provide different environments for adapting planning models. However, the principles of optimization are the same in mathematical steps of computation, in determination of optima, and in specification of the economic or marginality conditions which define an optimal allocation of resources. The problem of efficient planning is not of the models per se, but of ability to obtain appropriate data and adapt universal planning models and principles to the farm environment so that they serve most appropriately. The optimization principle for a farm operated under a particular social objective and economic environment is the same whether price weights are reflections directly from consumers, or indirectly as judgements of administrators. The dominance, among non-physical constraints, of minimum restraints in some cases and maximum restraints in other countries does not change the general method. A farm with a minimum obligatory quota for a crop simply has an additional relation or equation specified in its planning model. A farm with an upper quota for wheat or milk due to supply control policies also has an added equation. In the first case, with the minimum re-

straint on the left-hand side, the sign of the relation is $\geq$; in the second case, the sign is $\leq$. The relation for the first will be converted to an equation by the addition of a variable x_j with a coefficient of -1; the relation for the second becomes an equation with addition of variable x_j having a coefficient of $+1$. True, those are differences, but they are of arithmetic details rather than scientific conceptualization in the process of specification and application of models.

A general model can be devised to conform with an individual farm operating under market prices or state and collective conditions. To cover all of these organizations and the fact that some or all of such farms may operate under market, obligatory or contract prices, we can state a general objective function as

$$\varnothing = C'X = C'_1X_1 + C'_2X_2 + C'_3X_3 \tag{1c}$$

where C_1 is a subvector of obligatory prices, C_2 is a subvector of contract prices and C_3 is a subvector of market prices and $C' = [C'_1C'_2C'_3]$. For the individual farm operating only under market prices, the model applies with $C_1 = 0$, $C_2 = 0$ and $C_3 \neq 0$. For a collective or other farm which operates under all three types of prices, none of the price subvectors is null. If sales are all under obligatory delivery, then $C_2 = C_3 = 0$. The system of relations representing production possibilities is

$$AX \leq S, \text{ or } \begin{bmatrix} A_{11} & A_{12} & A_{13} \\ A_{21} & A_{22} & A_{23} \\ A_{31} & A_{32} & A_{33} \end{bmatrix} \begin{bmatrix} X_1 \\ X_2 \\ X_3 \end{bmatrix} \leq \begin{bmatrix} S_1 \\ S_2 \\ S_3 \end{bmatrix} \tag{2c}$$

where A is the matrix of technical coefficients, X is the vector of activity levels and S is the vector of resource restraints which are partitioned as shown to the right; A_{11} and S_1 are submatrices conforming with X_1, a subvector of activities for obligatory delivery; A_{22} and S_2 conform with X_2, a subvector of activities for contractual delivery; and A_{33} and S_3 conform with X_3, a subvector of activities sold at market prices. For all farms where $i \neq j$, we have $A_{ij} = 0$. For a farm with obligatory and contract deliveries $A_{11} = I$, $X_1 = S_1 \neq 0$, $A_{22} = I$ and $X_2 = S_2 \neq 0$. For a farm responding only to market prices, $S_1 = 0$ and $S_2 = 0$. Formulated in this fashion with a subvector S_i and S_3 to represent minimum output or employment levels but where $S_i = 0$ for the individual farm without these lower bounds imposed on it, exactly this same model can be applied to the individual, collective or state farm. (Computations can be saved, of course, by dropping all but A_{33}, X_3 and S_3 from the model of the individual farm.) In formulating the model, variables s_{i1}, x_{i2} and x_{i3} representing the ith product, respectively, for obligatory contractual and market prices and delivery can express the actual growing of the crop such as

wheat; or may represent only a sales or transactions activity for the crop while another element of X_3 represents the actual growing of wheat and has a -1 coefficient in an equation conforming to an element of S_3 representing the total supply of wheat produced on the farm.

Other details of a general model applicable to different economic and social organizations of farms could be outlined. However, we have gone far enough to illustrate that planning models can be universal and that the organization of agriculture and farms in a particular country has no bearing on the general applicability of the models. The extent to which decisions are made by the farm manager or administrative planners will, of course, depend on the magnitudes of S_1. If $S_1 = 0$, all decisions are left to the individual manager, the farm responds only to the market and the manager can assign "full" values to the x_{ij} of X_3 to conform with the resource restrictions in S_3. If the elements in $S_1 \equiv X_1$ are large then the decisions are entirely by the administrative or off-farm planners and the farm manager only implements these plans. If the elements in S_1 are modest, then the farm manager has a greater range of values which he can assign to the x_{i3} in X_3 — his range of actual decision-making and planning is greater.

ПЛАНИРОВАНИЕ ПРОИЗВОДСТВА В СОВРЕМЕННОМ СЕЛЬСКОМ ХОЗЯЙСТВЕ И КРУПНЫЕ ФЕРМЫ

Е. О. ХЕДИ

В развитых странах наблюдается сильная тенденция к образованию крупных и специализированных сельскохозяйственных предприятий.

Этот процесс вызывается к жизни экономическим прогрессом, в особенности в тех странах, где сельское хозяйство чувствительно реагирует на ориентирующее воздействие рыночных сил.

Образование крупных и специализированных ферм происходит параллельно с возникновением развитых технологических систем. Техническая вооруженность отдельных сельскохозяйственных отраслей достигает и, более того, в отдельных случаях превышает показатели механизации ряда промышленных деятельностей. Однако в то время как целый ряд ферм внедряет новейшие биологические и технические достижения, множество (а может быть и большинство) сельскохозяйственных предприятий применяет отсталую технику планирования.

Планирование крупных сельскохозяйственных предприятий представляет собой особый вид планирования. В отношении крупных ферм, в том числе и восточно-европейских сельскохозяйственных предприятий, следует различать три уровня планирования:

1. Планирование на уровне всей фермы.
2. Планирование в масштабах технического участка.
3. Отраслевое планирование.

Планирование на уровне всей фермы осуществляется в натуральных единицах измерения и направлено в первую очередь на оптимальное распределение наличных ресурсов.

Планирование в масштабах технического участка заключается, например, в определении количества и состава удобрений на 1 га или в планировании кормов для свиней.

В рамках отраслевого планирования осуществляется планирование всей системы ресурсов отрасли. Конечно, в случае специализированного хозяйтсва отраслевое планирование означает планирование, охватывающее всю ферму.

Изготовление хорошего плана означает, во-первых, заключение объективной деятельности фермы в ясно определенную и выраженную систему, во-вторых, определение

срока действия плана, в-третьих, составление инвентаря наличных ресурсов, в-четвертых, разработку альтернатив применяемых технологий и, соответственно, возможностей достижения экономического результата.

Крупным фермам в области планирования присуща также и иная, особая проблема. Например, коровы пасутся на отделенном пастбище, и сено приходится привозить издалека. До создания структур крупных предприятий для молочных хозяйств являлось достаточным составление простой транспортной модели. Изготовление плана хранения также было сравнительно несложной задачей.

Особую проблему на крупных фермах составляет вопрос бригад, создаваемых для выполнения вручную периодически повторяющихся трудовых операций. Помимо хозяйственных проблем, это ставит ряд вопросов социального и психологического характера, которые трудно включить в план.

Отдельная проблема заключается в том, что крупные фермы из-за своих размеров, множества ресурсов и масштаба накопления должны составлять также и перспективный план. Если краткосрочный (годовой) план можно изготовить в форме классической линейной программы, то составление долгосрочного плана представляет собой уже гораздо более сложную задачу. К решению последней целесообразно привлекать также и научно-исследовательские институты.

На протяжении последнего десятилетия преобладали два типа крупных сельскохозяйственных предприятий: 1. крупные фермы, образовавшиеся благодаря высокому уровню руководства, эффективному планированию и применению современной технологии; 2. крупные фермы, которые обязаны своим существованием общественным преобразованиям или наследованию. Во вторую категорию входит особенно большое число ферм, которые продолжают существовать не благодаря эффективному планированию, а государственным субвенциям.

Прогресс сельскохозяйственной технологии и планирования в предстоящие дет в тилетия приведет к быстрому изчезновению ферм, принадлежащих ко второй категоруя-

Последнее десятилетие XX века явится эпохой всеобщего распространения упсии. ления и планирования в сельском хозяйстве. Прогресс науки приведет к перевороту в структуре ресурсов и производительности труда. Произойдет дальнейшее сокращение относительного значения земли и рабочей силы, которые на протяжении столетий являлись основными ресурсами мелких хозяйств. Рост производительности труда в предстоящие десятилетия произойдет на основе увеличения капиталовложений, потому что их эффективность гораздо выше эффективности земли и рабочей силы.

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SOME THOUGHTS ON ECONOMIC POLICIES AND INTERNATIONAL ORGANIZATIONS*

The author emphasizes the importance of international organizations for contemporary world and that they meet the mounting tasks inadequately. The reasons for this are: an unrealistic view of the potentials and limitations, a purely institutional approach suggested by the norms of international law. Conditions for improvement are: a perfect knowledge of environment, an intimate understanding of the real nature and functions of international organizations and an exact assessment of the interaction between environment and the organization. A brief classification of international organizations is given in the final remarks.

It is not the aim of this paper to describe in detail the structure, role and function of this or that intergovernmental agency or of looking at specific trade patterns. My contribution will rather be to place the Organisations in their proper perspective. I am sure that a better understanding of the real potentialities of international organizations by responsible national officials will lead not only to more harmonious international relations but also to wiser political decisions in the long-term national interest.

My approach will be pragmatic and relativistic — which I believe is a healthy approach — although I do not intend to get involved in epistemology or in theoretical speculation. In the last few decades an abundant literature has developed in this field. Literally hundreds of books have been devoted to the subject and the number of organizations, regional or global, grows every year. I think that, at least in part, it provides the policy-maker — both national and international — with useful tools of analysis and with insights into possibilities and limitations of the various types of international organizations.

Importance and inadequateness

A useful — although virtually impossible — intellectual exercise, in order to assess the importance international organizations have acquired, is to imagine the contemporary world deprived of such organizations. Life as we understand it would be inconceivable without UPU, ITU and some — if perhaps not all — the other specialized agencies of the United Nations. As the world grows smaller, as exchanges increase, as technology — with all its assets and its evils — progresses, international regulation and control become more

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and more indispensable. This task can only be accomplished by international organizations. The existing pattern of institutions, however, which in general terms was set up 25 years ago, is already quite inadequate to cope with present-day questions involving several or all States. The way responsibility was shared out among the agencies no longer corresponds to present needs and leads to conflicts of competence and, in many cases, the decision-making procedures are so cumbersome that decisions cannot keep up with events. It is obvious that the problems of air and water pollution, of telecommunications by satellite, of the exploitation of the ocean bed, of population growth — to mention only a few — have to be solved internationally. This implies the existence of international machinery since all these matters are much too complicated to be handled by traditional diplomacy. And adequate international machinery either does not exist or is desperately out of date. So not only have international organizations become a technical necessity, but they have to multiply or extend their competence and adapt their structures and procedures to meet the new problems and the changing needs of world society.

No one would quarrel with the statement that economic growth and development and, therefore, general well-being, depend to a large extent on the expansion of international trade and also that multilateralism favours the development of international trade. As foreign trade statistics clearly reveal, this is relatively more important for small countries than for large ones, but it can be taken — without adhering to any overall theory of foreign trade — as a generally valid statement. Now, one cannot conceive, in the present context, the growth of multilateral trade without the existence of *international regulatory machinery*. We are no longer in the liberal world of Adam Smith who thought that unimpeded free trade would automatically bring about peace among nations and that international trade would flourish if only tariffs were eliminated! Needless to say, no one holds such a belief today, when there are so many different and often hidden impediments to the free flow of goods and payments between countries.

As is clear from the Covenant of the League of Nations, the founding fathers devoted little attention to economic and social matters, placing much more importance on political and security affairs. However, as time went on, unavoidably the League became more involved in economic questions. In many cases the Secretariat had to improvise — but since there were no texts to refer to they had the advantage of flexibility. This shift of relative emphasis in the League culminated with the Bruce Report in 1939, tending to institutionalize and maximize the authority of the League of Nations in the economic and social fields. Although the drafters of the U. N. Charter, inspired to some extent by the Bruce Report, were more aware than their predecessors of the need to regulate international economic relations, they still granted priority to the maintenance of peace and security. Public opinion all over the world,

as well as the authors of the Covenant and the Charter, also grants priority to the maintenance of peace and security and judges the success of failure of international organization on the basis of its ability to maintain peace and to settle disputes. Yet an overwhelming proportion of the time and attention of present international organizations is devoted to economic and social questions. To select only one technique of measurement: of the 18.000 professional staff members employed by the U. N. system, less than one-sixth are engaged in political or security matters. If one adds the organizations outside the U. N. family (and this includes GATT) the proportion becomes even smaller. Therefore, the majority of staff and institutions are dealing with economic, technical and social matters which, of course, are all closely inter-related while leadership and public opinion pay most attention to political matters.

The discrepancy between the size and numbers of organizations on the one hand and the relative attention of leadership and of public opinion on the other is partly responsible for the fact that international economic organizations have grown like Topsy — often in an incoherent fashion. They have not — as a whole — been brought into existence according to an over-all coordinated plan but rather created on an *ad hoc* basis, to meet a specific regional or global need, to solve a particular set of problems, or in response to a given political impulse or of a change in the structure of the system or subsystem.

Another factor which has to be taken into account when looking at the complex web of international economic agencies spanning the globe, is that those created at Bretton Woods: the World Bank and the International Monetary Fund, which should have been able to deal effectively with international payments — so important for the expansion of trade — and the flow of capital, never managed to gain the support of Socialist countries. The historical and objective reasons for this situation would be too involved to analyze here, but for the purpose of our discussion it is sufficient to recognize that the premises these organizations are based on are those of capitalist economy. This does not imply, in my mind, that they could not be adapted in the same way that GATT has evolved, but this is a political matter which I shall revert to later.

One should also mention here that the failure of the Havana Conference and the consequent rejection of ITO had similar effects and that GATT operated, at least at the outset, exclusively on the premises of private enterprise. In parenthesis let me say that, on the other hand, the failure to establish a fully fledged trade organization gave GATT a kind of flexibility it would not otherwise have had and which has been its greatest asset.

The changing composition of the world community has also brought its modifications to the structure and nature of international economic organization. At the outset the U. N. was largely composed of the industrial nations of the northern hemisphere and the West disposed of an almost automatic majority in the General Assembly. With the large increase in membership,

particularly in the sixties, the whole voting balance shifted. Without such a shift one could hardly imagine UNCTAD or UNIDO being created. The introduction into the world arena and its institutions of a large number of less developed countries has been compared to the participation in national political life of a new social class with *mutatis mutandis* the same type of effects.

For all the reasons enumerated above, and several others, the whole set-up has become cumbersome, unduly complicated and often quite inefficient. There is overlapping of competence, rivalry between agencies, waste of resources and effort and much frustration. As Sir Robert Jackson has put it: ". . . the machine as a whole has become unmanageable in the strictest use of the word". ,,. . . it (the machine) is built up of the administrative structures of the U. N. and its component parts, such as UNDP, UNICEF, UNIDO and UNCTAD, etc. . . . and about a dozen specialized agencies. In theory it is under the control of about thirty separate governing bodies; in the past much of their work dealing with administrative problems has been self-defeating. At the headquarters there is no real "headpiece", no central coordinating organization, which could exercise effective control . . ." [1] If one adds the organizations outside the U. N. system and particularly all the regional attempts at integration, the pattern becomes still more confused. Unfortunately this situation has to a large extent to be considered as a fact of life, because it would be totally unrealistic to think that it would be possible to streamline — to any significant extent — the present institutional set-up. This state of affairs should not, however, prevent scholars and policy-makers from examining the existing system with a critical eye and proposing rationalisations, simplifications and improvements — as Sir Robert Jackson, among others, has done so brilliantly. But, for the suggested modifications of structure or practice to have any significance they have to take full account of the political context at the time. Unrealistic propositions only lead to frustration; a lack of imagination on the other hand can create stagnation so, as is often the case, a proper balance between the two has to be struck. I would like to add here, merely as a footnote, that the very complexity of the international machinery gives a premium to the very well informed if somewhat machiavellian politician who can exploit the situation in his own or his government's interest. The new countries of the Third World, on the contrary, are at a disadvantage on account of their shortage of experienced diplomats and experts.

The reasons

To harness nature — to put its forces to good use — one has to know and respect its laws. This precept applies with equal validity to human affairs in general and to international relations in particular. Unfortunately, the "laws" of international relation are more difficult to formulate and less universally accepted than the laws of nature. Nevertheless a foreign policy not based on

a sound analysis of the real forces at play would have little hope of succeeding; and to improve the international economic machinery or to use the existing network of organizations most effectively in the national interest of a given country — and these two propositions are not necessarily antinomous — one has to comprehend the exact nature of each institution with its possibilities and limitations, its particularities and its relation to the political context in which it operates. One must, therefore, dispose of adequate tools of analysis and of methods of understanding the operation of the organizations in reality.

Traditionally it has been the task of the *lawyers*, and more particularly of the constitutional and international lawyers, not only to draft the Charters and by-laws of organizations but also to explain their nature and functions in international society. The fact that law as a discipline provided for many years the main tool of analysis and understanding, has given rise to a very distorted image of reality. This image, needless to say, attributes undue importance to institutions *per se*, to formal procedures, to rational behaviour and to legal fictions such as the sovereign equality of states etc. On the other hand, it under-estimates political forces, power politics, informal (unwritten) procedures and pressures. A lawyer will tend to compare the Charter of an organization to a constitution — just considering the two texts — and under-estimate the fundamental difference between a national community, however decentralized, and the international society the organization is set up to serve. The terms themselves — the Assemblies, the Councils, the Civil Services — suggesting analogies with national institutions are misleading. However important the normative task of international law in international society, it does not as a discipline and by itself provide an adequate means of assessing the exact role and function of international institutions. The distorted image provided by excessively legalistic analysis can be a dangerous basis for action. It would, of course, be equally mistaken to over-emphasize the role of "power" and to under-estimate the more intangible elements. Great powers, as is suggested for instance by the attitudes of the "group of Geneva" in their discussion on the I. O. budgets, often make this mistake. These remarks are true for all categories of international organizations.

Organizations dealing with economic and monetary matters have an additional reason for not being put in a proper perspective. There is a curious notion that they deal with highly technical matters only "experts" can understand (see the case of the S. D. R.) and with "pure" economics in which political questions are not involved. Richard Gardner tells a story about the hearings before the United States Senate Foreign Relations Committee on Bretton Woods Agreements in 1945. ". . . The U. S. Secretary of the Treasury, Henry Morgenthau, insisted that the Bank and the Fund are to be financial institutions run by financial people, financial experts, and the needs in a financial way of a country are to be taken care of wholly independent of political con-

nection". When Senator Fulbright questioned whether economics could be so easily divorced from politics, the Chairman of the Committee, Senator Robert F. Wagner of New York, interjected: "I have just checked with Senator Tobey, and neither one of us heard any politics at all at Bretton Woods" [2]. Although such a naive statement would be difficult to imagine today when people have become more sophisticated about the interrelationship of politics and economics, one can still read, in the book just quoted, a footnote to a contribution on GATT by Gerard Curzon stating that "the author of this paper is an economist, and approaches this political science subject with a great deal of trepidation . . ." [3] Obviously, a purely "economic" analysis of GATT — that interestingly politically sensitive institution — would provide as totally unrealistic an image as a strictly legal analysis. To be fair, I should add that one of the soundest books on GATT has been written by a French lawyer, M. Flory!

The image of an international organization is also frequently distorted by *wishful thinking*. Promoters of an idea or of an institution — often for purely idealistic motivations — over-estimate its importance or potential, or have to "oversell" for the idea for it to make headway. Slightly different, but not less important, is the distortion stemming from one's vantage point: looking at GATT or at UNCTAD from a developed Western country, from a country in the Third World or from a Socialist country, one sees these two organizations — in all good faith — in a completely different light. From London or Brussels GATT seems to be a highly useful instrument for facilitating the development of international trade, whereas from Algiers or New Delhi it might appear to be an association of the rich trading countries with little relevance for developing countries. One could continue to enumerate the differences due to perspective, but I think I have made my point. Of course, to be brief, I have used rudimentary clichés, but it is surprising to note that serious studies of these agencies still provide widely differing assessments depending on the origin of the authors. Are we condemned, with Pirandello, to accept that "*A chacun sa vérité*"? I still have a temerity to think that there are some objective criteria. It is to this problem I would now like to turn.

Objective criteria

To ask if an organization is good or bad, useful or not, only begs the question: useful for what purpose and to whom? For this reason the only valid way of evaluating an institution, be it the United Nations or the government of the United States, the ECE or the Hungarian post-office, is to examine *a)* its problem-solving capacity, *b)* the relation between cost and achievement and *c)* its capacity to adapt itself to new situations.

If an organization manages to fulfil the objectives it was set up to accomplish, be it to settle disputes, to reduce tariffs or create international

liquidity . . ., if this is achieved within reasonable limits of time, effort and resources, and if the organization can adapt its procedures to operate well in a changed context, then judged by any standards and whatever the value-premises, the organization can be considered fully successful. All I am saying is that evaluation can only be functional. Let us now take a closer look at my three criteria: they are not always so easy to apply.

a) The *exact function or task* can be, and often is, disputed and it is not always the one spelled out in the constitution which is the real one. For instance, there is a fundamental ambiguity about final objectives of the EEC. The Rome Treaty does not even mention political union but clearly states as the objective of the six countries, the creation of an economic Union. All the "European" militants, on the other hand, declare — as P. H. Spaak did again recently in Geneva — that the ultimate and necessary goal is political union, a new federal entity, and that the "economic" measures are merely tactical steps towards the real objective. This is what Raymond Aron has called "clandestine federalism". Whether this process is possible or not and if possible — likely is not our concern today; all I am stressing is that the ambiguity of function of an institution can complicate the task of those seeking to evaluate it objectively. Less ambitious organizations than the Brussels communities have more clearly defined tasks but obviously one should always take into account the difficulty of the problem to be solved when judging the success or failure of an organization. The problem-solving capacity of the Security Council has to be measured in different terms, for obvious reasons, from that of the Universal Postal Union.

b) The *relation between achievement and cost* — the term being used in the broadest sense — is also an important factor for evaluating the effectiveness of an agency. It would be interesting in this connection to study UNCTAD, for instance, and to compare practical results with staff effort and time and resources invested. But there are many intangible factors in "*cost*", and unfortunately, since no satisfactory quantitative method of measurement exists, evaluation must, to a larger extent, remain subjective.

c) Institutions are by nature conservative and it is a general observation that the least formally structured organizations are also the most adaptable ones. Naturally I am thinking particularly of GATT which in law is not even an organization at all but merely a grouping of the contracting parties to the Agreement and, therefore, enjoys, as its history proves, a great possibility of adaptation. Some thoughts should also be given, however, to OECE which to meet changed circumstances underwent a complete mutation and became OECD. Many cases could be cited of organizations so incapable of adapting themselves to changed needs that new ones have had to be created (ITU). Although these three criteria for judging institutions are difficult to apply scientifically, recent studies by political scientists, sociologists, statisticians,

etc., have developed slightly more objective methods of measurement. 1) Economic and social indicators, more sophisticated than mere trade statistics, show without any possible doubt the benefits to members of the Common Market on the one hand and, on the other, the very limited achievements of the UNDP, for instance. 2) Social scientists could, no doubt, also contribute some objectivity to the estimation of the *real* cost to GATT of the Kennedy Round Negotiations by contriving measurements which would take into account many more imponderable variables than the number of man-hours devoted to it by the staff. 3) Political scientists and specialists in public administration, by analysing decision-making processes and internal communications, for instance, could provide an objective explanation of why some institutions are adaptable and others not.

Conditions for improvement

I have put forward some of the reasons why I think that not only the public at large but also those directly involved in international affairs – experts, diplomats and politicians – frequently have an nurealistic view of the potentialities and limitations of international organizations in general and of the specialized economic ones in particular. Policy based on a distorted image will necessarily, to say the least, be an ineffective policy, or to put it in positive terms: a foreign or economic policy can only be effective if it makes full use of all the potentialities offered by each and every piece of international machinery. This presupposes, in the mind of the policy-maker, a correct view of what each organization has to contribute in a given situation. We have already demonstrated that neither law nor economics as discipline provide completely satisfactory tools of analysis. We have also observed that a purely institutional approach is quite misleading and that – in these questions as in all others – value-premises affect perception of reality. What can be done to correct these "optical illusions" and to help people see the international organizations as they really are? It is mainly, I think, a question of discipline of thought. Three things are necessary: 1) a perfect knowledge of the *environment* in which the organization operates, 2) an intimate understanding *of the real nature and function of international organizations* in general and each one in particular, and 3) an exact assessment of the *interaction between the environment and the organization*. Let us now take a closer look at each one of these requirements.

The environment, as I understand it, is composed of two elements: a) *the general and regional or political context* and b) *the problem area* the organization has to deal with: international trade, payments, agriculture, economic development, etc. A correct analysis of the real political context is indispensable. For this one still has to rely mostly on individual judgement and political

sensitivity which was the strong point of traditional diplomacy (although not always used to good effect!) One has to take into account the actual forces at play which are made up of a long list of factors: the power relationships, pressures of economic and social groups, the state of public opinion, the personality of key individuals . . . These factors have to be correlated and given — in each instance — a specific weight. Although, as I have said, one still has to rely heavily on political flair to analyse the international scene, political science, political sociology and the scholarly study of international relations have provided us with models and concepts as well as methods and techniques useful to make our analysis more systematic. This is not the place or time to describe these models and concepts or to give an account of modern techniques but let me just give you some illustrations.

A) *Game theory* — first developed by economists — has no doubt sharpened thinking about bargaining and negotiation. Whereas two party-zero-sum games are quite simple to understand, multi-party, non zero-sum games require quite elaborate mathematical formulae, but many people think that the effort is worth while and the application of mathematics to social and political problems has made real progress in recent years. I would like, in this connection, to draw attention to the very important work of M. Malitza, the Rumanian Minister of Education who is one of the great experts of game theory. Game theory understood in this sense should not be confused with "gaming" or simulation. *Simulation exercises* can be considered as a pedagogical technique — to familiarise students with decision-making processes or conflict situations, for instance, — or as a research method to enable scholars or others better to understand a given situation or likely developments. There are many types of games or simulations which can be illuminating for policy-makers — ones with individuals playing the parts of real political "actors" others played partly or entirely with computers. This is not the time or place to elaborate but I do want to stress the difference between *game theory* and *simulation*.

B) The concept of *system* has also proved very profitable. If one looks at global international relations as a system (in the same way as one can look at a railroad as a system) and at the regions as subsystems — with their own rules but fitting into the general pattern — it helps one to understand the mechanisms and distinguish between important and less important factors. Faced with such a mass of material the student of world affairs needs a model — however simplified —to enable him to select and correlate the relevant material. Each model will, of course, only give him a partial view of reality but the concept of system as developed, for instance, by Morton Kaplan has proved very useful. He claims that there are only a limited number of possible world systems [single empires, bi-polar (tight and loose), multi-polar, balance of power]. The concept of system is particularly profitable for the study of international organization because it permits

quite easily to establish the relationship between the environment, considered as a system, and the organization in question.

C) The fact of isolating the *decision-making process* in national or international institutions has again contributed to providing a more realistic picture of these institutions. By studying the decision-making process carefully in a specific instance one detects the official and unofficial structures, the actions of pressure groups, etc. which would never be revealed by legal-type studies. As every politician knows there is a vast difference, in these matters, between theory and practice — and it is the practice that counts for the policy-maker. The *decision-making process* is a political science concept but which has been adapted for the study of international organizations by Robert Cox, among others. In passing one should stress the importance of the concept of *pressure group* studied in the international context, among others by Jean Meynaud.

I have chosen at random a few of the tools developed by the social sciences, there are, of course, many more, but I hope that I have convinced you of their usefulness although I have only been able to describe them in a very superficial way. We are, however, still very far from a general theory of international relations which would make possible a really scientific analysis; our models are fragmentary as I have already pointed out. *Karl Deutsch* has probably provided us so far with the most complex, multi-dimensional models, taking into account a variety of factors. Still all these contributions have to be integrated by the insight and intuition of the detached observer of the political scene.

I said that the *environment* consisted of the *political context* and of the *specific problem area*. Part of the failure of the less developed countries to achieve their goals in UNCTAD, for example, is due to the fact that they have so few qualified experts who can be spared to attend international conferences. It would be superfluous to stress the importance of a thorough knowledge of the *problem area* — be it the world coffee market or the exploitation of the Continental shelf — because it is obvious. So I shall leave it at that.

If I have given considerable importance to modes of analysis of the *political context* I have not said explicitly why this is so vital for the proper assessment of international organizations. I should possibly have started by this, but I think that by turning the focus to the international organizations themselves, as I intend to do now, the relevance of the political context will become clear if it is not already self-evident.

Gunnar Myrdal once said that an *international organization was nothing more than the sum of its members*. I do not really think that he believed that entirely since, as executive director of the ECE, the organization took such important initiatives, but one has to recognize that the member states are the masters of the organization and that without their consent — or at least the consent of the large ones — decisions, even if taken in accordance with regular

constitutional procedures – will remain inoperative. This ties up, of course, with the whole problem of weighted voting in international organization which is, as you know, too complicated an issue for me to become involved in today.

The question has often been asked: what is, in the last analysis, an international organization? Is it the Secretariat or the joint will of the member states, or the structure of its component parts? There is no easy answer.

a) Obviously the common will (or *consensus)* of members is fundamental and is what really gives power to an organization. One can say that the power and effectiveness of an organization is directly proportional to the consensus among its members – this may appear to be a tautology but it is not always recognized. Consensus can depend on the general cohesion of the system or sub-system (EEC) or on the degree of common interest among members (UPU). One immediately sees the relevance of a correct analysis of the political context.

b) G. Schwarzenberger has referred to the action of states in international organizations *as power politics in disguise.* It is true that states continue to play their struggle for advantage through multilateral diplomacy as they do in bilateral diplomacy – it would be misleading not to recognize the fact. But it would be equally misleading to underrate the importance of the "disguise" in Schwarzenberger's formula or in other terms of the "forum" offered by the organization.

c) The *"Club" concept* is a useful one for it explains how members become obliged to accomodate their positions, to tone down their interventions and in general to behave in an acceptable fashion, respecting the written and unwritten rules of the society, for fear of being rejected. The story of the OECE (now OECD) is an interesting illustration of this point. In OECE all decisions were taken unanimously by a slow process of consensus formation; these decisions were often unpleasant for a member, the organization making specific recommendations about, and criticism of, the countries' economic or financial policies. The OECE, which under its present name is essentially known as the rich man's club, in which the Western countries concert their policies to be conducted in larger organizations such as UNCTAD, played together with EPU an important role in Western Europe in the fifties, in development and reconstruction, in modernization and in harmonizing economic policies. The club theory worked because all were convinced that there were greater advantages to remain inside – accepting the restraints on independence – than to be excluded. The "Club Theory" operates at the highest governmental decision-making level but also at the level of the national delegate to an organization, he personally will find it unpleasant to be rejected by his colleagues and will in turn attempt to influence his superiors to adopt a more conciliatory policy. In this way it is said that many delegates "write their own instructions". One should, of course, not commit the error of over-estimating this factor at either level but it has to be taken into account.

To understand an agency one has to be familiar — as I have already suggested — with the informal as well as the formal procedures. Everyone knows that as much goes on in the lobbies and at social occasions as in the sessions of the Assemblies or councils, but an intimate knowledge of all the resources of the formal rules of procedure will give a great additional advantage to a delegate. The informal or corridor diplomacy not necessarily related to matters debated by the organization, which is a by-product of international organizations can be made good use of by member states. Contacts are so much more easy than in traditional bilateral diplomacy. Everyone also knows the *fundamental role of the informal groupings or caucuses* in the life of international organizations. The pattern they form is very different from formal membership. In UNCTAD institutional recognition has been granted to the major groups: the 77, the Western group and the Socialist countries. The analyst has to go further, however, and study the cohesion of the group, its sense of purpose, its capacity of settling internal disputes, the competence of its spokesmen, the authority of its leaders. . . . So much has been said and written about informal diplomacy in international organizations and about caucuses and voting behaviour that I shall not develop these points further.

The *effective power or authority of the international organization Secretariat* is both an important and highly controversial question. In most cases the formal powers granted by the constitutions to the Secretary-General or executive head are limited; in fact, the effective authority varies a lot from case to case. It depends on the nature and structure of the organization, and — as suggested before — on the degree of consensus among the members. It depends also on the political context of the moment and on the *personality of the chief executive*. His personal charisma, his professional competence, his skill as a negotiator and as an administrator, his relations with governments are all important factors in this complicated equation. The cohesion, the dedication, the technical competence and the imagination of the *whole staff* also determine to a large extent the authority and possibility of influence and initiative of the Secretariat. In turn, these qualities of the staff depend on the ability of the Chief executive as a leader who can inspire confidence and enthusiasm. Although a Secretariat operates mainly by quiet diplomacy, there are many other possibilities of action open to it. It would be revealing in this connection to compare *R. Prebisch* at the head of UNCTAD and Eric Wyndham White at GATT, and particularly during the Kennedy Round Negotiations. Two completely different styles but both effective in their way. There is a growing literature on International Secretariats, to which my colleague, Jean Siotis, has contributed with distinction. Again this is a whole chapter which would deserve more than a few cursory remarks, but time is limited.

In the course of my exposé I have continually pointed out *how closely the political context and the organization interact*, how intimately they are inter-

related. This is the third point which I shall not elaborate because I think I have already made it sufficiently clear.

Final remarks

Before concluding on this matter I should express a word of warning: by focusing attention essentially on *international organizations* there is the *danger of granting them too much importance in international relations.* This error of perspective is as dangerous for a sound appraisal as others I have referred to. It is necessary, therefore, to maintain a sense of proportion and to remember that the essential dealings between governments are still conducted bilaterally. A practical way of doing this is to focus attention on the problem area and then seeing how the Institutions fit into the picture, rather than the other way round. This recognition in no way reduces the importance of the study of international organization as a special field and one which is vitally important to international peace; it merely places the problem in its proper perspective.

Organizations are the creatures of the "system" or "sub-system" in which they operate — this is a more satisfactory way of expressing the situation than by simply saying that they are the servants of the Member-states — and in turn, they influence and modify the system itself. This action and reaction is again usefully explained by using an input-output model. In a classical movement towards *integration* the output at one level becomes the input at the next and so the process develops with the help of the institutions. An international organization is therefore more than the sum of its parts, it has a personality of its own. The exact nature of the difference between the Members as a group and a Working Organization is difficult to pin-point, but obviously it is there, although it varies considerably from Organization to Organization (for some of the reasons I have explained previously), and because it exists one is justified in considering international organizations as separate actors on the international scene.

So far I have been talking about international organizations (while emphasizing those dealing mainly with economic matters) as if they were all the same, and I think it is legitimate because there is an overall class (in the sense of Euler) which includes both the UNO and the EEC (in spite of the protests of the "Europeans"), the WHO and GATT. Nevertheless, it is always a useful exercise to see if by distinguishing different categories — within an overall "class" — greater understanding can be attained. I am in no way attempting to propose, therefore, a general typology or taxonomy of international organizations which would be very ambitious indeed! — but merely a few crude categories for the purpose of argument. Of course, many such classifications already exist and I shall not now try to explore their respective

merits. I would like to submit, for your consideration, the following four categories of *International Organizations in the economic field:*

a) Organizations the declared aim of which is to promote *economic integration* (in the strictest sense of the term). In this category belong *inter alia* Customs Unions, Free Trade Areas, Economic Unions. Many such have been created in the past quarter of a century but only a handful have become really significant and these include: BENELUX, EFTA and EEC. (So little is known about the real functioning of CMEA that I do not know where to classify it, in spite of its obvious political importance for the configuration of the European "System".)

This type of organization usually has quite an important political component — if it is to be successful — and in the long run brings considerable economic advantages to Members — particularly in the developed parts of the world — by creating larger markets. On the other hand for third parties, Economic Unions can constitute quite a problem as they tend to create autarchic entities — as the difficulties of trade between EEC and the Socialist countries suggest. This is a problem worth special attention which we might well discuss later.

b) Norm-setting Organizations, such as GATT, OECD and to some extent UNCTAD, which proceed largely by negotiation. I have devoted a lot of attention to them in this talk.

c) Fact-finding and fact-analyzing organizations, such as the United Nations regional economic commissions — in particular ECE — which promote trade and cooperation.

d) Special task Organizations, such as the World Bank, the IMF and UNDP, which are essentially operating agencies.

One could add, in a separate category, ECOSOC which has an overall co-ordinating function within the U. N. system.

This distinction between different types of economically oriented international organizations is, I recognize, quite crude, but I submit it to you as a basis for discussion. It would be equally unwise — if one's purpose is to understand — to lump all the Organizations together and treat them in the same way as it would be to consider each one as completely different from the other. This is why discussion of tentative classifications can be enlightening.

There is little I have to add by way of conclusion. I trust that I have provoked you into thinking about some of the problems you deal with in your daily work in a somewhat original fashion. I hope that I have suggested patterns for further thought and reading, and that I have convinced you that contemporary social science can contribute useful tools for the policy-maker.

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НЕКОТОРЫЕ СООБРАЖЕНИЯ ОТНОСИТЕЛЬНО ЭКОНОМИЧЕСКОЙ ПОЛИТИКИ И МЕЖДУНАРОДНЫХ ОРГАНИЗАЦИЙ

Д. ГООРМАХТИХ

Настоящая статья написана на основании лекции, прочитанной автором в январе 1971 года во Внешнеторговом институте (Будапешт) о международных организациях и их взаимосвязях с политикой и экономической политикой.

Автор указывает на значение международных организаций в современном мировом хозяйстве, но вместе с тем, подчеркивает, что они слабо удовлетворяют предъявляемым к ним требованиям. Это в особенности относится к международным экономическим организациям, функционирующим в качестве специализированных органов ООН.

Эти организации зародились отчасти еще в недрах Лиги Наций, когда экономическим аспектам уделялось сравнительно мало внимания. Другая часть этих институций была создана в Бреттон-Вудсе, и им с самого момента их образования были присущи тяжелые пороки. Автор подвергает резкой критике внутреннюю жизнь и практику международных организаций, в особенности, то обстоятельство, что они недостаточно учитывают окружающую их действительность. Среди недостатков, по мнению автора, важная роль принадлежит преобладанию юридического подхода, отрыву от действительности и некоторой близорукости.

Автор указывает на следующие важные условия совершенствования работы международных организаций: *а)* точное определение функций или задач, *б)* учет соотношения достигнутых результатов и затраченных усилий, *в)* надлежащая гибкость организаций.

Для ликвидации нередко встречающегося в международных организациях нереального подхода нужно знать окружение, в которой работает данная организация, подлинный характер и функции международных организаций и следует правильно оценить взаимодействия между средой и организацией. Ознакомлению со средой содействует теория игр, симуляционная техника, анализ систем, тщательное изучение процессов принятия решений. На основании всех этих факторов можно должным образом оценить политические условия и специфичную область, в которой работают отдельные международные организации.

Анализируя сущность международных организаций, автор приводит различные точки зрения. Согласно одной из них функционирование международных организаций зависит от согласия их участников, согласно другому взгляду, международные организации являются ареной борьбы великих держав, согласно третьему воззрению, международные организации имеют характер клубов, в которых участники учатся нормам международного сотрудничества. Автор указывает на важность неофициальных контактов в международных организациях и значение функционирования их аппаратов с точки зрения организаций в целом. В заключительной части своей статьи автор предостерегает против переоценки значения международных организаций.

Наконец, автор предпринимает попытку классификации международных организаций. Он делит их на четыре группы, как-то: *а)* международные интеграционные организации, *б)* организации, устанавливающие правовые нормы, *в)* организации по обработке и анализу данных, *г)* организации с особыми функциями.

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REVIEWS

I. László

THE NATIONAL MANAGEMENT DEVELOPMENT CENTRE

In Hungary *refresher courses* for economic managers have been organized relatively recently, although several past government initiatives in connection with education have already aided executives in gaining the higher qualifications so absolutely necessary for the personal conditions of management. During the five years of its existence, the Economic and Technological Academy, established in 1949, helped to provide economic training for workers and peasants who had been appointed to leading positions straight from the work benches, and who did not possess higher level qualification. Within the framework of evening and correspondence courses at engineering and economic university faculties, persons already at work can gain the knowledge needed for management. Some universities and other institutions of higher education provide post-graduate training for those who already have a diploma.* These forms of training and refresher courses improved the level of economic management, but they are not identical with management training.

The need for training economic executives and the efforts and experiments to this end first appeared in Hungary in the early 1960's. Following initiatives by university faculties and social bodies, and making use of the experience they gained, managers were prepared for the introduction of the new system of economic management in 1967 within the framework of a nationwide refresher course.

Under the effect of the steadily growing interest manifesting itself for modern management, questions involving the planned, institutionalized training of managers came to the forefront.

In autumn 1967 the government created the National Management Development Centre as a basis for the further training system of managers, in accordance with the requirements of the new system of economic management, and to advance the content and methodology of such education.

The National Management Development Centre, operating under the supervision of the Minister for Labour organizes training courses for the higher level managers of economic bodies and for teachers participating in the training of managers in parallel and aiding the progress of modern management. It performs basic and applied research; it organizes pioneer projects in order to introduce modern management methods and maintains an enterprise manager advisory service. The Centre's scope of activity includes the maintenance of a

* See T. Forgács: Post-Graduate Training for Economists in Hungary. Acta Oeconomica. Vol. IV, No. 2. 1969. (Editor's note.)

modern library and a documentation and information service. In order to aid the automation of management systems and the broad-scale application of mathematics in management activity, the Centre operates an electronic computer.

The National Management Development Centre began its operations on the basis of a three-year project between the Hungarian government and the Special Fund of the United Nations Organization. It receives financial contributions from both partners. Organized by and with the co-operation of the International Labour Office, it has received broad-scale opportunities for providing fellowships abroad, for using technical aid, and for receiving foreign experts.

Of the 150 people working for the National Manager Development Centre, 30 complete educational and research work, 50 work for the Computer Technology Institute, and 20 for the Scientific Research Service. Future development places education-research and computer technology in the forefront.

From the very beginning, the fundamental activity in the National Management Development Centre has been education, and all other activities are linked to this.

Refresher training for economic managers has three definite aspects: the common basis for all information to be passed on is to aid more efficient economy and humanize management; — to aid in realizing the economic policy goals of the government with the special means of education; together with raising participating managers knowledge and their ability to solve problems to a higher level, to advance also their socialist consciousnesses.

Manager training takes place within the framework of three types of course. Beside the courses for higher enterprise managers there are also such for functional and medium level managers.

— The curriculum of the four week *complex* course entitled "The Strategic and Tactical Tasks of Enterprise Management" is comparatively complete in scope. It comprises economic policy, economic, management and organizational science as well as other information which can be used in managing enterprises.

— The *functional* courses deal with more concrete management problems in a definite field of more restricted topics. (Courses for personnel managers, marketing courses, production control courses).

Thematic courses provide help in solving closely related, clearly definable enterprise problems, within the framework of a shorter refresher course (foreign trade courses for industrial managers, enterprise profit optimization, management of assets and cost economy).

The expansion of management training, and the organization of training for medium and lower level managers beside the higher level enterprise managers requires an increasing number of well-trained teachers who are well acquainted with the contents of refresher training, and modern methods of education. The National Management Development Centre provides courses primarily in methodology for teachers in other institutions based on a separate educational programme. Persons participating at these courses include outstanding specialists in their own fields who already have a certain amount of experience, but who, at the same time, would like to be more efficient. Participants try the most modern methods of education in practice, in the course of the program.

With the creation of the subjective and objective conditions for education, teaching began in the National Management Development Centre in the autumn of 1968. Since then 1,350 managers of medium-sized and large enterprises have received training in over 50 refresher courses.

Teaching in the individual courses is carried out beside the scientific workers of the Centre, also by leading professionals working in ministries, enterprises, universities, colleges and scientific research institutes, who also write curricula and lectures for the Centre.

The working out of curricula, case studies, examples, and other documentation needed for education in this field — a task completely without precedent in Hungarian research and education — was a difficult job for the Centre, and required much effort.

With the progress of the content of education and under the effects of international methodological experience, a decisive role has been given to *activization* methods: case studies, economic games, role plays. Demonstrative means, in both mechanical and audio-visual variations are appearing with increasing frequency.

Advancing the *contents* of the courses is inseparable from the advance of the national economy. While in the first courses the subject matter was for the most part reviewing, in an informative manner, the operation of the new system of economic management, the conditions for it, and the managerial behaviour which would aid the adaptation of the enterprise, today, however, the principles and methods of modern management have come to the forefront.

Within the refresher programme, along with demonstrations of the requirements made on managers, a growing emphasis is placed on two factors of the Hungarian economic reality: on the necessary dialogue between the economic regulatory means serving to realize government economic policy and enterprise autonomy, and on the roles of the national economic plan and the regulated market, assuming the existence of each other. The lectures and curricula reflect the way in which the problems of enterprise management are related to branch and national economic problems, and to the high level requirements of economic policy and the new system of economic management.

The group of questions relating to enterprise operation receives, of course, an important place in manager training. This group includes human factors, economy of fixed assets and operating capital, marketing, production organization, the enterprise information system, and the possibilities for applying computers.

The development of management training, its organizational and numerical advance call attention at the same time to the potential importance of management training, and regarding the future, to the need for a better adaptation to the requirements of the 4th Five Year Plan. This circumstance places in the centre of attention the improvement of the contents of the education programme, as well as research into management and organization theory which would serve as the basis for them.

In view of these problems, the major directions for research in the National Management Development Centre are the following:

— identification of the general fields of management problems, their analysis, and working out typical solutions,

— determining the new management tasks connected with the operation of the new system of economic management,

— working out models which can be used in managerial practice,
— psychological and sociological surveys and analytical studies in connection with enterprise operation,
— study of the teaching methods used in manager training.

The National Management Development Centre has established educational and research co-operation with industrial enterprises and research-educational institutions. This cooperation appears, among other things, in the form of joint research in definite problems of production control, and in joint exposure of the possibilities for using computers in enterprise practice. Another form of cooperation which has been developed is when the National Management Development Centre makes available its own curricula to manager training courses organized in other institutions, together with its educational programme and case studies.

The National Management Development Centre, as the basic institute for the training of economic managers, considers it its task to provide, beside its educational activities, information which will aid fruitful cooperation with other bodies engaged in organizing refresher training courses, on the basis of a rational division of the tasks.

The abstract review "Vezetőképzés" (Management Development) of the Centre which surveys carefully selected special literature of the capitalist and socialist countries that can be used in Hungary, is published quarterly.

The above activities of the Centre are being continually developed in the light of accumulated experience, and in accordance with new requirements. The new task of the near future is to start courses for high ministerial officials, and for enterprise computer technology leaders, as well as to begin training a new generation of managers. The National Management Development Centre has established close relations with similar institutions primarily in the socialist countries. Based on cooperation agreements, regular exchanges of experiences are being realized; educator-researchers are studying the operation of fraternal institutions, and the exchange of publications related to manager training also helps the institutions to approach one another. Four professionals from the Soviet Union, four from Great Britain, one from the United States, one from Canada, one from France and one from Sweden each spent six month periods working in the Management Development Centre, in the employment of the International Labour Office. Aside from them, professionals from socialist and capitalist countries alike have been received for shorter periods of time, ranging from 1—4 weeks. The professionals from abroad taught in the courses, and dealt with scientific problems in cooperation with their Hungarian colleagues.

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COMMENTS AND CRITICISMS

GY. BECSKY

CRITICAL COMMENTS ON J. K. GALBRAITH'S BOOK*

The work the Harvard University professor published in 1967, has since become world famous; it has recently appeared also in Hungarian. The ideas expressed in the work are now available to the broadest possible strata of those engaged in social sciences and for this reason it will be worth while to make a thorough re-examination of the statements and the reasoning of the author.

In this book — which, by the way, was printed after almost ten years of preparation, writing, editing, revision, etc., — Professor Galbraith has undertaken no less than the systematization of the objective socio-economic processes considered characteristic of the developed industrial countries, and to create on this basis the political economy of the "industrial state" (in fact the "industrial society"). This political economy is fundamentally critical regarding the "industrial state" and is sharply polemic towards the "academic" — neoliberal and neokeynesian — economics dominating in the United States.

The result of the undertaking is a synthesis which is thought-provoking but, at the same time, highly problematic. It is thought-provoking despite the fact that some of its conclusions can be considered no more than scientific platitudes to Hungarian economic public opinion. It is problematic, and we shall speak more about this later. Despite its shortcomings and contradictions Galbraith has created a logical political economy. His major partial conclusions cannot be criticized or rejected without simultaneously criticizing or rejecting his whole concept. His train of thought is coherent and closed.

The author draws the majority of his conclusions on the basis of studying the economy of contemporary America. We shall return to study the extent to which his methods make his concept debatable; but already the following brief introduction of the concept necessitates that we should indicate this.

Galbraith's general concept

What then are the socio-economic laws which, according to Galbraith, affect the modern "industrial state" as natural forces?

The development of modern, highly capital-intensive *technology*, ensuring mass production, created the interrelated system of giant-sized "mature" *corporations*, the so-called *industrial system*, and together with it, *as a new*

* Galbraith, J. K.: The new industrial state. London, 1967. Hamish Hamilton. 427 p.

factor of production, the enterprise management, the professional structure which absolutely monopolizes the necessary specialized knowledge, and the ability to make decisions — the technocracy or, as the author terms it, the "*technostructure*". It is from the interests of the technostructure that the economic and social laws of motion of the industrial system can be deduced.

The fundamental interest of the technostructure is maximum self-employment, that is, to maintain and continually reinforce its own autonomy, security, and the key role it plays in socio-economic life. This requires large-scale technological development, the autonomous accumulation of capital, and the safe realization of the continually increasing mass production which it generates.

The classic free market is no longer capable of ensuring realization of the continually increasing social product; fluctuations in market prices and in demand *can no longer fill their earlier sovereign role of controlling production*, concerning either individual products, groups of products, or global social-consumer and investment-demand. This role has been taken over by *planning*, which makes a maximum growth in business turnover possible at prices and with a pattern ensuring the giant corporations (= the technostructure) the adequate cash flow and profits they have planned in advance. Planning takes place on two levels: on the one hand, the enterprise technostructure plans its own marketing and other activities while, on the other, the state ensures the needed expansion of the social demand for commodities in a planned manner.

The three main directions of the planned realization are: *a)* the self-consumption of the "industrial system" (to plan production involves planning productive consumption too); *b)* manipulating with a sure hand the personal consumption of the society living within the framework of the industrial system; an organic part of this control and also of the industrial system is the wide-spread, manipulative and aggressive advertising sector, which in fact plans, and channels the consumers in the necessary direction; *c)* the guaranteed public (state) consumption which raises particularly great demand for the products of advanced technology (e.g. armaments) and for this reason is particularly important for the extended social reproduction, that is, for the expanding self-employment of the "technostructure".

A fundamental interest of the industrial system, and the technostructure is that this latter circumstance shall not end their autonomy. Since the financing of most of the research and development projects is connected with state orders, the control of completing the orders, and the simple fact of the order itself increases the dependence of the enterprise technostructure on the state. On the other hand, the technostructure endeavours to ensure completion of these orders and make the dependence permanent and safe through its deep-reaching influence on state bodies as early as the formation of state goals. It has extensive opportunities to do so since it monopolizes the real technological and enterprise management decisions, and thus, in fact, becomes the *lengthened arm of state administration*. Hence its harmful influence on foreign policy, which sharpens international tension; while its influence on *domestic policy* is detrimental because the one-sided, quantitative increase in production and consumption, and the often wanton technological innovations drive other, no less important, social and human needs into the background, and, ultimately, may even deny that they need be met at all. (Neglected public health, unsolved mass transportation problems, the chronic general congestion of the

large cities, the pronounced destruction of the ecological and aesthetic environment of human society, etc.). The industrial system, with its wealth of resources, eliminates the physical poverty of earlier historical eras but, at the same time, it has a damaging effect on man from the sociological viewpoint, turning people into its own one-sidedly specialized producer *and* consumer robots.

Is it possible to drive back the ever growing monopoly power of the industrial system and of the technostructure, and if so, by what social force? — asks Galbraith. Yes, it is possible, he replies and he thinks to find the *necessary social basis in the intelligentsia or more precisely, in the "educational and scientific estate"*. No other social grouping comes into consideration. "Capital", that is, the entrepreneurs of the giant enterprises and the stockholders have for the most part lost their power and control over the actual operation of the industrial system, they are "idle, passive figures" and their interest extends only to the profitability of their shares. The "technostructure" takes care that the stock dividends are maintained on a level considered suitable, and thus satisfy the stockholders and, in this way, reserve in practice the autonomy needed for their group decisions. The workers as production factors grouped in trade unions are not in a position to challenge the power of the technostructure: technological progress gradually reduces their relative importance; at the same time, as manipulated consumers they form an organic part of the industrial system. Other strata outside the sphere of the industrial system (= the total of the giant corporations): farmers, owners of small plants, small businessmen, servicing enterprises, and the "poor", count even less. These groups are under market rule even today, or have been forced outside the sphere of socio-economic processes.

For the time being, the "educational and scientific estate" and the educational-scientific infrastructure are of vital importance for the industrial system, the "technostructure"; they constitute essential paraphernalia and the basis of the industrial system. This "estate" — particularly the part which is active in the social sciences — does have that cultural and intellectual autonomy with which it is capable — in (antagonistic) contradiction with the "technostructure" — to become the carrier and propagator of a new system of social values, and give preference to everything the "technostructure" is neglecting or destroying. On the level of material wealth achieved, it emphasises the priority of improving the position of the "poor", it stresses leisure, and the value of cultural and artistic activity, as well as the need for peaceful foreign policy, instead of quantitative growth. Their social stand and political actions could be given greater emphasis by the concentrated student masses, who are dissatisfied with the manipulated system of values favourable to, and advertised by the technostructure. It is a vital interest of this "estate" to achieve with its socio-political actions that the state and society living under the manipulative power of the industrial system should accept its own system of values; this also *coincides with the fundamental existential interests of society* (though not with the economic-financial ones in the narrow sense of the term).

Only by breaking the social hegemony of the technostructure can the self-centred development of the industrial system come to an end, and become no more than a means for the production of a suitable quantity of necessary goods and services.

We quote the closing thought of the concept: "The industrial system, in contrast with its economic antecedents, is intellectually demanding. It brings

into existence, to serve its intellectual and scientific needs, the community that, hopefully, will reject its monopoly of social purpose." Galbraith does not state categorically, but seems to consider it likely that if this will not take place, the industrial system, with the accumulation of increasingly "perfected" systems of armaments for mass destruction, will sooner or later destroy itself anyway. *Therefore, in order to safeguard the future of the industrial system its own social monopoly must be broken and the system itself does produce the social forces* to achieve this.

Superficial elaboration of the category "industrial state"

In many respects, the picture given by Galbraith successfully shows the structural changes which have taken place in the developed capitalist countries (first of all, in the United States). A great virtue of the work is that, starting from an analysis of the forces of production (that is, technological requirements) he finally comes to the changes taking place in the superstructure, that is, in institutions, politics and culture. We consider the most successful chapters of the book the ones which show the deep-reaching interest of the giant corporations in the entire system of state monopoly capitalism, the many-sided relationship between the state and the corporations, the manipulated channelling of consumer demand, the price policies of these corporations and, in the background of all these phenomena, the scientific-technological revolution, while research and development are becoming a direct force of production. The analysis of the emergence and role of the "technostructure" in the giant corporations is also very interesting. However, at this point we have arrived at the shortcomings in Galbraith's concept, and from now on we try to make an attempt to review these.

As we have seen, the basic category for the Galbraithian concept is the "industrial state" which he uses as a synonim for the "industrially developed country" and it can be compared with the "industrial society" category used by R. *Aron* and others. Both categories include the developed capitalist and the developed socialist countries as well. In this connection the problem is that Galbraith (and others) use this category in a much broader sense than can be reconciled with reality, and by doing so, they essentially identify the *social* model of the *industrially developed* United States, with the social models of *industrially developed* Western Europe and Japan, and even with the *social* models of the *industrially developed* Soviet Union and Yugoslavia.

"Industrial development" should be primarily interpreted from the aspect of the *forces of production;* while *within production relations* only business management proper, technological management relations — which, by necessity, are characteristic of every industrially developed economy — can be brought into *direct* relationship with industrial development. As a matter of fact, also Galbraith seems to be aware of this when, within social relationships, he marks the "technostructure" as the dominating social force in the "industrial state". None the less, his generalizations remain formal: when analyzing the ownership relations of the joint-stock companies, he already tries to sketch out the latest evolution of capitalist, primarily American, social relations, with general validity. From then on, his economic and social analy-

sis is even more USA-centred. He neglects the *differences* in the *ownership relations* of the "industrial states" to the extent that — e.g. in his analysis of the directions in which the corporations are advancing — he never raises the question as to whether corporations, individual shares, dividends, etc. exist at all in the Soviet Union. Obviously, they don't.

The other central thesis of Galbraith's system, as we have seen, is the emergence of technostructure as a major force in society and its socio-economic monopoly. In conformity with this approach ("the industrial state"), he concentrates his study on the "mature" giant corporations *in industry* and commerce, and their technostructures, and almost completely neglects the analysis of the giant financial (credit) corporations (large banks, giant insurance companies), and the role of their technostructures. In his system the credit sphere (the "bank") appears only peripherically and dimly, as the "finance capitalist" whose "services", as a "production factor" are no longer claimed by the technostructure of the "mature" industrial giant corporation which relies on its own rich resources for self-financing, and thus ensures its autonomy against "capital". Even if we look at reality through the Galbraithian system, the question arises: shouldn't the "technostructures" of the banks and insurance companies have been analyzed with the same thoroughness as those of the industrial giant corporations? It should not be forgotten that these are the *largest* corporations in the United States (and in other developed capitalist countries as well); only the turnover of a very few industrial giant enterprises can be compared with the business turnover and profits of the largest banks and insurance companies.

For the time being, let us accept the Galbraithian thesis that social hegemony has passed into the hands of the technostructure; but in this case, what is the relationship between the interests of "industrial" and "finance" technostructures: are they independent of one another; if so, to what extent, and if not, who depends on whom, etc? These questions remain unanswered. Replying to them would have caused an essential change in the entire concept, because it would have called attention to those problems which Galbraith did not work out, or — in our opinion — worked them out incorrectly. These are: ownership relations, problems related to market (commodity and money) relations, and planning.

Power relations in the "industrial state"

Who actually controls the "mature" (industrial) corporation? Galbraith's reply, as we know, is the following: Control is in the hands of the technostructure, partly because stock ownership is too fragmented for the formation of a strong stockholding group capable of controlling the enterprise; for this reason, the large mass of stockholders do not have the necessary competence, and are incapable of having a say on the merits of the affairs of the enterprise. Therefore, the autonomy of the technostructure is ensured from this aspect; though only as long as — the author adds — their activities maintain a satisfactory level of dividends. However, for the most part, this condition is met — says Galbraith, and autonomy is not endangered.

The author's reasoning fully stands the test in the case of the *small stockholders;* the executives truly have nothing to fear from them. If a small

shareholder has so-called preference shares he has even no other right than a guaranteed dividend.

But the situation is entirely different regarding the finance groups controlling the individual enterprises. Galbraith views the giant sized industrial corporation — such as General Motors — as the basic unit in the "industrial system". In reality, from the point of view of long-range strategic decisions, the basic units are the individual conglomerates of finance groups, organized in holding companies or other forms which, through the chain of stock sharing control banks, insurance companies, industrial, commercial, transportation etc. large and medium-sized enterprises. In continental Western Europe and in Japan, the majority of these groups were formed around large banks; in Britain and the United States, due to a more developed "capital market", the process was more diversified. The extent to which the ownership control and *strategic* management of these groups is still in the hands of the families who had originally founded them is debatable and changes from case to case; the essence is that *there is* a controlling group of shareholders, which in some cases (particularly in Western Europe) is the state itself. It is true that the individual economic units (and their technostructures) do have in the majority of cases the necessary operative decision autonomy; but they are not the ones who determine the main strategic directions of enterprise research and development, investments, mergers or, say, of the banking credit branches of business. This affects the entire finance group and in the last instance the controlling owner(s) decide. Their decisions are, naturally, determined to a substantial degree by concrete socio-economic-technical conditions, by market demand. But this does not change the fact that the main direction of the activities of the technostructure are marked out by the controlling shareholder groups.

This, of course, does not take place through shareholders' annual general meetings; these meetings are truly as formal as Galbraith shows them to be. The technostructure receives direct information from highest enterprise management on the business policy and development directions decided upon, particularly if members of the finance group controlling the individual enterprises are themselves in leading positions.

Emergence of the relative operative autonomy of the technostructure indicates, of course, a process of separation between capital ownership and capital functions.

It is also beyond argument that the technostructure has called to life special — individual and collective — group interests of bureaucratic character within the enterprise, and these, in the final analysis, really want to ensure maximum "self-employment" together with a favourable standard of living for themselves. However, we have not said much in stating this for, in fact, the workers grouped in trade unions have the same goal. If, however, a substantial part of the business activities of a single large enterprise or finance group meet self-centred, improductive state demand (e.g. for armament), then the special interests of the enterprise technostructure will unquestionably work in a direction to maintain the state demand for the longest possible time and even to expand it. In this way, the difference between the technocracy of the producing enterprise in the narrow sense of the term, and state (e.g. Pentagon) bureaucracy disappears: to a large extent, their interests melt into one. Galbraith provides a very lucid picture of this process, and its effects on foreign

policy. Of course, such community of interests ensures a highly favourable social background for the leaders of the government and finance groups to finance the (military) orders of the state.

Stable demand of the state — within the framework of the system — is in the interest of the financial groups, in those of the technostructure and also in those of the trade unions on short term. Thus, Galbraith's conclusions on the relationship between the state and the "industrial system" will hold their ground for the most part even if, instead of the theory of socio-economic hegemony by the "technostructure", we set out from the dominating role and interests of the finance groups. However, the lack of the analysis of concrete interests of finance groups and the banking system tends to blur the conflict between maximum economic growth and full employment on the one hand, and monetary balance on the other, as preferences of government economic policy.

The "market" and "planning"

Another extremely problematic element of the Galbraith concept is in the "market and plan" complex. In this connection he correctly states that, within the framework of the "industrial" system (meaning: the large corporations) there is no perfect market in the classic or "neo-classic" sense which stands as a sovereign power opposing the individual producers, who have no influence on prices and market trends of total demand and total supply. He is also right in emphasizing that the large corporations – even without formal cartel agreements — avoid market price competition and are very much interested in the stability of the price level (or in raising it), in the possibly safest sale of their products.

Nevertheless, *Galbraith is mistaken when, setting out from the above, he confronts the categories of "market" and "planning" with each other.* Although, in the final analysis, his macro-economic concept is built on this confrontation, the author often *deviates from it* in explaining his theses, and only speaks of the dominating influence on the market, or simply of the (well-known) strong reciprocal effect between production and consumption; particularly in discussing the more indirectly manipulated market of consumer goods. In our opinion, there is a dual reason for this contradiction: on the one hand the professor expounds his theses by polemizing with the market price model of the ruling neoclassical theory and from this viewpoint it may be conceived that the difference between the planned influencing and control of the market and its complete disappearance is indistinct. On the other hand, however — and we consider this the main reason — he completes his analysis without first trying to clearly define (or even raise) the contents of the categories "commodities", "commodity production" or "commodity and money relations", and "planning".

The question is all the more interesting because Galbraith — while maintaining his method of reasoning centred on the USA — looks elsewhere on this (rare) occasion for examples to illuminate his point of view, namely, in the field of the economic reforms of the socialist countries. Accordingly, he thinks to find the essence of the reforms in the following (quoting the example in connection with price planning): "Socialist industry also works, as a matter of course, within a framework of controlled prices. In recent times the Soviet

Union, following the earlier Yugoslav practice, has been according to firms and industries some of the flexibility in adjusting prices that the more informal evolution has accorded the American system. This has been widely hailed as a return, by these countries, to the market system. This is a mirage. It does not mean, any more than in the American system, that the socialist firm is subject to control by market prices over which it exercises no influence. It means only that its control can be more flexibly exercised in response to change."*

We feel that from this quotation, the fundamental misunderstanding will be completely clear: Galbraith seems not to see that when the socialist countries changed over to a more flexible price control (and by definition: to more flexible planning methods) they were rejecting precisely the earlier planning approach (and the more or less consistent practice stemming from it) which denied the economic importance of the ulterior control of the market, the right of existence and efficiency of flexible planning methods which consciously and centrally apply market categories and, in this way, tried to reduce the developed industrial and global economic relations based on a complicated social division of labour and commodity production, to barter relations. At present, economic policy and the planning centre are increasingly striving within the framework of *macro-economic planning*, to make use of commodity and money categories. Galbraith is, of course, right, when he emphasizes that it is out of question to establish the spontaneous and complete rule of the market and of uncontrollable market prices as described in the neoclassical models. But since he has not theoretically defined the categories of "planning" and the "market", or their different historical forms, he identifies "planning" with the consciously guided, developed and organized capitalist market economy and with modern socialist planning, on the one hand, and the "market" with the theoretical abstraction of the pure free market, on the other. This unclear theoretical basis serves also as a foundation for the author's views on the convergence of the two systems, so often criticized.

Galbraith, in his more detailed analysis of the question, moves again primarily within the medium of the American economy. Here too, this lack of theoretical clarity strongly influences his conclusions.

The conclusion that in the developed industrial state (meaning: the United States) planning is required to ensure the smoothness of extended social reproduction is fundamentally correct, and indicates keen sight. We have seen, however, that Galbraith's concept does not take into consideration the dialectic relationship between the plan and the market and, for this reason, he interprets the economic-political intervention of the state in the United States, and preliminary market research by the large corporations as the elimination of all the "market" rules both on the macro-economic and micro-economic levels — at least within the scope of the "industrial system".

This view must be evaluated differently in the macro-economic and the micro-economic respects. On the *macro-economic level* state monopoly capitalism primarily means that the *spontaneous market determination* of the social reproduction process, that is, the cyclical periodicity characteristic of the era prior to World War II, has ceased to function. The state endeavours to ensure the stability and continuous expansion of the process of social reproduction, and of total social demand. Private enterprise investments, most immediately

* P. 191.

affected by market impulses, have lost their former, almost exclusive role in determining prosperity; indeed, the fact that they are maintained on the same level to a great extent depends on the direct or indirect trends state demand creates. As a result, e.g. even the structure of investments by branches showed a considerable stability from one year to the next in the United States in the past quarter of the century; and the necessary shifts caused by the scientific-technological revolution did not take place in leaps either, but gradually. It is Galbraith's great scientific (though not pioneering) merit that he convincingly shows: this development was objectively forced by the modern forces of production (= technology + the technostructure), and the large corporations are fundamentally interested in maintaining it.

On the micro-economic level — that is, on the level of the individual large corporations — however, the picture sketched out by Galbraith is rather misleading, and contradictory too. Galbraith's starting point is true: the individual large corporations endeavour to see that the placing of their products and the procurement sources shall be ensured in the long term. It is also true that the development of combined large vertical corporations completely eliminated market relations between the *individual vertical stages*. However, the disappearance of market (commodity-money) relations ends at this point. For vertical or non-vertical enterprise units (often within a single concern, too) *relations between one another, relations maintained with the state* and particularly, *their relationships with personal consumer demand* appear in the form of commodity and money relations, and it is competition, more or less, which decides the extent to which the enterprise "plans" based on preliminary market research, can be realized. Let us examine this process more closely.

The long-term delivery contracts — whether it is a question of a contract between large enterprises, or one between the enterprises and the state — never automatically ensure through coercive administrative measures that the commodity-money (C-M) metamorphosis shall be realized for the enterprises: for its materialization such contractual conditions of shipment as quality, price, deadline, and other must be met. The bargaining process on the market is transponed, however, to earlier stages; namely, the delivery conditions are set up in advance and the control of their fulfilment takes place already before the actual sale. The control of the conditions itself is also a bargaining process which ends by the time of the delivery. Hence, the appearance emerges that the market does not function any more. By eliminating this false appearance we may conclude that with the exception of unusual situations (e.g. runaway inflation) the controlling function of the market being a precondition for the C-M metamorphosis i.e., commodity sales does exist even today. It follows that the long-term contracts, for the most part, eliminate the uncertainty and unknown character of the market, but not the market itself.

The effects of the market appear even more sharply *prior* to signing the long-term shipment contracts, that is, before agreeing on conditions for sales and ensuring the market. The large corporations, while they take special care that price competition between them shall not break out, are in deadly competition with one another, even in the oligopoly position, for the state orders and, in general, on the market of capital goods and materials. The tools of the competition are well known: they extend from research and development to product substitution and advertising, so we will not discuss them here in detail. Galbraith himself refers to the merciless competition, and to the related inter-

ests of the technostructure. The competition is, of course, blended with monopoly elements stemming from the position of the large corporations and/or their products: this is not pure free competition but monopoly (oligopoly) competition! Nevertheless, from the point of view of the enterprise (and the finance groups) the major motivating force for technical-technological-marketing research and development is to remain in competition. *And this is the most classical incentive and coercing market effect.*

This holds to an even greater degree for the sphere of industrial consumer goods. Despite the market control methods of different intensity, the individual large corporations — although they have individual sales policies — can only realize them if, in competition with one another for the consumer, they are capable of doing so. True, consumer decision does not follow the rules of behaviour described in the neoclassical models (Galbraith is right on this point), but it didn't follow them 50—100 years ago either.

Naturally, in the final analysis, the consumer's choice is limited by the range of consumer goods produced: production, in this macro-economic sense, determines the possible direction and pattern of consumption. However, the range of consumer goods — particularly that of modern industrial consumer goods — induces itself new patterns of demand among the consumers, and the "industrial system" endeavours to discover, artificially increase, advertise and meet these demands. Already Marx pointed out the reciprocal effect of the production and consumption spheres: Galbraith provides a many-sided picture of how this interrelationship takes effect today in the developed capitalist countries, particularly in the United States. He clearly points to the fundamental macro-economic importance of advertising, which is aimed at the general raising and maintenance of the consumption level. The problem again is that the author couples and often identifies these phenomena with bypassing, eliminating or simply controlling the market. These concepts are obviously not identical and, with the exception of the latter, are even less identical with the category of "planning".

The government strives to ensure the stability of total social demand, its continuous expansion, and its major proportions, but the individual large corporations must continually fight for their adequate share in total demand, in the state, private investment and — particularly — in the consumer market. Ulterior correction of the practical disproportions which may appear is again the task of the government. In brief, this is the complex relationship between planning and the market in the developed capitalist countries. Galbraith's "planning" and "market" categories do not expose this fundamental interrelation and, in fact, they mislead the reader. We feel in particular, that the description of the large corporation as a "planning unit" eliminating the market is highly exaggerated, and for this reason, misleading.

As we have already indicated, Galbraith's statements on details often contradict the elements of his concept we have criticized; this is particularly true in his demonstration of the role of the "market". From his statements on details it is obvious that, e.g. the market does not disappear even within the "industrial system", but simply assumes a more organized and oligopolistic form; and that it is (monopoly) competition that continues to force the enterprises to technological development and that this process is stimulated by the qualitatively new role of the state as buyer. The built-in contradictions of this chapter of the book are immediately obvious to the reader.

Notwithstanding the exaggerations stemming from polemization with the neoclassical (micro) economic theory, the weakness of the concept shown above has its roots also in the fact is that in his analysis the author — partly because of his USA-centred viewpoint — completely ignores the role and influence of liberalized foreign trade and capital movements, of the world market and of the international monetary system on the macro- and micro-economic reproduction processes of the national economies and on the possible goals of government intervention. Within a given national economy it is easier to assume theoretically — but only theoretically — the elimination of all functions of the market than in the case of a national economy with diversified world economic relations. Galbraith's "industrial states" might as well all be on different planets, for there are no tangible foreign economic ties among them, or between them and the "non-industrial" states of the third world.

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We have in essence reviewed those elements of the Galbraithian concept which require economic analysis in the strict sense of the term. But, in his "political economy" economic analysis is not the author's only goal, he also wishes to make a social diagnosis, and draw up a social programme of action he considers necessary. His programme and concepts have been criticized many times, and for this reason we would only like to summarize our opinion on what we consider to be the most debatable point made by the author.

Galbraith attributes an exaggerated and one-sided importance to the "educational and scientific estate" in the political reform actions. Practically, he does not reckon with the actions of the organized workers and trade unions, although, in connection with the Roosevelt reform period, he himself emphasizes the tremendous importance of the trade unions in the so-called Rooseveltian coalition. This can be explained for the most part by the problematic nature of the fundamental reform objective itself, marked out by Galbraith: to influence with the aid of initiatives stemming from the intelligentsia, by "counter-conditioning" the state and the "consumer" in order to supress the hegemony of the industrial system in foreign and home policies. The events in the United States of the three years since the publication of the book have shown the relative success of this concept among the university students but they have also proven in practice that the reform concept announced by Galbraith cannot be realized in its globality.

We should not think, however, that the concept can now be dismissed. Despite its closed and logical construction and its many correct conclusions, the Galbraithian political economy cannot be considered as a full exposition of the socio-economic laws of the American economy (and much less of the world economy) from the viewpoint of science in the narrow sense of the term. *But this political economy is simultaneously the critical political economy of the American reform intelligentsia*, and as such, it may be the starting point for influencing certain concepts on government level; it may also give economic thoughts to the newly developing left-wing radicalism.

Á. SCHMIDT

ZUR TYPOLOGIE DER PLANUNGSSYSTEME*

Als Abschluß der lange Zeit hindurch währenden Diskussion, die in der Wirtschaftswissenschaft über die Möglichkeiten der Planung geführt wurde, entstanden in der Welt der Wirklichkeit die verschiedensten Landespläne, Planungssysteme, Planwirtschaften. All dies führte unter anderem zum außerordentlichen Aufschwung und zur weiten Verzweigung der sich mit Problemen der Planung befassenden Wirtschaftsliteratur. Das Überblicken dieser Literatur ist fast so schwierig, wie die Übersicht, Analyse und Bestimmung der Eigenheiten der Planungssysteme selbst. Und so erscheint es, als ob die Literatur der Planung zwischen den beiden Extremen: zwischen der sich der Wirklichkeit anhaftenden empirisch-deskriptiven, und der von der Wirklichkeit manchmal so weit entfernten abstrakt-theoretischen Tendenz, der theoretisch hochwertigen Analyse, der Systemuntersuchung, der Gegenüberstellung, Vergleich und Ausarbeitung der Typologie der Planung und des Planungssystems bisher nicht genügend Beachtung geschenkt hätte. Aber wie schwer es sich auch gestaltete die Entwicklung der sich mit Planungsproblemen befassenden Literatur zu verfolgen, eine genau so schwere Aufgabe besteht darin, sich über die in der Welt konkret bestehenden Planungssysteme eine entsprechende Orientierung von wissenschaftlichem Wert zu beschaffen.

Über die in der Welt bereits bestehenden verschiedenen Planungssysteme sind in den letzten Jahren mehrere Werke erschienen. Eine der neuesten beachtungswerten Monographien, in der versucht wird, die in der Welt bereits entstandenen und wirkenden Planungssysteme mit wissenschaftlichem Anspruch zu analysieren, zu vergleichen und zu typologisieren, ist das in 1969 erschienene Werk von *Peter Knirsch*. Die vorliegende Rezension stellt sich das Ziel dieses Werk skizzenhaft zu besprechen, und — vom Gesichtspunkt der sozialistischen Planwirtschaft ausgehend — zu werten.

Das Werk, das einen Umfang von rund 310 Seiten besitzt, bemüht sich nach einer kurzen Einleitung in dem mit *A* bezeichneten ersten Teil den Begriff der zentralen Wirtschaftsplanung — nach der in den sozialistischen Ländern angewendeten Terminologie: der Volkswirtschaftsplanung — zu bestimmen. In dem mit *B* bezeichneten zweiten Teil systematisiert das Buch die strukturbestimmenden Grundlagen, Kriterien der in Frage stehenden Planung. Auf Grund dieser Systematisierung gibt der mit *C* bezeichnete, umfangreichste dritte Teil — der fast zwei Drittel der gesamten Monographie ausmacht — eine ausführliche Analyse der bisher konkret verwirklichten Systemformen, und qualifiziert, bzw. charakterisiert sie aus mehreren Gesichtspunkten. Im letzten, mit *D* bezeichneten Teil, der von zusammenfassendem Charakter ist, skizziert der Verfasser die sich gleichenden und voneinander abweichenden Züge der Systeme zentraler Planung. (Das Buch wird durch ein — mehr als 400 Titel enthaltendes — Literaturverzeichnis, sowie durch Inhaltsauszüge in englischer Sprache ergänzt.)

Der Teil *A* bestimmt nach einer Skizzierung des allgemeinen Planungsbegriffs zuerst im allgemeinen den Begriff der Wirtschaftsplanung, nachher

* Knirsch P.: Strukturen und Formen zentraler Wirtschaftsplanung. Berlin, 1969. Osteuropa-Institut. 310 S.

den Begriff der zentralen (Landes-) Wirtschaftsplanung. »Unter zentraler Planung oder gesamtwirtschaftlicher Planung oder Volkswirtschaftsplanung wollen wir somit das wirtschaftsbezogene Handeln staatlicher Zentralinstanzen verstehen, das einerseits aus dem Entwurf des zukünftigen Wirtschaftsgeschehens in einer Volkswirtschaft, andererseits aus den Beeinflussungsbemühungen um einen entsprechenden Handlungsvollzug besteht.« (S. 29.) Der Verfasser unterscheidet die zentrale umfassende Gesamtplanung — Teilplanung, sowie die gesamtwirtschaftliche Vorhersage (Prognose) und Wirtschaftsplanung; letztere sondert er von einigen verwandten Begriffen ab, weist auf die ideologischen Beziehungen der Planung hin und befasst sich auch mit den Zusammenhängen der Zentralplanung und Wirtschaftspolitik. Mit Recht hebt er hervor: »Die Planung ist in Systemen zentraler Planung bewußte, ständige und institutionalisierte Form des wirtschaftlichen Verhaltens« und »In wirtschaftspolitischen Systemen zentraler Planung liegt ein umfassender staatlicher Gesamtplan vor, der nicht nur das zukünftige wirtschaftspolitische Verhalten festlegt, sondern darüber hinaus auch die wirtschaftspolitisch angestrebten gesamtwirtschaftlichen Abläufe enthält.« (S. 48.)

Aus theoretischem Gesichtspunkt kann der mit *B* bezeichnete zweite Teil als bedeutendster beurteilt werden, der mit Hilfe der strukturanalysierenden Methode einen Versuch zur *Gruppierung der wirtschaftspolitischen Systeme* unternimmt. Die Gruppierung gründet sich auf Systeme der 1. Verhaltensprinzipien, 2. wirtschaftspolitischen Ziele, 3. organisatorischen Gesichtspunkte, 4. wirtschaftspolitischen Instrumente, 5. wirtschaftspolitisch relevanten Umweltsbedingungen. Unter den *Verhaltensprinzipien* finden wir z. B. solche Momente wie das Rationalitätsprinzip, das soziale Bewußtsein, das Verhältnis zur Macht. Im komplizierten System der *wirtschaftspolitischen Ziele* erscheinen folgende Ziele: In der Hauptgruppe der außerökonomischen Ziele finden wir die innen- und außenpolitischen, die kulturellen und geistigen, sowie die sozialen Ziele, z. B. Beeinflussung der sozialen Gerechtigkeit, Sicherheit, Beeinflussung der Sozialstruktur. In der Hauptgruppe der wirtschaftlichen Ziele im engeren Sinne des Wortes stehen die ordnungspolitischen Ziele, wie z. B. das Koordinationssystem — die Planung, die Gestaltung der Eigentums- und Organisationsordnung mitinbegriffen — an erster Stelle; nach diesen folgt die Gruppe der materialen ökonomischen Ziele, zu denen z. B. die Förderung des Volkswohlstandes, die Sicherung der Wirtschaftsstabilität, Strukturänderungen (Beeinflussung der natürlichen Wirtschaftsgrundlagen, Beeinflussung der Wirtschaftsstruktur im engeren Sinne des Wortes, Änderung der Zweigstruktur, sowie außenwirtschaftliche Ziele) gehören. Die wirtschaftspolitischen Ziele können auch noch durch eine gewiße allgemeine Charakteristik und eine formale Gliederung des Zielsystems charakterisiert werden. In der Systematik der *organisatiorischen Gesichtspunkte* befinden sich unter anderen die Organisationsstruktur der Planungseinheiten (Planträger), wie z. B. die organisatorischen Lösungen der im Planungsprozeß teilnehmenden Einheiten, ihre Gliederung gemäß ihrer Stellung und ihrer Aufgaben in der Planung, die zentralisierten und dezentralisierten staatlichen Planungseinheiten, die Dezentralisierungsprinzipien. Hierzu gehört die Struktur der Pläne zusammen mit ihren Charakteristiken, ihr System und ihre Gliederung betreffend.

Fast unübersichtlich weitverzweigt und kompliziert ist das *System der wirtschaftspolitischen Instrumente.* Unter diesen stehen die ordnungspolitischen Instrumente, wie z. B. Verwaltungsorganisation, Eigenstumsordnung, Geld-

und Kreditsystem, Instrumente zur Änderung des Unternehmenssystems an erster Stelle. In die Reihe der prozeßpolitischen Instrumente gehören die Finanzpolitik (Ausgaben- und Einnahmenpolitik des Staatshaushaltes), die Geld- und Kreditpolitik, die Instrumente zur Gestaltung der Planungstätigkeit der staatlichen Wirtschaftsverwaltung (z. B. in bezug auf die Planungsmethoden, Planungsaufgaben, Plandurchführung), Instrumente zur Beeinflussung der laufenden Unternehmungstätigkeit (direkte administrative Beeinflussung, administrative Festlegung von Teilen des Unternehmungsplans), direkte administrative Einwirkungen außerhalb des Unternehmungsplans, Festsetzung der Preise und Gebühren, Kontrolle der privaten nichtunternehmerischen Wirtschaftstätigkeit, Instrumente zur Beeinflussung des Verhaltens der Arbeitskräfte, Instrumente zur Beeinflussung des Konsumentenverhaltens, Instrumente zur Kontrolle der Außenwirtschaftsbeziehungen. Die wirtschaftspolitischen Instrumente können endlich auch durch gewiße allgemeine Kriterien charakterisiert werden. Unter den *vom wirtschaftspolitischen Gesichtspunkt aus bedeutenden Umweltsbedingungen* spielen die natürlichen Bedingungen, die geistigen und kulturellen Grundlagen, sowie die Staats- und Rechtsordnung, die technischen, sozialen und wirtschaftlichen Bedingungen eine Rolle.

Die *abstrakten* Elemente in den obigen skizzenhaft dargelegten fünf Kriteriengruppen dienen dazu, um — ihr reales Dasein und ihre Kombination in Betracht ziehend — die *konkreten* wirtschaftspolitischen und Planungssysteme qualifizieren und typologisieren zu können. Das Kriteriumsystem ist also die Grundlage zur Typengestaltung und zur näheren Charakterisierung der in Typen gereihten Variationen. Dazu unternimmt der Verfasser einen Versuch im dritten Teil des Buches.

In der Einleitung des mit *C* bezeichneten dritten Teiles befasst er sich mit den prinzipiellen Fragen der Ausgestaltung der Typen und kommt zu dem Ergebnis, daß bei der Typisierung der verwirklichten zentralen Planungssysteme besonders zwei Kriterien bedeutend sind: einerseits der Grad der verbindlichen Kraft der Planung, andererseits das wirtschaftliche Entwicklungsniveau der geplanten Wirtschaften. Daraus ausgehend, kann durch Kombination der beiden Kriterien die untenstehende Hauptgliederung der allgemeinen Planungstypen zusammengestellt werden:

Formen imperativer Planung
- Kriegswirtschaftliche Planungsformen
- Sowjetische Planungsformen
  - Sowjetische Planung bei niedrigem wirtschaftlichem Entwicklungsstand
  - Sowjetische Planung bei höherem wirtschaftlichem Entwicklungsstand

Formen vollzugsunverbindlicher Planung
- Zentrale Planung in den Entwicklungsländern
- Indikative Planung in entwickelten Volkswirtschaften
  - Indikative Planung des wirtschaftspolitischen und des ausführenden Verhaltens
  - Indikative Planung als unmittelbare Grundlage des wirtschaftspolitischen Verhaltens
  - Indikative Planung als mittelbare Grundlage des wirtschaftspolitischen Verhaltens.

Das erste, wichtigere Kriterium der Typisierung ist also der vollzugsverbindliche Charakter und das zweite Kriterium der wirtschaftliche Entwicklungsstand. Auf dieser Grundlage kommen die kriegswirtschaftlichen Systeme der kapitalistischen Länder und die Planwirtschaften der sozialistischen Länder in eine Hauptgruppe, in eine andere Hauptgruppe aber die Planungs- bzw. Wirtschaftssysteme der Entwicklungsländer und der entwickelten kapitalistischen Länder.

Das Buch nimmt dann, aus obiger Typologisierung ausgehend, der Reihe nach die in der Welt bisher bereits konkret zustandegekommenen planwirtschaftlichen Systeme, bzw. Planungssysteme vor, analysiert und charakterisiert diese. Als Eigenheit des *kriegswirtschaftlichen Planungssystems* erachtet der Autor die eindeutigen Verhaltensprinzipien, die Unbestimmtheit der Organisationsformen, die Anwendung von verbindlichen wirtschaftspolitischen Instrumenten, die Beanspruchung von Kraftquellen im Dienste der Kriegsziele, die Zurückdrängung der individuellen Bedarfsdeckung.

Unmittelbar nach der Kriegswirtschaft beginnt der Verfasser die Untersuchung der *sowjetischen Planwirtschaft*. Er schreibt folgendes: »In den allgemeinen Verhaltensprinzipien der Wirtschaftspolitik unterscheidet sich die sowjetische Planung nur wenig von dem Typ der kriegswirtschaftlichen Planung.« (S. 125.) Dies ist klar anfechtbar. Bei den Planwirtschaften sowjetischen Typs, richtiger, den sozialistischen Planwirtschaften können aber — wie aus obigem ersichtlich — zwei Arten unterschieden werden: der Variante, die dem niedrigeren wirtschaftlichen Entwicklungsstand entspricht, gehörten bis zur Mitte der Fünfzigerjahre die Sowjetunion und sämtliche sozialistische Länder an; derzeit gehören unter diese in Europa Bulgarien, Rumänien und Albanien, sowie sämtliche asiatischen sozialistischen Länder. In den Typ, der dem höheren Entwicklungsgrad entspricht, gehören derzeit die Sowjetunion, die Deutsche Demokratische Republik (in Anführungszeichen), die Tschechoslowakei, Polen und Ungarn. (Zu bemerken ist, daß diese Gliederung gemäß der Situation vor Einführung des neuen ungarischen Wirtschaftsmechanismus vorgenommen wurde.) Die Kriterien der Typisierung analysiert das Buch im weiteren immer den beiden Entwicklungsgraden nach gesondert.

Unter den angeführten Kriterien des wirtschaftlichen Zielsystems können noch die Sicherheit des Staates, die rasche Wirtschaftsentwicklung, dazu die Strukturänderung (Industrialisierung), die Erhöhung des Volkswohlstandes, neuerdings das Ansteigen der wirtschaftlichen Effektivität erwähnt werden. Die Monographie legt die Planungssysteme, die Durchsetzung und Harmonisierung der Prinzipien der Zentralisierung und Dezentralisierung in der Sowjetunion und den sozialistischen Ländern ausführlich dar. Das wirtschaftspolitische Instrumentarium analysierend kommt der Verfasser zur Feststellung, daß neben den erwähnten direkten Mitteln auf allen Gebieten auch die Anwendung indirekter Mittel zu finden ist, ja er nimmt sogar an, daß »die verbreitete Notwendigkeit zur indirekten Koordinationsvornahme das Hauptproblem dieses Planungstyps bildet«. (S. 172.)

Im zentralen Planungssystem der *Entwicklungsländer* dominiert im Zielsystem natürlich die Wirtschaftsentwicklung und auch die anderen Ziele (Industrialisierung, Erhöhung der Beschäftigung, Erhöhung des kulturellen Niveaus usw.) stehen in den meisten Fällen damit im Zusammenhang. Ein charakteristischer Zug der Entwicklungsplanung in den erwähnten Ländern ist die Vielfalt der organisatorischen Formen. Die wirtschaftpolitischen Instru-

mente der Entwicklungsplanung richten sich in erster Reihe danach, die Erschaffung der Systemformen der erzielten wirtschaftlichen Entwicklung zu erreichen. Zur Beeinflussung der Wirtschaftsprozeße ist der Ausbau einer entsprechenden Informationsgrundlage, der Ausbau eines entsprechenden Planungssystems notwendig, was eine ziemlich schwere Aufgabe bedeutet. Gegenüber der Beeinflussung der laufenden Wirtschaftstätigkeit steht in erster Reihe die Förderung der Investitionen, der Kapitalbildung und der Kapitalausfuhr, der Ersparnisse im Vordergrund. Besonders bedeutend ist die Verwirklichung der gemeinwirtschaftlichen Investitionen und die Lenkung und Förderung der Privatinvestitionen durch indirekte Mittel. Auch die entsprechende Gestaltung der Außenhandelsbeziehungen ist in den Entwicklungsländern ein sehr schwieriges Problem. Überdies spielen in diesen Ländern die indirekten Mittel gegenüber den direkten Mitteln eine bedeutende Rolle.

In den *entwickelten kapitalistischen Ländern* kommt im allgemeinen das System der indikativen Planung zur Geltung, aber es zeigen sich sowohl den Wirkungskreis, als auch die Bestimmungskraft betreffend verschiedene Typen. Das Zielsystem wird durch den Pluralismus der wirtschaftlichen Hauptziele gekennzeichnet, in dem sich die politischen, wirtschaftlichen, gesellschaftlichen Ziele in verschiedenen Kombinationen vereinen. Charakteristische Zielsetzungen sind unter anderen die entsprechende Wachstumsrate, die Stabilität des Geldwerts, das Gleichgewicht der Zahlungsbilanz, die Vollbeschäftigung. Daraus ergeben sich einige weitere Ziele, wie z. B. die Änderung der Wirtschaftsstruktur, Erhöhung der Effektivität usw. Die Wirtschaftspolitik strebt in weitem Kreis nicht die Verwirklichung der administrativen, sondern der marktwirtschaftlichen Koordination an. Ein Charakteristikum der Planung ist, daß der verhältnismäßig kleinere Umfang der Planaufgaben eigentlich eine größere Zentralisierung der Planung ermöglicht. Im System der indikativen Planung, im wirtschaftspolitischen Instrumentarium sind die ordnungspolitischen Instrumente von verhältnismäßig geringer Bedeutung, in der Reihe der die Beeinflussung der Prozeße anstrebenden Mittel erhalten dagegen die indirekten Mittel eine größere Rolle. Zu den Bedingungen der Planung gehören: Ausbau einer entsprechenden Informationsgrundlage, Aufstellung von Wirtschaftsprognosen, Vervollkommnung der Planungsmethoden, Verwendung mathematischer Methoden usw. Im Kreis außerhalb des Staates steht an erster Stelle die Beeinflussung der Investitionstätigkeit, besonders durch finanzielle und kreditpolitische Mittel. Ein schwieriges Problem bedeutet in den entwickelten Ländern die Bekämpfung der Inflation, was unter anderem auch durch die Bestrebungen zur Erreichung eines Gleichgewichts der Zahlungsbilanz, sowie durch Einkommenserwägungen notwendig wird.

Nach einer Analyse der einzelnen Planungstypen wird im mit *D* bezeichneten vierten Teil vermittels einer *Zusammenfassung der Ähnlichkeiten und Unterschiede* der zentralen Wirtschaftsplanungen ein Versuch zur Querschnittsanalyse und auf solche Weise auch zur Synthetisierung der Ergebnisse angestellt. Über die *Zielsetzungen* der Systeme stellt der Verfasser fest, daß diese mehr oder weniger differenziert sind. In der Kriegswirtschaft und bei dem sowjetischen (bzw. sozialistischen) System niedrigeren Grades, sowie in den Entwicklungsländern dominiert aber nur eine einzige Zielsetzung: die Sicherung der Mittel zur Schaffung und Nutzung des militärischen Potentials (beim ersten), bzw. die Wirtschaftsentwicklung (beim zweiten und dritten). Bei sämtlichen anderen Typen zeigt sich die immer mehr anwachsende Pluralität

der Ziele; neben dem Wirtschaftswachstum gewinnen die Gesichtspunkte der Stabilität und Proportionalität an Bedeutung.

In bezug auf die *Organisationsformen* zeigen alle Typen eine relativ zufällige Struktur. Die bereits bestehenden Administrationsorgane entsprechen im allgemeinen den Zielen der wirkungsvollen Planung nicht. Die entwickeltesten Organisationsformen sind im sowjetischen System zu finden, aber die Ansprüche der zu versehenden Planarbeit übersteigen die Möglichkeiten der derzeit bestehenden funktionalen Planungsmethoden. Es kann aber auch festgestellt werden, daß die in den indikativen Wirtschaftssystemen angewendeten Lösungen ebenfalls widersprüchlich und keineswegs genügend wirksam sind.

In dem *Instrumentarium* zeigt sich eine Differenziertheit von großem Ausmaße. Bei der kriegswirtschaftlichen und der sowjetischen, bzw. sozialistischen Planung ist die direkte Leitung dominierend; bei den anderen Systemen sind die indirekten Mittel in der Mehrzahl. Während bei den zuerst erwähnten Systemen sich das Bestreben nach einer unmittelbaren Koordinierung der Wirtschaftsprozesse richtet, gelangt bei den anderen die Wirtschaftspolitik nur durch den Markt zur Geltung. Aber auch im sowjetischen System verengen sich, in dem Maße wie sich die Komplexität der Wirtschaft erhöht, die Anwendungsmöglichkeiten der direkten Leitungsmittel und die Bedeutung der indirekten Mittel erhöht sich. All dies bezieht sich in erster Reihe auf die Plandurchführung, deren Bedeutung bei der Ausgestaltung und Trennung der verschiedenen Typen der Planung ausschlaggebend ist. Dort, wo die Planung in überwiegendem Maße innerhalb des Rahmens der staatlichen Administration vor sich geht, werden bei der Planung überwiegend pragmatische Methoden angewendet; neuerdings erhöht sich auch die Bedeutung der entwickelteren mathematischen Methoden. Außer den obigen kann noch festgestellt werden, daß sich keine einzige Planung auf das ganze Gebiet, auf sämtliche Prozesse der Wirtschaft erstreckt. Sogar bei der sowjetischen Planung können ziemlich breite Gebiete gefunden werden, die von der Planung nicht berührt sind: solche sind z. B. die ins Detail gehende Verteilung der Konsumartikel und der Arbeitskräfte, ja sogar zu einem gewißen Teil und in einer gewißen Beziehung auch die Produktion und Verteilung. Der Einfluß auf die Investitionspolitik ist bei sämtlichen Planungstypen der wichtigste Teil der Wirtschaftspolitik. Es erscheint, als ob die in der Praxis angewendeten Zentralplanungen weit vom Idealtyp der totalen Zentralplanung entfernt wären.

Ähnlich der skizzenhaften Erläuterung des Inhalts der Monographie, ist auch eine kurze Wertung des Werkes keine leichte Aufgabe. Die Monographie gibt über die Vielfältigkeit der Planungssysteme auf Grund einer umfassenden Quellenverarbeitung und gründlicher Kenntnisse der Wirklichkeit zweifellos eine nützliche Orientierung und eine Analyse von wissenschaftlichem Niveau. Vom theoretischen Gesichtspunkt ist Teil *B* des Buches der interessanteste, vom praktischen Gesichtspunkt aus Teil *C* der bedeutendste, Teil *D* gibt dann eine gute zusammenfassende Übersicht über das ganze Gebiet. Ein Verdienst der Arbeit ist, daß sie von einer breiten Interpretation des Problems ausgeht und sich nicht nur mit den Planungssystemen, sondern auch mit der Wirtschaftspolitik befasst — obzwar die Beziehungen zwischen Planung und Wirtschaftspolitik, sowie die Fragen der allgemeinen politischen Verhältnisse vielleicht mehr Aufmerksamkeit verdient hätten. Das im Teil *B* dargestellte Kriteriensystem bietet eine genügende Grundlage zur Analyse

der einzelnen konkreten Systeme, im Laufe derer auch die Gesichtspunkte der Entwicklung genügend beachtet werden. Der Verfasser begeht nicht den Fehler die sozialistischen Planungssysteme extrem uniformisiert zu charakterisieren, und wendet sowohl im Falle der Sowjetunion, als auch der anderen sozialistischen Länder seine Aufmerksamkeit auf die Unterschiede, Änderungen und Entwicklung der Systeme. Seine Feststellungen sind im überwiegenden Maße richtig (und stimmen größtenteils mit den Erfahrungen des Rezensors bezüglich der verschiedenen Planungssysteme überein). Ein unbestrittenes Verdienst des Verfassers ist sein Streben nach Objektivität und der Umstand, daß er kein Anhänger der — zwar in letzterer Zeit in geringerer Zahl und etwas zivilisierter auftretenden — sogenannten Sowjetologen ist.

Einige Teile der Monographie bewegen aber zu verschiedenen Bemerkungen. So ist in erster Reihe zu bemerken, daß im Teil *B* nur eine Anführung aber keine wirklich konsequente Systematisierung der Kriterien zu finden ist, und das Fehlen einer Gewichtung der Kriterien ein Gefühl der Unbefriedigtheit erweckt. Die Folgen zeigen sich z. B. darin, daß eine der grundlegenden Charakteristiken der Gesellschaftssysteme, das gesellschaftliche Eigentum der Produktionsmittel unter den wirtschaftspolitischen Zielen im Zusammenhang mit der Gestaltung der Eigentumsordnung als Förderung (bzw. Beschränkung) des staatlichen Eigentums und später mit der Bezeichnung »Verstaatlichung der wirtschaftlichen Einheiten« im Instrumentarium der wirtschaftspolitischen Mittel vorkommt, und auch dort nicht hervorgehoben, sondern z. B. mit den »kalkulatorischen Leitprinzipien« in einer Reihe. Aber eben dieses Kriterium ist es, das irgendeine Wirtschaftsplanung qualitativ verändert: zu einer Planwirtschaft macht. Die angeführten Kriterien der wirtschaftpolitischen, wirtschaftlichen und Planungssysteme sind zweifelsohne nützlich, aber eine Revision der Gruppierung der Kriterien und die Ausarbeitung eines mehrdimensionalen, konsequenten, gewogenen Kriteriensystems ist eine noch zu erledigende Aufgabe. Das Kriteriensystem ist, wie schon erwähnt, zur Analyse der konkreten Systeme eine gute Grundlage und ein guter Leitfaden, wird aber manchmal ein wenig schematisch und birgt Wiederholungen in sich. Und obzwar die Monographie die Planungssysteme charakterisiert, hätte der interessierte Leser vielleicht über die Planung selbst, über deren System, über ihre Methoden, Eigenheiten, Probleme, über ihre Praxis gerne mehr erfahren.

Den sozialistischen Leser interessieren besonders die über das sozialistische Planungssystem geschriebenen Teile und diese Teile — abgesehen von einigen kleineren oder größeren Mißverständnissen oder Mißbewertungen — sind im allgemeinen entsprechend. Es ist bedauerlich, daß die in den letzten Jahren in den sozialistischen Ländern durchgeführten Reformen im vorliegenden Buch noch nicht zur Aufarbeitung gelangten. Die Änderungen sind nämlich vermutlich damit einhergegangen, daß die Planungssysteme, bzw. Planwirtschaften einzelner Länder aus einer Systemkategorie eigentlich in eine andere, oder in irgendeine spezifische neue Kategorie gelangten. Es ist aber zu hoffen, daß der Verfasser im weiteren auch diese Probleme untersuchen, und deren Ergebnisse mit einem, aus der besprochenen Monographie hervorgehenden wissenschaftlichen Anspruch veröffentlichen wird.

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BOOK REVIEWS

ANDORKA, R.: *Mikromodellek.* (Micromodels.) Budapest, 1970. Közgazdasági és Jogi Könyvkiadó. 327 p.

The book deals with models describing the behaviour of the fundamental units of the economy. It is divided into three major parts: the first studies the models of household behaviour, the second the enterprise models, and the third reviews the market models.

The author discusses the models of household behaviour in three large groups. In the first he treats the household as a fundamental demand unit, in the second the household appears as a basic unit of labour supply, and finally, he provides an analysis of household savings.

The household consumption models are built on the marginal utility theory. Accordingly, he first defines the demand function and the concept of elasticity, showing examples of the most frequent demand functions. He shows the best known utility function which plays a central role in the theory of marginal utility and in doing so analyzes the Gossen function, the Cobb — Douglas function and the CES function. He provides a detailed discussion of the concepts needed for further analysis, the indifference curves, the marginal rate of substitution, elasticity of substitution and then goes on to study the conditions for consumption equilibrium. He proves theoretically and by means of practical examples that, with constraints on income, in an optimum consumer position, the marginal utility ratios and price ratios also coincide. Then he shows how the demand curve can be deduced from consumption equilibrium points. He analyzes how the effects of two factors, the substitution effect and the income effect, can be separated in case these factors influence the given commodity through some sort of price change. Finally, relying on Samuelson, he shows that if households behave rationally, the indifference curves exist, and on the basis of market data these curves can even be determined. His proof is constructive and, at the same time, provides a method for determining the curves.

The labour supply of the households is also analysed by using marginal analysis, he describes the total utility of the household as a function of free time (leisure) and income, and in a concrete case, represents it with a Cobb — Douglas type function.

In the model of household savings, he augments postponed consumption with the interest rate, and studies the optimum behaviour of the household as a function of the interest rate. In the interest of a better approach to reality, he does not treat prices and wages as constants, and examines consumer behaviour also as a function of the latter.

The author groups the enterprise behaviour models according to fields of major enterprise activity (production, investment, stockpiling, transport), and discusses them accordingly.

Following a brief review of fundamental concepts in connection with production, he separates the models of enterprise production into two major groups: models based on production functions, and programming models.

He begins discussion of models based on the production function with a review of the theory of production functions. He gives the definition of the production function, then reviews different ways of describing the production function by way of tables, analytical, and graphical descriptions and then provides a detailed study of the fundamental concepts in connection with the theory of production functions (marginal productivity, marginal rate of substitution, elasticity of substitution, accelerator, etc.). He briefly reviews the homogeneous and non-homogeneous production functions, mentioning the Cobb–Douglas and CES functions which he reviewed earlier, and which had been originally worked out within the theory of production functions. Then he provides a treatise of the use of production functions in economic analysis, in the course of which he separately discusses the possible ways for economic optimum calculations, and cost analysis possibilities which can be completed with the aid of cost functions derived from production functions.

In the course of reviewing the programming models for production the author, first of all, gives the definition of the programming model, and compares its characteristics with those of the production functions, and then classifies the programming models. He shows four of the eight different types of programming model through examples, giving some realistic economic interpretation to the individual examples, and in the case of simpler examples he even provides a graphic solution. In the framework of the first type introduced (linear programming models) he deals separately with the evaluation of resources in its scope of problems (shadow prices), and with duality (economically speaking: the duality of the production and realization aspects of an economic process), as well as with the possibilities of parametric linear programming.

In accordance with the nature of the methods applied, regarding models to analyze enterprise investment activities and to determine the optimum enterprise investment policy he distinguishes two groups: discounting models and investment programming models.

The discounting models — the traditional models of investment efficiency calculations — are reviewed through but a single example, which is fully sufficient for in fact every single traditional investment-efficiency model can be reduced to discounting to the present value revenues and expenses during the lifespan of a production unit created through an investment. He reviews the application of the discount formula to evaluating investments.

He deals with the application of programming models in the course of investment decision.

The next, highly important field of enterprise activity is stockpiling. In this context the author reviews a deterministic and a stochastic inventory economy model, and then shows a model for the combined treatment of production and stockpiling.

Regarding modelling the transport activities of the enterprise, the author reviews the so-called classic transport problem.

The two units discussed in the preceding, the households and the enterprises, meet on the market, and in his analysis of market models the author studies how the behaviour of the individual units determines prices on the market. He distinguishes three types of market, according to who faces whom on the market: the consumer goods market, the market for intermediary products, and the market for production factors. Of these three markets, he deals in detail only with the market for consumer goods and production factors. Depending on the number of economic units on each side, and the position they occupy, he distinguishes among perfect competition, perfect monopoly, perfect monopsony, oligopoly, and monopolistic competition.

In case of perfect competition the realization price, the marginal income, and the average income are all given for the enterprise. However, the form of the demand function depends on the length of the period

of time under study. The author provides a separate analysis of the form of demand curves over a very short period (when the sellers are unable to change the quantity of products brought to the market), a short period (when the producers can only change a part of the production factors) and the slow period (characterized by the fact that no production factor is constant for the enterprise).

In his analysis of monopoly behaviour, the author distinguishes between simple monopoly, and the price discriminative monopoly and he deals separately with the case when the state intervenes with the production and realization of the monopoly enterprise (by fixing prices, taxation policies, etc.).

While it is comparatively easy to describe the behaviour of the monopolies, with the aid of quite general models, the behaviour of the oligopolies — although they can be described in the theory of games — in general, leads to a model which has not been solved as yet. The author provides examples on how oligopolies react to the conduct they assume of one another in certain special cases. This includes his study of how the enterprise behaves if it counts on the fact that the others will not change their production, he analyzes the situation when the oligopolistic enterprises are not equal, and studies the conduct of oligopolies grouped into a cartell. He deals briefly with monopolistic competition, which is a transition between the monopoly and perfect competition.

From among the market models of production factors, he only sketches out the special case of perfect competition, and by way of conclusion, he discusses the monopsony, which is the monopoly turned upside down insofar as a single buyer faces many sellers. He shows that the behaviour of the monopsony enterprise can be described in a similar way to that of the monopoly. However, state intervention can deviate in this case sharply from the monopolistic case.

L. HUNYADI

JÁVORKA, E.: *Életszínvonal a mai társadalomban.* (Lebensstandard in der heutigen Gesellschaft.) Budapest, 1970. Kossuth Könyvkiadó. 372 p.

Das interessante Buch von Edit Jávorka, das bestrebt ist die sich mit dem Lebensstandard befassenden Untersuchungen, Analysen zu synthetisieren, gilt in der ungarischen Fachliteratur als ein bedeutendes Unternehmen.

Der außerordentlich ausgedehnte und komplexe Problemenkreis wird in neun Kapitel gegliedert. Die beiden ersten Kapitel nähern das Thema auf eine neuartige Weise an: »Anatomie des Begriffes« und »Habitus der Meßmethoden«. Im ersten Kapitel befaßt sich die Autorin mit dem Begriff, der Erläuterung, den Komponenten des Lebensstandards und legt die Vielfalt der damit verbundenen Anschauungen dar. Nach einer Aufreihung der Bestandteile gibt die Verfasserin zusammenfassend auch eine Definition dieser. Auf Grund der Untersuchung wird die Definition folgenderweise formuliert: »Der Lebensstandard ist ein Wohlstandsniveau, das durch die Quantität und Qualität der zur Befriedigung der verschiedenen (materiellen, physischen, psychischen) Bedürfnisse dienenden Produkte, bzw. Dienstleistungen bestimmt wird — und von der Unterwerfung der Natur und der günstigen sozialen Umgebung der menschlichen Freiheit abhängt — wobei der mit der Herstellung von Gütern zusammenhängende Arbeitsaufwand, und die Kontinuität, Störungslosigkeit und Gesichertheit der Bedarfsbefriedigung in Betracht gezogen werden müssen.« (S. 30.)

Diese Definition fußt größtenteils auf Folgerungen, die sich auf die Komponenten des Lebensstandards beziehen. Neben den »von der Höhe der Einkommen abhängenden Komponenten« unterscheidet Jávorka eine andere große Gruppe, »die den Charakter des kollektiven Zusammenlebens bestimmenden sozialen Faktoren«. Diese zweite große Gruppe, deren Definition und Analyse neuartig ist, wird in drei Teile

gegliedert: auf die mit der Arbeit zusammenhängenden Faktoren, auf die kulturelle und sanitäre Lage, sowie auf die eigentlichen Bestimmungsfaktoren des kollektiven Zusammenlebens. Hier werden Faktoren, wie die persönliche Geschütztheit oder die Einkommenssicherheit erwähnt.

Eines der gelungensten Kapitel des Buches ist das zweite, das sich mit den prinzipiellen und praktischen Fragen der Messung des Lebensstandards befasst. Die verschiedenen Methoden, ihre Vorteile und Nachteile, werden erläutert und gewertet, zahlreiche in Ungarn weniger bekannte Meßmethoden demonstriert, über wichtige internationale Vergleiche wird orientiert und über die angewendeten Kennzahlen des Lebensstandards und Rechnungsmethoden ein Bild gegeben.

Das umfangreichste Kapitel des Buches ist das vierte, das sich mit dem wichtigsten Faktoren des Lebensstandards, mit der Konsumption befasst. Die Autorin erläutert die Zusammenhänge zwischen Verbrauch und Lebensstandard, die verschiedenen wirtschaftlichen, sozialen, soziologischen und demographischen Faktoren, die die Struktur des Verbrauchs bilden. Dieser Teil befaßt sich mit den quantitativen und qualitativen Problemen des Lebensmittelverbrauchs, mit den gesundheitlichen Anforderungen der Ernährung, mit der Kleidungsmittelversorgung, weiters mit der Versorgung der Bevölkerung mit langlebigen Verbrauchsartikeln.

Das fünfte und sechste Kapitel, die sich mit den Einkommen und den Lohnverhältnissen der Familien befassen, analysieren außer dem Entstehen, der Umverteilung und der Streuung der Einkommen, den Charakter und das Ausmaß der staatlichen Zuwendungen für den Unterhalt der Kinder, bzw. der arbeitsunfähigen Alten. Das Buch vermittelt uns wichtige Untersuchungen über die Gestaltung, die Verteilung der Einkommen, weiters über die auf die Differenzierung wirkenden Faktoren, auf Grund von Daten aus Ungarn und aus anderen sozialistischen, sowie aus kapitalistischen Ländern. Interessant sind die Bemerkungen über das Rentensystem.

Die Autorin behandelt im Kapitel über die Verbraucherpreise die Zusammenhänge zwischen Preisen und Lebensstandard, und stellt auch weitere interessante internationale Preisverhältnis-Vergleiche an. Solche finden wir übrigens auch in den Teilen, die sich mit den übrigen Komponenten des Lebensstandards befassen, so z.B. ist ein internationaler Vergleich über die Lohnverhältnisse, Familienzuschläge, Renten, Steuern, Freizeit im Buch zu finden.

Das »Die Perspektiven der Lebensstandardpolitik« benannte letzte Kapitel gibt nicht nur eine Zusammenfassung der sich auf der Untersuchung der einzelnen Teilthemen ergebenden wichtigeren Folgerungen, sondern wirft auch zahlreiche neue Gedanken auf. Richtigerweise wird jener wichtige Zug der ungarischen Lebensstandardpolitik hervorgehoben, daß außer mit einer Erhöhung des materiellen Standards den sozialen Faktoren — auch bei der Beurteilung des Lebensstandards — eine immer größere Bedeutung zugesprochen wird, daß die qualitativen Anforderungen immer mehr in den Vordergrund gestellt werden.

In diesem Kapitel wird auch die wichtige Frage untersucht, daß die in je einer untersuchten Zeitspanne erworbenen Einkommen den Lebensstandard der verschiedenen sozialen Schichten nicht entsprechend widerspiegeln. Heute verfügen auch in Ungarn immer größere Schichten über entsprechende Wohnung, langlebige Verbrauchsartikel, einen gut ausgestatteten Haushalt, und es ist offenbar, daß die Einkommensverwendung, die Ausgabenstruktur dieser Familien sich — auch bei einem gleichen Einkommen — von den Familien unterscheidet, deren Wohnungslage, Versorgung mit materiellen Gütern ungünstiger ist.

Im abschließenden Teil des Buches erwähnt die Autorin, daß sich in Ungarn noch keine komplexe Lebensstandardpolitik und Konzeption ausgebildet hat — und auch die Ausarbeitung einer um-

fassenden Einkommenspolitik noch vor großen Aufgaben steht.

D. KOVÁCS

LÁSZLÓ, J.: *A gazdasági irányítás és a termelőszövetkezetek anyagi érdekeltsége.* (Die Wirtschaftsleitung und die materielle Interessiertheit in den landwirtschaftlichen Produktionsgenossenschaften.) Budapest, 1970. Közgazdasági és Jogi Könyvkiadó. 319 p.

Die Untersuchung der Zusammenhänge zwischen Wirtschaftsleitung und materieller Interessiertheit, die sowohl in Ungarn, als auch in den anderen sozialistischen Ländern in den letzten Jahren in den Vordergrund trat, macht die Veröffentlichung des Werkes von János László, das die Zusammenfassung seiner auf diesem Gebiet angestellten Forschungsarbeit von fast anderthalb Jahrzehnten enthält, besonders aktuell. In diesem Buch stellt der Verfasser das Verhältnis zwischen der Wirtschaftsleitung und der materiellen Interessiertheit der landwirtschaftlichen Genossenschaften im Prozeß der Entwicklung dar: er zeigt uns auf welche Weise in der Geschichte des Sozialismus die allmähliche Verschärfung der Widersprüche zwischen der Wirtschaftsleitung direkten Typs und der materiellen Interessiertheit im Laufe der Entwicklung die Reform des Wirtschaftsmechanismus notwendig machte. Im Rahmen der Erörterung dieses Gedankenganges legt der Autor auch die Gründe der Veränderungen dar.

Das erste des aus sieben Kapiteln bestehenden Werkes behandelt die grundlegenden Zusammenhänge der planmäßigen Leitung, der materiellen Interessiertheit und des materiellen Anreizes. Der Verfasser gibt eine geschichtliche Übersicht über die Beurteilung der Kategorien der gesellschaftlichen, gruppenweisen und individuellen Interessen, bzw. der materiellen Interessiertheit unter den Eigentumsformen des Sozialismus. Marx und Engels stellten sich in ihren Werken die Produktionseinheiten des Sozialismus ohne Ware—Geld-Beziehungen, ohne partikuläre materielle Interessen vor. Sie nahmen im Sozialismus eine kommunistische Verteilung an. Lenin erkannte aber bald die Unrichtigkeit eines Verneinens der Gruppeninteressen, und die nach Aufhebung des während der Interventionsjahre notwendigen und unvermeidlichen Kriegskommunismus ausgestaltete selbständige Unternehmungswirtschaft und Marktbeziehungen hatten bis Ende der Zwanzigerjahre eine große Entwicklung in der Produktion zur Folge. Parallel damit erweiterte sich auch der Anteil des sozialistischen Sektors auf eine bedeutende Weise. Vom Ende der Zwanzigerjahre an wurde aber die Wirtschaftsleitung immer mehr zentralisiert. Die Selbständigkeit der Unternehmungen erhielt einen formalen Charakter, und zusammen damit wurde auch das kollektive Interesse nicht anerkannt. In Ungarn wurde in den der Planwirtschaft folgenden Jahren ein direktives Leitungssystem vorherrschend, das mit der in der Sowjetunion vom Ende der Zwanzigerjahre an zur Anwendung gelangten Form übereinstimmte. Die proportionale Entwicklung der Wirtschaftszweige geriet immer mehr in den Hintergrund. Obzwar die Möglichkeit dazu besteht, daß sich die einzelnen Zweige der Industrie in einem schnellen Tempo entwickeln können, verschärfen sich doch auf lange Frist die Widersprüche immer mehr. Aus diesem Grund verstärkten sich mit der ersten Hälfte der Fünfzigerjahre beginnend in den sozialistischen Ländern immer mehr die Bestrebungen, die eine Lösung der Widersprüche zwischen der materiellen Interessiertheit und dem Wirtschaftssystem anstrebten. Zu dieser Zeit erhöhte sich der Anteil der Konsumption im Nationaleinkommen, und damit zugleich erhöhten sich die Investitionen der Landwirtschaft und der Nahrungsmittelindustrie.

Angesichts der sich immer mehr zeigenden Widersprüche des in den sozialistischen Ländern allgemein angewendeten Leitungssystems, begann man zu erkennen, daß neben Änderungen in der Wirtschaftspolitik auch eine Reform der Leitungssysteme

notwendig ist. In der Mitte der Fünfzigerjahre rief die direkte Durchführung der wirtschaftspolitischen Änderungen neue Spannungen hervor, die sich auf die Effektivität der Investitionen und der Produktion schädlich auswirkten. Bei der Ausgestaltung der in Ungarn in 1957 angenommenen neuen Agrarpolitik und beim Leitungssystem stützte man sich auch auf die Erfahrungen der früheren Jahre. Diese Agrarpolitik verfolgte ein zweifaches Ziel: die Entwicklung der landwirtschaftlichen Produktion, und die Einzelwirtschaften auf den Weg der Genossenschaften zu führen. Als Mittel der Entwicklung erachtete man die Marktbeziehungen und die marktregulierende Funktion des Staates. Die Entwicklung, die sich bis zum Abschluß der sozialistischen großbetrieblichen Umformung zeigte, bestätigte die Richtigkeit der Agrarpolitik.

Das zweite Kapitel befaßt sich mit der Wirkung, die die genossenschaftliche materielle Interessiertheit auf die Begründung der Produktionsentscheidungen ausübt. Der Verfasser klärt die Diskussion, die sich bei der Beurteilung des Einkommens von genossenschaftlicher Seite aus entfaltete, und nimmt auch zugleich Stellung dazu. »Zur Beurteilung der Rentabilität der Produktion unterscheidet die sozialistische ökonomische Literatur zwischen der Kategorie des Brutto- und des Nettoeinkommens. Unter Bruttoeinkommen wird der durch die Produzenten innerhalb einer gewissen Zeitspanne produzierte Neuwert, unter Nettoeinkommen aber der Teil des produzierten neuen Wertes verstanden, der über dem Individualeinkommen der Produzenten liegt. Die Diskussion entstand über das Verhältnis dieser beiden Kategorien im Zusammenhang mit der materiellen Interessiertheit.« (S. 57.) Seine Beweise anführend legt János László seinen Standpunkt klar, demgemäß die materielle Interessiertheit der landwirtschaftlichen Produktionsgenossenschaften mit der Maximalisierung des Bruttoeinkommens verbunden ist. Zugleich verwirft er den Standpunkt, wonach dem Brutto- und Nettoeinkommen dieselbe Bedeutung zugesprochen wird. Zum Beweis der Berechtigtkeit der Zugrundelegung des Bruttoeinkommens untersucht der Verfasser auf Betriebsebene, indem er sich auf drei Varianten eines Produktionsmodells stützt, das Verhältnis zwischen Reineinkommen und Produktionsstruktur. In dieser Frage ist eine eindeutige Stellungnahme notwendig, weil die Produktionsgenossenschaften als Eigentümer ihrer Produktionsmittel ihre Produktionsstruktur auf eine solche Weise wählen um damit das möglichst größte Einkommen zu erreichen. Die auf Grund der materiellen Interessiertheit der Genossenschaft getroffenen Produktionsentscheidungen formen die Produktionsstruktur, deren Gesamtheit sich auf volkswirtschaftlicher Ebene zeigt.

Im III. Kapitel untersucht der Verfasser die wichtigeren Kennzahlen der materiellen Interessiertheit, die bei der Gestaltung der Produktionsstruktur eine Rolle spielen. Da die Aufgabe der Produktionsgenossenschaften darin besteht, der gegebenen Zahl der Mitgliederschaft entsprechende Arbeitsmöglichkeiten und annehmbare Einkommen — auf einem beschränkt zur Verfügung stehenden Bodengebiet — zu sichern, müssen die Genossenschaften hauptsächlich danach streben ihr pro Kopf gerechnetes Bruttoeinkommen maximal zu gestalten. Zugleich weist der Verfasser auch darauf hin, daß »die materielle Interessiertheit die Produktionsgenossenschaften stimuliert, ihr Bruttoeinkommen, sowohl auf eine Flächeneinheit, als auch auf die Arbeitseinheit zu erhöhen«. (S. 97.) Der Verfasser zeigt in einem Modell, durch eine Untersuchung und Analyse einer Produktionsstruktur – die aus einer Produktengruppe von abweichender Arbeitsintensität und Bruttoeinkommen zu bilden ist — die komplizierten Zusammenhänge zwischen der genossenschaftlichen materiellen Interessiertheit und der Produktionsstruktur.

Im IV. Kapitel stellt der Verfasser mit Hilfe einer Modellrechnung die Wirkung der abweichenden Mitgliederdichte der Produktionsgenossenschaften auf die Produk-

tions struktur dar. Auch aus seinen früheren Erörterungen zieht er die Folgerung, daß die Produktionsgenossenschaften — neben der Proportionalität der Aufwendungen von lebendiger Arbeit auf das Bruttoeinkommen je Produkt — auch daran interessiert sind, ihre Produktionsstruktur auf Grund der realisierbaren Arbeitstage auszugestalten. Wenn eine größere Mitgliederdichte vorhanden ist, muß die Produktionsgenossenschaft also je Flächeneinheit ein höheres Bruttoeinkommen erreichen, entweder durch die Förderung von Produkten, die ein höheres Bruttoeinkommen ergeben, oder durch die Steigerung der Aufwendungen.

Auf Grund der bisherigen Kapitel folgt in den weiteren die Untersuchung der Frage, auf welche Weise die volkswirtschaftlichen Zielsetzungen mit den Interessen der Produktionsgenossenschaften übereinstimmt werden können. Die Verschiedenheit der Rentabilität je Produkt wirkt auf die Produktionsstruktur. Diese Wirkung kommt unter einem direktiven Leitungssystem nur beschränkt zum Ausdruck. Neben dem System der Pflichtablieferung wurden auch die Anbauflächen vorgeschrieben, ja sogar die Erfüllung verschiedener Planvorschriften wurde streng kontrolliert. Zugleich bewiesen die Erfahrungen, daß die materielle Interessiertheit der Produzenten, wenn auch nur in kleinerem Ausmaße, ungeachtet der beschränkten Vorschriften zur Geltung gelangen wollte. So stagnierten die Produktionsergebnisse einzelner Erzeugnisse; diese waren im allgemeinen Produkte, bei denen sich die Bedingtheit in einem gesteigerten Maße zeigte. Von 1957 angefangen spielte eher die materielle Interessiertheit eine ausschlaggebende Rolle. Also wurde die Harmonisierung der Interessen die grundlegende Bedingung einer effektiven Produktionsleitung. Durch die Abweichung der Einkommen je Produkt verwirklicht sich die Übereinstimmung der gesellschaftlichen und genossenschaftlichen Interessen. Die gegebenen Daten zeigen, daß die landwirtschaftlichen Preise in Ungarn nicht wertproportional und auch nicht kostenproportional sind. Bezeichnend für die Einkommensverhältnisse ist es aber, daß wenn auf ein Produkt je Flächeneinheit ein größeres Einkommen entfällt, dort auf die Arbeitseinheit weniger entfällt, und umgekehrt. Der Verfasser untersucht endlich die prinzipiellen Fragen der produktionsgenossenschaftlichen Einkommensrechnung.

Im VI. Kapitel legt der Verfasser die staatliche Leitung der Produktionsgenossenschaften dar, und analysiert die wichtigeren Faktoren, die die Effektivität dieser Leitung beeinflussen. Als wichtigste Mittel der Leitung charakterisiert er die Preis- und Kreditpolitik, die Aufkaufspolitik und die Ordnung der Besteuerung. Um die Effektivität zu erhöhen ist es notwendig die Wirkung in eine bestimmte Richtung zu stellen und zwar so, daß die verschiedenen wirtschaftlichen Anreize durch die Preispolitik in eine Einheit zusammenzufassen sind. Eine wichtige Frage ist die Differenzierung des Bruttoeinkommens je Produkt nach Qualität, was eine Anerkennung der zur Sicherung einer besseren Qualität angewendeten Arbeit ist. Eine Differenzierung der landwirtschaftlichen Preise nach Gebiet ist in Ungarn im allgemeinen nicht begründet. Als Ausnahme kann es vorkommen, daß im Kreis irgendeines Verarbeitungszentrums höhere Preise zur Stimulierung der niedrigeren Transportaufwendungen festgesetzt werden (z. B. könnte dies im Falle von Gemüse verwirklicht werden). Zum Ausgleich von ungünstigen Gegebenheiten gibt in Ungarn gegenüber den nach Gebieten differenzierten Preisen die Anwendung von Dotationen oder Steuerbegünstigungen eine bessere Methode.

Im VII. Kapitel legt der Verfasser die Hauptzüge der Reform des Wirtschaftsmechanismus dar und skizziert die Aufgaben, die mit der Weiterentwicklung verbunden sind. Um das Thema besser auszuführen analysiert er die Gründe der Notwendigkeit der Reform. Er weist darauf hin, daß sich die Widersprüche im Preis- und Finanzsystem der Landwirtschaft in den

Jahren, die der Beendigung der sozialistischen Umformung der Landwirtschaft folgten, verschärften. Die relativ große Selbständigkeit der sich ausgestaltenden genossenschaftlichen Großbetriebe wirkte im staatlichen Sektor nicht in Richtung der Selbständigkeit, sondern ein entgegengesetzter Prozeß spielte sich ab: bis zur Mitte der Sechzigerjahre wurde auch die Selbständigkeit der Produktionsgenossenschaften durch eine Reihe von Planaufschlüsselungen geschwächt. Deswegen verminderten sich die spezifischen Erträge der verbindlich vorgeschriebenen Produkte. Zugleich deckte das niedrige landwirtschaftliche Preisniveau bei einem Teil der Produktionsgenossenschaften nicht einmal die einfache Reproduktion. Das zur Kompensierung dieses geeignete, stark differenzierte Subventionssystem war nicht imstande die schwachen Produktionsgenossenschaften auf das Niveau der mittleren, die mittleren aber auf dasselbe der guten Genossenschaften zu heben. (Es ist zu betonen, daß der Inhalt der Unterstützung das Rückerstatten eines Teiles des entzogenen landwirtschaftlichen Einkommens ist, weil ein beträchtlicher Teil davon nicht zur Entwicklung der Landwirtschaft, sondern anderer Zweige der Volkswirtschaft zur Anwendung gelangt.) Infolge der Verschärfung der Widersprüche stieg der Anteil der mit Defizit arbeitenden Genossenschaften zu Beginn der Sechzigerjahre an. Die Leitprinzipien der Reform wurden im Jahre 1966 am IX. Kongreß der Ungarischen Sozialistischen Arbeiterpartei beschlossen. Vom Gesichtspunkt der Genossenschaften aus waren zwei Aufgaben zu lösen: »Die erste: Selbständigkeit in den Entscheidungen bei der Auswahl der Produktionsstruktur und der Art der Bewirtschaftung; die zweite: die Schaffung von materiellfinanziellen Bedingungen zur selbständigen Bewirtschaftung.« (S. 250.) Um eine größere Selbständigkeit in den Entscheidungen sowie in den Finanzfragen zu erreichen, wurden — mit 1966, bzw. mit 1967 beginnend — mehr als 60% sämtlicher Kreditschulden der Produktionsgenossenschaften aufgehoben, und 1968 das Preisniveau der Landwirtschaft um insgesamt 17% erhöht.

Zur Zeit der Vorbereitung der Reform wurde bei der Bestimmung des landwirtschaftlichen Preisniveaus davon ausgegangen, daß das neue Preisniveau zur Ersetzung der bei der Produktion verwendeten Grund- und Umlaufmittel, und zur Entlohnung der genossenschaftlichen Arbeiter — proportional zum Lohn der Lohn- und Gehaltempfänger — eine Deckung bieten soll. Das mit dem Preissystem in einem engen Verhältnis stehende Kreditsystem wurde bei der Regulierung der Produktion auf Grund des Ermessens der Rentabilität wirksam angewendet. Die starke Differenziertheit der staatlichen Subventionierungsreform beeinflußt die Rentabilität der Produktion bei den verschiedenen Produkten und fördert dadurch die gesellschaftlich notwendige Änderung der Produktionsstruktur auf eine wirksame Weise. Die Reform bedeutet einen Fortschritt im Verwertungssystem der landwirtschaftlichen Produkte. Zwischen den Aufkaufunternehmen und den Genossenschaften konnten freiere Marktbeziehungen gebildet werden. Größere Möglichkeiten ergaben sich zur Aufarbeitungs- und Aushilfstätigkeit der Genossenschaften. Ihr Beitrag zur Verwirklichung der gemeinsamen gesellschaftlichen Ziele wird durch den Staat mit Hilfe des Preis- und Steuersystems bestimmt. Die Besteuerung geht zum Teil nach einem angenommenen Einkommen (Bodensteuer) vor sich, zum Teil aber nach der Anteilquote, die von dem tatsächlich erreichten Einkommen ausgeteilt wird. Neben dem Anwachsen der Anteilsquote erhöhte sich in den letzten Jahren die Akkumulation um mehr, als im Genossenschaftsgesetz festgelegt war. Im Laufe der Reform entstanden noch die regionalen Vereinigungen der Genossenschaften und der Landesrat der Genossenschaften, die eine interessenvertretende, koordinierende und informative Tätigkeit ausüben.

Das Kapitel — und auch das Buch — schließt mit der Untersuchung einiger Fra-

gen der perspektivischen Entwicklung der landwirtschaftlichen Produktion, wobei die perspektivischen Fragen des Wachstumstempos der landwirtschaftlichen Produktion, der Produktionsstruktur, des materiellen Interesses, sowie des materiellen Anreizes eine Hauptrolle spielen. Die Modernisierung der Landwirtschaft erfordert eine engere Verbindung zwischen Produktion, Verarbeitung und Vertrieb, was das dezentralisierte System der Wirtschaftsleitung leichter als die frühere Ordnung ermöglicht, indem die gemeinsamen Unternehmungen und die auf Gemeinschaftsinteressen begründeten verschiedenen Kooperationen subventioniert werden.

Von theoretischem Gesichtpunkt aus ist das Werk von János László organisch mit dem die genossenschaftliche Interessiertheit behandelnden Material der Wirtschaftsliteratur von anderthalb Jahrzehnten verbunden. Es ist aber notwendig zu bemerken, daß der Verfasser bei einzelnen Fragen seinen eigenen Standpunkt anderen Ökonomen gegenüber vertritt, die auf der Plattform der sich auf das Bruttoeinkommen basierenden genossenschaftlichen Interessiertheit stehen. T. FERENCZI

TÓTH, A. E.: *A háztáji és kisegítő gazdaságok, földhasznosításuk gazdasági kérdései.* (Приусадебные и подсобные хозяйства, экономические вопросы их землепользования.) Budapest, 1970. Akadémiai Kiadó. 143 стр.

В ходе социалистического переустройства венгерского сельского хозяйства площадь в примерно 170 тысяч га, — главным образом сады и виноградники, — была провозглашена «закрытым садом» и исключена из коллективизации. Часть этих земель послужила для образования приусадебных участков членов кооперативов, а другая часть была передана на пользование общественным хозяйствам. На этой площади имеют участки также и лица, которые не являются членами сельскохозяйственных производственных кооперативов (рабочие, служащие, единоличные крестьяне). Такие «закрытые сады» не были образованы в каждом селе, да и не во всех местностях, в которых, — согласно существующим правилам, — можно создавать приусадебные хозяйства. Величина таких площадей — согласно оценке автора, — достигает 300 тысяч га.

Со времени социалистического переустройства сельского хозяйства мы приобрелизначительный опыт в развитии общественного хозяйства производственных кооперативов и экономической оценке приусадебных хозяйств, а также в использовании заложенных в них возможностей. Значительная часть этого опыта относится к бывшим мелкотоварным плантациям. Однако еще предстоит ответить на ряд вопросов, в том числе на то, каким образом можно наиболее целесообразно использовать эти площади в социалистическом сельском хозяйстве и, соответственно, при каких условиях возможно их использование в рамках крупного хозяйства, в чем заключаются проблемы их использования в виде приусадебных или единоличных участков, какие факторы содействуют или мешают использованиюэтих площадей и какие способы для решения данного вопроса следует применять в настоящем и будущем? В чем заключается причина того, что в одних кооперативах такие сады и виноградники, включенные в общественное хозяйство, являются важным источником дохода, а в других кооперативах их использование является убыточным? Чем объясняется то явление, что одна часть этих площадей с большим успехом используется приусадебными и единоличными хозяйствами, а другая часть этих угодий вообще не используется и приходит в негодность? В чем заключается приичина того, что в ряде сельскохозяйственных производственных кооперативов закрытый сад считается вредным с точки зрения общественного хозяйства, в то время как в других кооперативах существуют гармоничные отношения между общественным хозяйством и приусадебными хозяйствами? Какова перспектива закрытого сада и вообще растениеводства в приусадебных хозяйствах? Все это такие вопросы,

на которые мы в настоящее время можем предоставить гораздо более обстоятельные ответы, чем в 1950-ые годы или начале 1960-ых годов.

Автор настоящей монографии производит попытку путем изучения и оценки международной и отечественной аграрно-экономической и производственной литературы, а также фактически сложившегося положения указать на отдельные вопросы, ожидающие своего решения и наметить возможные способы их решения.

В книге дается исторический очерк о специфических экономических и общественных условиях возникновения так называемых горных виноградников (горных общин чтобы способствовать и пониманию проблем сегодняшних подсобных земельных участков личного пользования. Автор устанавливает, что в социалистической Венгрии с использовать эти земельные участки выгодно в форме приусадебных и подсобных хозяйств.

Социалистические приусадебные и подсобные хозяйства имеют много общих черт с небольшими хозяйствами, ведущимися в лях цеподсобной деятельности в развитых капиталистических странах. Исходя из этого, статья пытается, используя в ажнейшие определения западной и социалистической спецлитературы, осветить новые стороны экономического и производственно-организационного положения приусадебных и подсобных сельских хозяйств.

В развитых капиталистических странах небольшие крестьянские хозяйства, приусадебные и подсобные хозяйства в соревновании с крупными хозяйствами обладают специфическими свойствами с точки зрения их товаропроизводительного и самодовлеющего характера. Они имеют особенно большое значение в использовании рабочей силы внутри семьи для приобретения дополнительного заработка благодаря обладению средствами производства которие в связи с концентрацией, считаются устаревшим и в техническом смысле, но годными для работы. К последним относятся и насаждения, предназначенные для ведения небольшого хозяйства на основе ручного труда.

Коллективизация ранее образовавшихся мелких насаждений (носящих характер «закрытых садов») в экономическом отношении вообще оказалась нецелесообразной. Именно поэтому современное механизированное крупное товарное производство в основном представлено новыми плантациями и насаждениями. Интенсивное крупное товарное производство переходит на площади обеспечивающие более выгодные условия для производительности труда. С развитием товарного производства и товарооборота преимущества рыночного характера крупных хозяйств умножаются по сравнению с приусадебными и подсобными хозяйствами. Производство последних сохраняется на земельных площадях, расположенных близко к дому, на так называемых закрытых садах, лежащих на определенном расстоянии от основного производства. В процессе соревнования в первую очередь понизится их товарное производство.

В крупных хозяйствах только лишь экстенсивнее (например, преобразовав насаждение в пастбище), с пониженным общим налогом или же с увеличенной дотацией можно использовать такие земельные участки. Приусадебные и подсобные хозяйства имеют для этой цели существующие производственные мощности, не полностью занятую рабочую силу и кроме того, они могут использовать такие участки, вследствие умеренных размеров заработка членов семей. Размеры и интенсивность каждого отдельного хозяйства приравнивается во времени, используемом для этого рабочей силой данной семьи. Территориальные запросы, — имея в виду занятость на настоящем уровне и ожидаемом его в будущем, — у членов производственных кооперативов, можно считать, будут выше, по сравнению с другими владельцами вспомогательных хозяйств.

Большое преимущество крупного производства сделало совершенно нецелесообразным единоличное мелкое производство в о пахотном сопровождается поручением. В так называемой «эластичной» приусадебной системе использование земли пользы от крупного хозяйства, в целях обеспечения приусадебного скота необходимым кормом.

Такой специфический кооперативный характер единоличного владения землями и земельными участками более выгоден, чем единоличное использование земельных участков и так называемых закрытых садов.

Личная собственность на земли, понимаемая в более узких рамках, а также пользование такой землей с точки зрения экономического характера, может иметь свой эффект около жилого дома в деревне и в закрытых садах. Перспективно в среднем в государственном масштабе предвидется, что такие земельные участки, которые невозможно превратить в крупно-производственные будут в избытке, по сравнению с ожидаемыми запросами, так как понизится население сельскохозяйственного характера, а повысится его занятость и жизненный уровень. Кроме этого, запросы несельскохозяйственного населения на земельные участки в общей сложности невелики, и в то же время основная линия развития крупных хозяйств заключается в интенсификации.

Закрытые участки земли — сады — характеризуются различными видами использования земельных участков, начиная от самых интенсивных отраслей до необработанных пастбищ. Во многих случаях во многих местах на окраинах отдельных сел имеются такие земельные площади, которые невозможно объединить в крупные земельные хозяйства и поэтому нет возможности для сознания крупного земельного комплекса. Наилучшее использование площаде характера закрытых садов невозможно разрешить на основании единой государственной схемы. Целесообразным надо считать решение этого вопроса по-разному, по отдельным сельскохозяйственным краям (и внутри этого различно в закрытых поселениях и хуторской системе), по промышленно развитым местам, курортным площадям, а также по территориям, предназначенным для дачных мест, то есть для поселений, служащих для отдыха в конце недели. В том случае, если условия рельефа, грунта, а также рыночные условия предоставляют возможности организации рентабельного крупного хозяйства, это также надо принимать во внимание. Запросы на территориальные возможности товаро-производственного, а также подсобного характера ведения хозяйства отличаются от нетоварного хозяйства или же от ведения хозяйства в свободное от работы время. Необходимо также считаться и с дифференцированным уровнем материальной обеспеченности и с состоянием рабочей силы заинтересованных семей. Многовековой пыт более единого ведения хозяйства в горных виноградниках также имеет свою широкую разнообразность. Реально почти невозможно представить, что именно в нашем социалистическом общественном укладе окажется осуществимым единый централизованный способ использования таких земель.

Члены сельскохозяйственных кооперативов в использовании таких земельных участков будут также в первую очередь опираться на общественные хозяйства, а что касается остальных, вспомогательных хозяйств (существующих, как подсобные, обеспечивающие получение дополнительного заработка), то здесь дело могут разрешить разнообразные, более простые формы кооперирования или же именно приобретение для личного пользования небольших сельскохозяйственных машин.

При урегулировании вопроса, единоначальных земельных участков и их использования желательно принимать во внимание описанные в книге существующие условия и предпосылки, а также тенденции развития в этой области.

Domé, Gy.: *A mezőgazdasági termelőszövetkezetek társulásai.* (Объединения сельскохозяйственных производственных кооперативов.) Budapest, 1970. Akadémiai Kiadó. 258 стр.

Распространение разнообразных форм хозяйственного сотрудничества и кооперирования в течение последних лет становится все более характерной чертой развития продовольственного хозяйства также и в Венгрии. Реформа хозяйственного механизма создала благоприятные условия для развертывания этого процесса. Она делает не толь-

ко возможным, но и необходимым развитие кооперирования в области производства, обработки и обслуживания.

Создание объединений, установление хозяйственных связей выгодно не только для участников. Это приводит не только к росту их доходов, но обеспечивает также и лучшее снабжение населения, содействует повышению бюджетных поступлений, следовательно, полезно с точки зрения всего народного хозяйства.

В то же время возникновение и развитие производственных объединений, их существование как новой хозяйственной, организационной формы и тем самым как новой юридической институции ставит многочисленные теоретические и практические вопросы. Изучение и решение последних является общей задачей теоретиков и практиков различных специальностей.

Книга автора о кооперативных объединениях относится в отечественной литературе к числу первых трудов о проблемах совместного предпринимательства социалистических хозяйственных организаций. До сих пор вышло в свет всего лишь несколько статей, трактующих эту важную тему и дающих общую характеристику объединений и сущности их деятельности.

В своей монографии автор по-научному подошла к *правовым проблемам*, связанным с функционированием трех основных типов кооперативных объединений: хозяйственного сотрудничества, совместных товариществ и совместных предприятий. Учитывая также и направление дальнейшего развития, она останавливается и на совместных объединениях производственных кооперативов и государственных предприятий, указывая на необходимость разработки единого социалистического права хозяйственных объединений.

Состоящая из 16 печатных листов книга содержит введение и шесть глав. Прилагается и содержание на русском и немецком языках.

В *первой главе* под заглавием «Общие черты производственных объединений, создаваемых сельскохозяйственными производственными кооперативами и другими социалистическими хозяйственными организациями» автор вкратце рассматривает историческое развитие кооперации в сельском хозяйстве и смежных с ним отраслях, начавшееся с возникновением капитализма. Она отмечает, что развитие межкооперативного сотрудничества, будучи неотъемлемым спутником быстрого процесса концентрации, в настоящее время превратилось уже в мировое движение. Развитие сотрудничества между кооперативами продвинулось вперед и в капиталистических странах, но его подлинный прогресс может развернуться лишь в социалистических странах после завершения преобразования сельского хозяйства на базе крупного социалистического производства. Автор дает сводную картину развития в Венгрии производственной кооперации между крупными отечественными социалистическими предприятиями.

В дальнейшей части главы автор рассматривает ряд правовых проблем, как-то: юридические основы производственных объединений, их правовые формы, характер объединения как правовой институции. Она рассматривает важнейшие предпосылки создания и функционирования объединений. Типы объединений делятся ею на две группы: 1. формы, регулируемые в правовом отношении и получившие признание в качестве самостоятельных типов; 2. формы взаимной поддержки и взаимопомощи, не имеющие производственного характера (например, сбытовые конторы производственных кооперативов, союзы кооперативов). Выбор формы сотрудничества является правом организаций, создающих объединение. Останавливаясь на объединении как правовой институции, автор отмечает, что основные принципы нынешних форм объединений общие, независимо от того, в какой отрасли права они закреплены, в гражданском кодексе или в законе о производственных кооперативах, а также от того, относятся ли они к объединениям кооперативных или государственных предприятий. Таким образом, следует признать равноправными также и объединения, в создании которых приняли участие только производственные

кооперативы. Нынешнее юридическое регулирование еще не придерживается последовательно этого принципа. Обеспечение равноправия способствовало бы распространению кооперативных объединений и, соответственно, объединений кооперативов и других социалистических хозяйственных организаций.

Во *второй*, наиболее объемистой *главе* своей книги, автор подробно анализирует особенности права собственности и имущественного права различных производственных объединений. Рассматриваются вопросы *имущественного пая*, который является условием участия в объединении. Его размер, вид, срок внесения устанавливается организациями, создающими объединение. Пай находится в распоряжении совместного объединения до тех пор, пока пайщик является его членом, и представляет собой основу участия в прибылях и, соответственно, несения убытков. Имущественный пай является таким договорным обязательством, за невыполнение которого нарушитель отвечает согласно общим правилам гражданского права. Автор перечисляет предметы, которые можно считать имуществом объединения. Круг этих предметов узок, поскольку они связаны с производственными целями, и кроме этого ограничен также и исключительным характером государственной собственности.

В связи с особенностями права собственности в совместных товариществах, совместных предприятиях и более простых формах сотрудничества автор анализирует их общие и специфичные черты. Заслуживают внимания ее рассуждения об осуществлении существенных элементов *права кооперативной собственности*. Не менее достойны внимания высказанные в этой главе соображения относительно *разделения доходов одъединений*, образования фондов, несения убытков и взятия на поруки.

В *третьей главе* автор рассматривает внутреннее управление и организационную структуру производственных объединений. Излагаются основные принципы, методы внутреннего управления, означающие специфичное осуществление социалистической кооперативной демократии. Описывает органы выборного и производственного руководства в трех главных формах объединений, излагает их функции и, соответственно, существующие в этом отношении различия между этими формами. Между совместным товариществом и совместным предприятием в этом отношении существует большое сходство. Существенное различие имеет место при более простой форме объединения, которая, будучи менее связанным типом сотрудничества, в организационном отношении не образует настолько замкнутой хозяйственной единицы, как предыдущие формы. Поэтому управление простыми объединениями только отчасти обособляется от создавших их организаций. Управление и представительство обычно поручается одному из кооперативов-учредителей.

В *четвертой главе* автор обстоятельно рассматривает юридическое положение кооператоров и работников кооперативов, занятых в производственных объединениях. Она показывает изменения в осуществлении прав и обязанностей, связанных с членством в кооперативах, у кооператоров, переведенных на работу в объединение. Их трудовые отношения в объединении определяются временным трудовым контрактом. В этом отношении их положение аналогично положению работников по найму в этих объединениях. Автор вносит ряд предложений, которые с пользой применимы как при разработке соответствующих законоположений, так и в практической работе.

Пятая глава, в которой автор рассматривает вопросы материальной ответственности производственных объединений, бесспорно окажет содействие решению возникающих на практике спорных юридических вопросов и совершенствованию существующих законоположений. Вопрос материальной ответственности объединения трактуется, во-первых, в отношении работающих там кооператоров, во-вторых, в отношении состоящих в нем организаций и, в-третьих, в отношении третьих лиц.

Наконец, в *шестой главе* под заглавием «Значение и влияние создания производственных объединений на тенденции сбли-

жения двух форм социалистической собственостни» автор затрагивает несколько весьма важных и в теоретическом отношении вопросов, которые до сих пор не получили окончательного решения. Сюда относятся: отношение государственной и кооперативной собственности; сближение и перспективы двух форм собственности; межкооперативная собственность как категория собственности. Наряду с прочим автор отмечает, что в процессе сближения двух форм собственности на уровне общенародной собственности изменятся и преобразуются не только характер и форма кооперативной собственности, но также и государственной собственности. В Венгрии в условиях новой системы управления народным хозяйством различия между кооперативами, межкооперативными организациями и государственными предприятиями уменьшаются и усиливаются общие черты. С этой точки зрения крупная роль принадлежит таким объединениям, в которых участвуют не только производственные кооперативы, но и другие социалистические организации. Эти объединения с точки зрения их строения и функционирования носят, скорее, кооперативный характер, а с точки зрения их хозяйственной деятельности являются предприятиями. Межкооперативная собственность, — согласно автору, — это особый вид общественной собственности. Она выражает интересы не только одного кооперативного коллектива, а целого ряда коллективов, выходя таким образом за рамки отдельных кооперативов. Более того, в случае сотрудничества между государственными предприятиями и кооперативами образуется смешанная, государственно-кооперативная совместная собственность.

Следует отметить, что Дьердьне Доме взялась за исследование весьма актуальных вопросов главным образом с правовой точки зрения. Но ее книга обращена не только к юристам. Она явится весьма полезным справочником также и для занимающихся теоретическими и практическими вопросами экономистов и организаторов производства, которые в Венгрии или за рубежом, главным образом в социалистических странах, работают над аналогичными проблемами.

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Le capitalisme monopoliste d'état. Traite marxiste d'économie politique. Tome 1—2. (State monopoly capitalism.) Paris, 1971. Editions Sociales. 447 + 447 p.**

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* We acknowledge the receipt of the enlisted books. No obligation to review them is involved.

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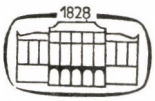

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R. NYERS

HUNGARIAN ECONOMIC POLICY IN PRACTICE

After the 10th Congress of the Hungarian Socialist Workers' Party, the author summarizes the conclusions to be drawn from the resolution of the congress on the previous and future economic policy. It is an important feature of the fourth five-year plan just started that it places great emphasis on requirements of proportionality, while ensuring a certain margin for quantitative growth. Particularly great stress is laid in the new plan on efficiency. As regards economic control, the harmony between the national economic plan and the economic means of regulation must be improved. The democratic features of economic life must be further strengthened.

With the end of 1970 we have left behind the seventh decade of our century, a period of our social development heavily pregnant with excitement and characterized by laying the foundations for the future in many respects. A survey of the major political events of the sixties reveals such facts as the successful socialist transformation of agriculture, the institutional settling of socialist lawfulness, the growth and experience of two five-year plan periods; and current events rooted in that decade, such as the elaboration and introduction of the economic reform, the updating of the development of science, the promotion of socialist democracy in wide spheres of life as well as the re-assessment of the particular problems of women and youth. Of course, unsuccessful initiatives could also be listed, unimplemented resolutions, some almost forgotten, others reducing the value of the positive processes mentioned. Finally, a balance sheet of active and passive items can be drawn up even on the political plane. On this basis, *the political balance of the ten years is strongly active.*

The most important decision of the Tenth Party Congress was *to reinforce the line followed by our party over one and a half decades* thus determining the trend to be followed in policy and in building the society. The trend remains the same, and this is a good thing since it is the highest achievement of Hungarian communists against both the sectarian-dogmatic "radicalism" and the right-wing distortions. But what is the political content of the statement that the trend remains the same? To a superficial reviewer it may even suggest that "everything has remained unchanged", particularly to those who underestimate the importance of the slogan: "continue everything but better". But

this must not be underestimated. Further, the interpretation that "everything has remained" would be a vast misunderstanding of the substance, since our policy, particularly since the 9th Congress, has been characterized not by stagnation but precisely by *progress*, both in politics and in the development of economic, cultural and scientific life. Therefore, the confirmation by the 10th Congress of the policy pursued till now can mean only one thing: "We proceed on the way which has been followed up to now". It is the strategy and tactics of this policy that are reflected in the resolution of the Congress.

The Congress has summed up the manifold tasks of our party in the slogan: "*Continue building socialism on a higher level.*" How does this slogan reflect development?

— First, it expresses the view that what we have achieved is not yet socialism in its completeness. We still have much to do until we can declare that socialism has been built up in our country. True, the foundations of socialism are strong and determinant as regards the possession of the means of production, even as regards the ownership of the decisive part of the means of production. However, the socialization of landed property is still going on with the gradual spread of the socialist cooperative ownership of arable land. It is similarly a fact that the state, economic and cultural relations are of a socialist character; yet they need substantial *development* for the *full accomplishment* of this socialist character.

— Second, although indirectly, the slogan expresses the concept that all our attention and efforts must be focussed on the society of *socialism*, and that the preparation for communism has not yet been put on the agenda. It would be impossible to try to overtake our age and run ahead or, indeed, jump over a historical stage of development.

— Finally, it expresses that we continue building socialism on a higher level than earlier (of course, this higher level has not been achieved on the day of the congress: partly we have attained it, partly it must be still reached), that is, we must know to carry on politics, organize the economy, and spread culture more efficiently, more exactly and in a better way. On this higher level the circumstances are new, it is more difficult but also more important to keep the balance; several old methods or means will become unusable and new ones must be found in their place. Thus, the higher level causes many problems, but expresses, at the same time, the progress and meaning of constructive activity.

Experience has proved that the development of socialism is not only a growth process but also a process in which change and growth are interlinked. The institutional framework of society changes, the social situation changes, and so does the content of human activity. From time to time changes mature within science and technology, or in international politics; changes are induced by the emergence of new human needs and by the development of social coexistence. It is one of the major dilemmas of building socialism, becoming

decisive in a given period, how to secure the continuity of development, and the change in methods and institutions mature for change?

The latter organically follows from the former, the two complement each other, though, from the point of view of development, the emphasis was on another aspect at the time of the former Congress, and is on another one now. In our resolutions of four years ago a great part was played by the decisions on the development of the actual system of institutions of socialism, by the new system of economic control and management, by the system of cooperative land ownership and by the new system of conditions for democracy in industrial enterprises. Our present resolution complements the institutions of socialist democracy in the field of government activities, mainly by the part played by the councils, as well as people's representations and organs of autonomy. The main emphasis is laid, at the same time, on the improvement in the efficiency, in the "quality" of *human action* in every field of life. This is considered the main condition of the development of the whole system of socialism in the process of construction. The political motto of the Tenth Congress could be: to improve actual common activities and individual performance, to live better in a socialist way and to know how to act in a socialist manner within the given framework of institutions, to *increase economic efficiency, and to raise socialist public morale.*

Short retrospect and present situation

Considering the rate of economic growth we find that the national income of Hungary increased in the period 1961—65 by 22 per cent and in the years 1966—70 by 39 per cent. The fourth five-year plan provides for a growth of 32 per cent in 1971—75. Dynamism of the economy is thus increasing (comparing the first five-year period with the second one the production of national income increases). Why then is the growth estimate of the current five-year plan lower? Does this not point to exaggerated caution? No, it does not. The explanation must be looked for in the accelerated restoration activities, following the grave disproportions which emerged in the fifties, in a stricter adherence to the principles of planning and in the fact that the "planability" of the intensive development ahead of us has not yet attained a high degree. At the same time, higher requirements are raised as regards the plan in respect of proportionality and equilibrium. Proportionate growth alone should be planned, and it should be realized under balanced conditions. This is what the planners have done, this being the only responsible attitude on their part in the given case. Of course, the plan is not yet the reality of the future, it does not mean limitations as narrow as not leaving scope of movement for implementation. The concept of the fourth five-year plan strongly regulates the *equilibrium* conditions of growth, yet the plan assures a wide scope of movement for growth and the limit is drawn rather above than below the planned level of growth.

If we examine to what extent national economic planning succeeded in determining and regulating the rate of economic growth in our country in the past, we may establish that this occurred relatively better in the annual plans, but hardly in the five-year plans. This is well illustrated by the "legendary" lag of the first five-year plan or by the great overfulfilment of the second three-year plan. The second five-year plan provided for a 36 per cent growth in national income, however, fulfilment was only 22 per cent, that is, one third lower than the target. In the third five-year plan, the opposite happened: the plan target was a 22 per cent growth and we attained 39 per cent. Of course, the latter is an essentially better form of deviation from the plan, but not ideal either. What is behind these deviations? Fundamentally the fact that we discarded in economic policy much earlier—in 1957—the one-sided "quantitative approach" and made steady efforts to repress it; but it still continued to work in practice. Since, for a long time, the national economic plan transmitted to the enterprises almost nothing but quantitative requirements. Thus the quantitative target dominated in practice, and there was a tendency for upsetting the proportions. The old plan mechanism simply did not permit to "break down" proportionality to the enterprises. And as regards the Central Planning Office and the government, they acted each year with the aim of restoring equilibrium in the annual plans, frequently deviating essentially from the five-year plans. Thus, in the framework of income distribution, based on the five-year plan and the production conditions set by the annual plans, the problems of the efficiency of the economy and of management were pushed to the background.

Thus, putting the problem sharply, practice has raised the question: should the plan regulate mainly quantitative growth, leaving proportionality to disciplined fulfilment, or conversely, is it the proportionality requirements that must be efficiently transmitted to the economic units with the aid of strict regulators, leaving a certain field of movement for growth? Our new system of economic control and management has adopted the latter concept. For the fourth five-year plan this means: if the enterprises are capable of achieving greater economic growth and income while observing the planned proportions, they have a green light (up to a certain limit, of course), and this may add up perhaps to bigger growth than planned even on the national economic level. Thus, *whether the plan for growth can be overfulfilled*, is an open question of the fourth five-year plan.

From the viewpoint of national economic proportions it is worthwhile to have a look at the two main sources of income, i.e. industry and agriculture. The lag in national income between 1961 and 1965 came about in a way that industrial output increased according to the plan: the target was 49 per cent for five years and fulfilment 47 per cent. Agricultural production, however, increased instead of the irrealistically high target of 23 per cent slower than

would have been possible, by a mere 8 per cent; the growth proportions were nearly 6 : 1 in favour of industry. In the period now ended, between 1966 and 1970, both branches of the economy increased according to the plan. Industrial output by 35 against the planned 33 per cent, and agricultural production by 16 instead of the 15 per cent target. The relative growth in favour of industry was 2 : 1 in this five-year period, not only in the plan but also in reality. With the proportion of 6 : 1 only 60 per cent of the growth in national income could be realized, while with the one of 2 : 1 the target could be overfulfilled by more than 50 per cent. Of course, this is only one of the interrelations which must not be overestimated, but it shows that our *economic growth depends still considerably on agriculture*. In fact, the efficiency of industry is in all probability closely linked with agricultural output. Therefore, the fourth five-year plan provides for growth rates in the two main branches which ensure that the approximate 2 : 1 ratio should be practicable. This means that industrialization will be continued under the fourth five-year plan as a *proportion maintaining* industrialization. At its present level of international competitiveness, the Hungarian industry can well meet the requirements of its leading role with these relative development proportions.

If national economic *efficiency* is examined, the past ten years show an improvement, though in this area we are still much lagging behind the leading developed industrial countries and certainly also behind our own possibilities (which are, as a matter of fact, more limited than those of many advanced industrial countries). National income per employee — that is, the social productivity of live labour — increased during the period of the second five-year plan by 23 per cent, during the third one already by 30 per cent, indicating that from a "job-creating" economic policy we are gradually changing over to a policy of raising productivity. It is characteristic, particularly for the last three years (1968—70), that production on a national level involved relatively smaller material inputs. In industry, between 1966 and 1970 production per man-year increased by 20 per cent and per man-hour by 33, the difference being explained by the reduction in working hours. The 16 per cent growth of agricultural production took place with a decreasing employment, thus the exclusive source of growth here was rising productivity. For a realistic assessment of this result, we have to consider the great capital intensity of modernization which made this rise in productivity possible.

What does the fourth five-year plan imply in this respect? The requirement of efficiency increases, the *importance of productivity among the sources of growth is showing a continued upward tendency*. The growth rate of both total and industrial employment is diminishing, agricultural employment decreases also in absolute terms, only the services in the broader sense continue to increase their staff. It is one of the major government tasks to promote that industries and enterprises should adapt themselves in a rational manner (that

is, in advance and not after the event) to the labour situation described; this is one of the decisive criteria of increasing efficiency. But there are also great reserves for increasing efficiency inherent *in the better utilization of existing capacities.*

The economic efficiency of new investments has hardly improved. This is a weak point in our economy. We have tried many measures in this field but, we must confess, with little result in comparison to our efforts. The cause of low efficiency is that actual investment plans exceed the funds and the capacity which can be allocated to this activity. It is a characteristic feature that, although investments are mounting in both absolute and relative terms (in 1961—65 21 per cent, in 1966—70 24 per cent of national income was accumulated), they always seem to be in short supply. The efficiency of investments has much improved lately in the sense that the technological level of the new projects is generally up-to-date in the planning stage and, with few exceptions, investments are in fact directed towards the development of efficient activities. Yet a large part of the increase in efficiency "gets lost" in the period between designing and putting to use. Projects, the completion of which takes in our country five or six years, are frequently put into operation in more advanced countries after two or three years of construction work. This slow completion ties up the means and technological capacities; if rapidly developing technologies are involved, the economic effects of serious obsolescence are sometimes unavoidable under such conditions.

In what direction should we look for a radical improvement in investment activity? I believe we have already tried the way of increasing the volume of investments and also the one of drawing off the financial means from relatively small investments and shift them to the major ones, with the alleged aim of "concentrating investments". The first could not be implemented for lack of funds, while the latter proved to be a pseudo-concentration, and with the implementation of the reform we had to abandon this course. We have also begun to *increase construction capacities* at a particularly *fast rate* and wish to continue with it since it is really a *necessary* and good course. But however decisive it may be, it seems not to be sufficient in itself to increase efficiency. I think that, apart from further increasing construction capacities, there are two possible ways for substantially increasing the efficiency of investment; First, *the concentration of the "government will"*, that is, the investment policies and practice of the many ministries and authorities (only these and not more) must be controlled, at least for a transition period, from one centre, the National Planning Office. Secondly, the whole field of investments should be *subjected to economic control, essentially to monetary control,* since for the majority of investments there is no forint control in merit today and things are only acknowledged after the event. For a part of investments the principle of "approval of objectives in physical terms — free disbursement of forints" still operates

and may possibly upset the desired proportions within the economy. We have got now the means in our economic policy and economic control, which enable us to liquidate gradually and adequately this twenty-year-old chronic problem.

The aim of economic development: growing welfare

The capacity, in terms of labour, of the Hungarian economy increased under both the second and the third five-year plans. Between 1966 and 1970 the number of active earners increased by 7 per cent instead of the planned 4 to 5 per cent. Thus, the proportion of the economically active population increased from 46 per cent to 48—49 per cent. The obligation of society towards dependants significantly increased in five years, though the ratio of dependants in the stricter sense diminished. The number of inactive earners (pensioners, those drawing various rents) grew in five years from 0.9 to 1.4 million, their ratio is now 15 per cent within the total population against the earlier 9. From the viewpoint of public welfare, both the growth in social employment capacity and in the capacity to maintain the dependants is a significant and positive phenomenon.

If per capita disposable personal real income is taken for a scale of comparison, it grew 17 per cent in the second five-year plan period, 36 in the third and the estimate of the fourth five-year plan is 27 per cent. Since the index number of real income reflects in a summary form the change in proportion between earners and dependants, the increase in earnings and the changes in grants in kind, the increase in real wages per earner are of particular importance in practice. Real wages increased in the second five-year plan period by 9 per cent, by 18 in the third and the same figure is planned for the fourth five-year period. According to our political target, the rate of increase in real wages accelerated in the period of the reform from the earlier annual average of 1.8 per cent during the second five-year plan period to a rate of 3.7 per cent p.a. during 1968 to 1970.

An essential improvement has taken place in the possibility of spending the income on the purchase of commodities, particularly on foodstuffs and household articles, but also in respect of industrial articles in general, though the vestiges of the earlier "shortage economy" could not yet be completely liquidated. Performance in residential construction over the individual plan periods also shows a rising trend.

Between 1961 and 1965, 282,000 flats were built in the country, between 1966 and 1970 327,000 and the 1971—75 five-year plan provides for the building of 400,000 new flats. If the plan is carried into effect, the 15-year housing plan worked out for the years 1960—1975 and the target of one million flats will be fulfilled.

All these show that in the course of the past two five-year periods *the material interest of the working people has significantly grown* and become more direct, and it is likely to increase in the course of the next five years as well.

Let us finally consider the problem of *equilibrium*. If we ask the question whether, considering a longer period, the equilibrium of the Hungarian economy is improving from the viewpoint of the main factors, we may answer that a gradual slow but perceptible improvement may be expected. The process is taking place amidst fluctuations, the curve of development is deflected from the trend line sometimes by transitory setbacks and on other occasions by improvement which cannot last. But longer-term *tendency* undoubtedly points to an *improvement of equilibrium*.

No doubt, the external equilibrium of the national economy has been improving, though it has not yet attained a lasting state of balance. Looking at the years 1966 to 1970, in the five years exports increased by 52 per cent and imports by 47 in comparison with the rather passive base of the preceding five-year period. Thus, the situation shifted in the direction of equilibrium. In the years 1961 to 1965 4.6 per cent of imports had no export cover, while in the years 1966 to 1970 this was reduced to one per cent. It is by far not immaterial whether we consume the import surplus or invest it into the economy. The former promotes the future reproduction of the imbalance, while the latter its future liquidation (provided, of course, that the investment is efficient). In recent years a smaller part of the import surplus has been consumed, the major part served the growth of the economy. In connection with external equilibrium it must be observed that future equilibrium will be more difficult to bring about, because of our growing international financial commitments and the sharpening competition on the capitalist markets.

The internal equilibrium of our national economy also shows improvement. The volume of supply on the consumer market is keeping pace with the rise in the income of the population, the pattern of commodity supply has fundamentally improved as regards foodstuffs and household articles, and in respect of other industrial articles it is better adapting itself to the demand — despite transitory difficulties. The tendency of producing unwanted surpluses has favourably changed and such stocks are diminishing. Trade in capital goods has been reorganized on a commercial basis and this has not only brought to an end bureaucracy in the distribution of products but resulted in gradual improvements in the supply with materials and fittings as well. Thus, the change is positive in this field too. However, equilibrium has not improved on the investment market and this unfavourably affects both the consumer market and that of producer goods as well, rendering difficult the future reproduction of equilibrium. In the final analysis, of course, internal equilibrium cannot be rigidly separated from external equilibrium, particularly not in the case of Hungarian national economy, since in our country 25 per cent of

final product consists of imports, and 25 per cent of the final output must be exported again and again.

Summarizing the lessons of having looked into the past ten and the future five years, it will become unequivocally clear what *primary* economic factor *policy* means, particularly in a socialist society. The serious difficulties of the second five-year period could be surmounted because our party honestly faced the problems of those times and correctly established in its political analysis the interrelations of the economic phenomena; it was able to rely on economic science and did not close its eyes to so-called unpalatable truths. Moreover, from the viewpoint of economic growth a decisive factor is the international political situation, our good cooperation with the Soviet Union and the other socialist countries, and the development trend of world trade. We have "to be in step" with this, too.

Besides, the lesson can also be drawn that it is no easy matter to bring about balanced growth with the system of means of socialism either. Central planning is a huge resource, but it does not provide an automatic guarantee for equilibrium, because the economic laws — with the law of value among them — objectively exist, and if planners do not take them into account, for whatever good intentions, this will be detrimental to the plan and not to the economic law: the economy will develop in another way than desired. Those in control of the economy must find the *optimum of growth and equilibrium*, and they have to deal with the *changes in structure as practically decisive factors*, including here the structures of production, consumption and investment as well. Structural planning is a huge task of socialist planning, but a huge pitfall too; in this area it is easy to tumble, but we cannot afford any longer to fall, once its importance has been recognized.

In the final analysis, the development of the ten years have been certainly positive. The growing economy enables us to allocate more and more resources for improving the living conditions of our people, not at the expense of the future but decisively from the source of increased efficiency. We have to recognize this development; its political significance is immeasurable. But people always *look forward and strive ever higher*, in the economic field as elsewhere. In addition, we must be aware of the fact that by international comparison our level of economic development is not more than moderate (and probably the same holds true for its rate as well). Thus, our task is not a small one. We must not only keep our position within the hierarchy of countries — itself not an easy matter — but approach also those ahead of us. This is even more difficult, but it is a necessary and unavoidable task of the future.

What is the next decisive task?

Recently it has been frequently mentioned that the Hungarian economy has left behind the extensive stage of growth and is entering the stage of inten-

sive development. It has been stated, furthermore, that we belong to the countries with a moderately developed economy. From these two statements the general target of development follows: our economy must be made capable of intensive and dynamic growth, of attaining a high level of development. This is no easy task, nor can it be attained in the short run.

Obviously, it is not a matter of a single decision to step from our present-day state into the desired conditions. But the general objective must be attained; for this purpose a development-oriented economy is needed as well as a social environment and public attitude which realizes the social consequences of economic development and "reacts" positively to difficulties, — that is, its criticism is not directed against development, does not get stuck with past values, but is oriented towards the requirements of the future. For the time being, neither of the conditions is within our reach to any sufficient extent. Both the approximation of the general objective and the promotion of the multitude of economic tasks require the strengthening of the *decisive link: the improvement of economic efficiency.*

Why is economic efficiency of primary importance? Because in the case of intensive development, in view of the narrowing of other economic resources, this becomes the main source of growth. Extensive development started at an excessively forced rate and in a forced manner at the time of the first five-year plan; efficiency had thus a subordinated role. The impact of this situation could be felt for a long time, and the "accumulated" lag in efficiency still persists in wide sectors of our economy, in industry, agriculture and the services. Thus, for a dual reason, efficiency comes now more into the foreground than before, and will retain its paramount importance in the future as well.

The absolute and relative contraction of our economic resources becomes perspicuous. Land, as the object of economy, has been gradually on the decrease for a long time already; a part of land of inferior quality had even to be put back again to extensive cultivation, since yields were lower than intensive inputs. The growth in the labour force is small today; relatively speaking, this source is not expanding either. In addition, the relative overstaffing originating from earlier years still can be frequently found with all its detrimental effect on efficiency. The dynamic growth of consumption exerts a growing pressure on the volume of production and on its pattern; this makes it impossible to help economic growth with the aid of increasing the rate of accumulation.

Towards the end of the period of extensive development, in the mid-sixties, signs of the intensive stage of advance emerged in the Hungrian economy. The lack of resources and economic means started to exert an ever growing pressure, there was already a relative shortage of investment possibilities and a relative scarcity of liquid assets. Foreign exchange became increasingly scarce, not because of neglected exports or excess imports but owing to the low degree of economic efficiency. Yet, amidst great scarcity of resources and

means, there were several facts to prove that both resources and means were utilized at a low degree, that there was *simultaneously a shortage and a wasting of resources*. The increase of economic efficiency, if it is considerable, may have a twofold positive effect: it may become a process simultaneously creating additional resources for the economy and one relatively saving them. It logically follows that raising economic efficiency has become a key problem for the intensive development of the economy.

What do we mean by the concept of economic efficiency and how do we assess it on national, industrial and enterprise levels? The system of evaluation is still under examination and *discussion* but it is obvious already that *efficiency cannot be summed up in a single indicator*, since, as regards its substance, it is a complex matter, to be set against several criteria. Efficiency is thus a *qualitative notion*, the degree of which can be evaluated by qualifications only. Qualification should essentially solve the summing up of three criteria. One is the success of economic performance (gross or net income in comparison to input), another is the technical efficiency of performance (utilization of a given technology), and the third is the degree of competitiveness (capability of adaptation to the present and future market, to the technical and profitability conditions of the future). From the point of view of enterprise and branch efficiency the first and basic condition is profitability; efficiency is a notion not substituting but expanding it.

Where are the reserves in our country for efficiency? Since we have to deal with a complex activity in the case of enterprises and industries as well as in that of the national economy, efficiency depends in all three cases on two factors: 1. *on the efficiency of the various "parts" and partial activities;* 2. *on the internal proportions and structure of these activities.* According to general opinion (which can be confirmed) there are ample possibilities in our country to increase the efficiency of the "parts"; wherever these exist, they must be used to a considerable degree since this will eventually result in higher national economic efficiency. It is, however, similarly obvious that by merely increasing the efficiency of the "parts" we can hardly (and later even much less) achieve a satisfactory increase in national economic efficiency. *Changes in structure must be increasingly resorted to* as a means to raise efficiency. The tool for this *is selective development policy*, which we wish to employ more purposefully and on a wider scale than hitherto.

What should the concept be relying on which the changes in structure may be carried out? According to our conception now and in the coming next years *selective development* should be directed and implemented mainly to the *improvement of the product-pattern*. The tools for this are directly in the hands of enterprise management and they could not be elsewhere; it would be needless and incorrect if government bodies tried to act instead of enterprise managers. The state can and does exert direct influence on the improvement of

the product pattern in two ways: one is the limitation of reimbursement for losses and setting conditions for such reimbursement; the possibility for such action to be taken is given by the fact that half of the round 80 billion forints of government revenue from profits, some 40 billion forints, are now spent on export subsidies, production subsidies and tax exemptions. The second is to substitute imports for the productive activities showing heavy losses and later even those showing smaller losses. A part of the national economic concept is also to *improve the pattern by branches of production* but this must be carried on in a natural, and not a forced manner. This means that in the present stage we develop the structure *by government investments, by giving preference to more efficient branches* and not by withdrawing social capital from some of the branches. For the time being, foreign trade is not forcing the Hungarian economy to such action; nor are we sufficiently "open" for starting such a process smoothly. Even international cooperation exerts its influence rather on the "micro-structure", and is hardly felt in "macro-structure".

Thus, the development of the product pattern is influenced more and more from two sides. First, by developing new products and reducing the production of products which show a loss. Secondly, as regards branches, the change in structure is influenced by the selective channelling of additional investments, and not yet by freezing or withdrawing capital. The latter is a task of the future (though not of the too remote future); preparations must be made for it presently in national planning, and the development of international integration is one of the major tools promoting it. The state must increasingly concentrate attention to improving the branch pattern, both by securing the efficiency of "expansion" and by the necessary regrouping of social capital.

More efficient economic policy and economic mechanism

The past three years were a time of great test: a test whether the combination of central control and local initiative contained in the earlier resolutions on the economic reform can be put to practice. It was a test for trying whether it was correct to rely essentially more than earlier on local initiative in economic life, if we abolish the system of directing "from above" enterprises and councils in every matter, if we alter the role of central planning from merely and strictly "keeping a firm hand" on the economy mainly to stimulating development conforming to the plan.

Experience has proved that if, *within the framework of the centrally guided and regulated economic order, we grant the economic units the possible genuine autonomy and the related responsibility, this will be to the benefit* and not to the detriment of *planned growth*. It has been proved that we need not be afraid of, nor be anxious about, the national economy becoming dominated by human narrow-mindedness and irresponsibility, because, even if erroneous or faulty

activity can be frequently found, as a mass phenomenon and "on average" (to use this undeservedly belittled expression) *the responsibility necessary for autonomy exists in both the workers and the executives.* Autonomy is, of course, accompanied by difficulties of the change-over, yet it continuously stimulates the acquisition of greater knowledge, increases initiative and more considerate planning; and puts an end, as it were, to bombastic, twaddling, demagogue behaviour, and it unmasks passivity.

This is why the party congress approved of the fundamental features of our system of economic control and this is why we continue to build our economic policy on the organic linking of central planning with the market mechanism. To increase the efficiency of control requires in the future both that planning should be improved and that the market mechanism should further develop.

If in the light of experience and relying on political and economic requirements we reflect in what respect should national economic control be strengthened and advanced, it seems that we have to act in the following four directions:

The consistency of the national economic plan conception and its co-ordination with the economic means of regulation should be strengthened. This is a requirement of development since we cannot assume that at present we are capable of assuring better co-ordination than we created in concrete decisions. With the development of planning this can be also improved. But, what is perhaps even in greater need of strengthening is the awareness of the unity of plan objectives and regulatory normatives in the course of implementation, awareness of the fact that the central interest is expressed by the two together and simultaneously. There are many people who have only vague ideas about the substance of the concrete economic regulators and from some of their manifestations one may even conclude to such opinion that the production and welfare targets are the "plan" and the economic regulators mean the "market mechanism"; and on this basis some of them take the field for relaxing the economic regulators. It is against these that we must strengthen the awareness of the fact that the *plan targets and the means of regulation are combined expressions of the national economic plan, that is, of social interest.*

— *Both in planning and in control, efforts should be made to apply and enforce correctly and in a harmonious manner the "production principles" and the "welfare principles".* The production principles dictate that demand for products should be met by increasing economic efficiency. This requires technical progress, a better utilization of fixed assets, a differentiation of earnings according to work; it requires, furthermore, that prime costs and fair profits should be recovered in prices, and that growing productivity should provide a basis for a rise in wages. The welfare principles, however, demand that living standards should be regularly raised, that equality between social classes and strata should be attained, together with a gradual equalization of family in-

comes, with the objective that income differences should reflect differences in earnings only. The armoury of welfare objectives is: raising of real wages; increasing social benefits, mainly those in money; regulation of the price level; development of the social policy and of the health service. *In economic policy both must be asserted*, at all times, in case of conflict neither can be subordinated to the other, *both must be brought to a common denominator*. A communist policy must not be a partisan of mere efficiency, nor must it approach things purely from the welfare angle, since economic efficiency under socialism equals future welfare.

— In practice it is mainly the problems of income-differentitation or equalization, as well as consumer prices where welfare policy and production policy occasionally conflict with each other. Related to income regulation *the distribution of wages (fixed and moving earnings) must be judged mainly from the aspect of production policy*. It follows that *difference between good, average and poor performance must be increased and wages must reflect qualification* (but differences between leaders and subordinates need no longer be increased, the target may be a reproduction of the present ratios). However, *as regards the distribution of income by classes and families, equalization might be the unequivocal objective*, thus the situation must be viewed from the angle of welfare policy. It is, however, more difficult to take a stand in principle regarding prices. Welfare policy has, and will have, a decisive role in the central determination of prices for fundamental articles of mass consumption (about 50 per cent of total consumption); but this role, though decisive, cannot be exclusive because production policy demands with respect to these products that a certain harmony should exist between production costs and prices. If these prices must be adjusted, this can and must be done only with a view to welfare aspects. The situation is different in the case of free prices; the welfare points of view cannot be asserted for individual products, only for the average of products, that is, by subjecting the price level to the national economic plan. This means that *the price system cannot be an exclusive tool either of production policy or of welfare policy*.

— *National economic planning must make advance in structural planning*, eliminating the danger of subjectively well-meant but unfounded decisions that always emerge in the course of such work, and we can never cherish the illusion to have conquered it once and for all. (Incidentally, subjectivity frequently appears under the mask of objectivity.) *To promote structural development is a basic and increasing task of national economic planning*. The task of the plan is to *show the direction* for economic activity in matters of structural changes. The working out of plan-alternatives for political decisions should be linked most purposefully with changes in structure.

— *To raise the level of enterprise management and to develop enterprise planning is also an urgent task*, mhich must not be considered as a campaign,

but as a process. Sometimes it might be complemented with an accelerating campaign, should the necessity arise. (Such a campaign is, e.g., the working out of enterprise five-year plans, going on now in the enterprises. This is the first occasion that a work of this kind is going on in our country in the autonomous scope of authority of the enterprises and with their responsibility.) Enterprise management faces two big tasks in our days. One is to get better acquainted with the market of the enterprise and a high-standard prediction of the future market; the other is the up-dating of organization, including the reform of work, technology, and administration, which is needed in many of our enterprises. As regards the standards of enterprise management, an increasing requirement will be to establish *an international outlook*, since perhaps the greatest possibility for modernizing organization is, if management "confronts" its own enterprise with top-ranking foreign ones.

To what extent and in what respect is it correct to leave scope for a further unfolding of the market and of its active influence in the Hungarian economy? In principle, the answer follows from the substance of the economic reform: to the extent we can increase thereby our efficiency according to the objective of the national economic plans. Both the possibility and the need for it exist in Hungary. What must be restricted in certain cases is not the role of the market, since this is not greater but somewhat smaller than necessary. But *efficient limits must be set to unprincipled and dishonourable misuse of market possibilities* by unscrupulous people and in a concealed way, in the era of directive planning, and more openly in the era of enterprise autonomy. Further evolution of the market must be promoted with the aid of the following measures:

— Where possible, the effect of the market demand on the pattern of production of consumer goods must be further enhanced. Particularly the mediating role of trade should be improved, and the direct contact of productive enterprises and cooperatives with consumers stimulated. This is a required step for eliminating shortages of goods and a remedy to prevent their recurrence.

— Commercial methods in the producer goods trade must be further developed; the same holds for cooperations. Overdimensioned cooperation can be reduced and the continuity of production is also better served if such contacts become commercial transactions and cease to be cooperation relations lacking commercial methods and conditions. The problem of "reserve-capacity in production *versus* commodity reserve in warehouses" also awaits settlement by branches, according to commercial interests.

— In the interest of implementing objectives of the national economic plan, competition among enterprises can be further widened, including competition among trading enterprises, competition between trading and productive companies, competition between imported and domestic products, and

competition among productive enterprises in non-monopolistic branches. With the given state regulations competition cannot become a competition among capital; competition in Hungary does not endanger the existence of enterprises, its substance is the competition of products and services for the consumer. We cannot set as an early objective that the present "sellers' market" should become a "buyers' market" — this is absolutely clear; but it is both possible and necessary to aim at competition among products and services which is wider than the present one, both in trade and in the production of consumer goods.

— The form of competition established recently must be developed where the state induces competition among enterprises with a definite economic aim. This is a product of the new economic mechanism. It has been successfully used by the Ministry of Foreign Trade and the Ministry of Metallurgy and Engineering when they are calling for tenders in the case of export deliveries (sometimes the same procedure is used among domestic enterprises for the allocation of imports), and then enterprise offering the best terms in respect of price, quality and date of delivery, or asking for the smallest subsidy, obtains the order. Similar measures are used by the Ministry for Agriculture and Food as well as by the Ministry of Light Industries, the former in the case of large-scale pig breeding, the latter in the case of the reconstruction of the textile industry: government investments are distributed by tender among the competing enterprises.

Relation of economic policy to the development of ecenomic democracy

It follows from the stand taken by the congress that *the intensification and extension of socialist democracy must be continued in the economy as well.* In these days, development of socialist democracy supports the socialist ideals in everyday life and, though it may leave some room for petty-bourgeois views too, the latter can be fought only in this manner. It is rather a promoting than a retarding factor in co-ordinating the national economic objectives and the interest of working communities. For the moment it sometimes may render administration difficult and slow down the settling of certain problems, since conflicting views must be confronted, and arguments and counter-arguments must be discussed which have been perhaps carefully weighed at an earlier date by those preparing the decision; information of the public opinion must be first thought of now when the leader would like to take immediate action. Even in view of these facts it should be emphasized that *democracy*, if employed not in a formal way, *develops in the long range the most important force of production, i.e. the working man broadens his economic outlook, improves his capacity to act.* This is why the program of developing democracy has been built into the economic policy of our party.

If we look back to the past four years, we feel it proved that the democracy of economic life has developed and is in the process of further development. The evidence may be provided mainly in the following respects:

— The realization of enterprise autonomy has decisively improved the system of conditions for democracy in the plants. Where they could make use of it, the workers obtained the right of having their say mainly through the trade unions — in matters of merit in labour, social and cultural affairs. The safeguarding of the workers' interests by the trade unions has become more efficient and factual. In matters important for the workers, the employers and the organs safeguarding the interests of workers — the ministries, trusts and enterprise management on the one hand, and the trade unions (branch, territorial and enterprise organizations) — have become real partners.

— In cooperative democracy, advance can be observed in the rational separation from each other of the rights of self-government deriving from membership and the fellow-workership relations; which makes both rights and obligations clearer. In agricultural cooperatives it was a new step to introduce continuous remuneration, the activation of cooperative control committees and the democratic creation of cooperative alliances.

— A great part of the economy has come under the control of public opinion. Economic problems obtain incomparably greater publicity in press than earlier; the number of confidentially treated subjects has diminished, and generally the information of the public is improving.

— The consumer wants to put in a word and is being increasingly heard in public life. Enterprises care more for the information of consumers, by making them acquainted with the properties and use of new products; the testing of commodities has become institutional; and there is much greater possibility for expressing the consumers' interests and opinions. (It should also be mentioned, however, that in certain questions the views and opinions of citizens approach the problems in a manner which represents the consumers' interests in a somewhat exaggerated way.)

— The decisions and initial steps aimed at developing the economic self-government of the local councils have already started a healthy teeming in the life of towns, though the full evolution of autonomy will take longer time. There still are several difficulties which will have to be surmounted until it is wholly implemented — particularly in the villages.

— The sense and substance of democracy in the economy *is to help in concrete economic problems the clarification of real interests and their correct ranking*, to enforce an equilibrium of interests in the preparation of the decision or in the decision itself which will autonomously prohibit incorrect decision-making and eliminate the danger of conflict deriving from such decision.

What are the experiences of the democratic clarification of interests in economic life? Experience has shown that, where interests can be clearly

defined they obtain already proper representation nowadays and balanced decision is generally brought, accomodating the interests defined to the satisfaction of the parties concerned. Conflict in economic life can be mostly found where, for some reason or other, the definition, the clearing up of interests has not yet been successful.

What is the situation with individual interests? Individual interests are always clear; in the individual actions (while working or purchasing) the individual can represent himself and can do so in the framework of certain social (state and trade union) safeguards. Safeguarding the interest of individuals and the feeling of security are extremely important and it follows from the spirit of socialism that this must be secured also in future. From the point of view of society, problems may arise, and matters may require settlement in order to avoid a confrontation of social and individual interests, but this can only happen if the interests of several or many people grow into group or common interests.

What is the situation with common (or group) interests in Hungary today? These provide now most of the problems for both economic policy and economic practice. In general, the interests of trades and professions are clear and at present the clarification, the definition of regional (council) interests is on the agenda. Both must be paid great attention to and the social interests related to them must be formulated in time, (e.g. for the moment in respect of teachers, physicians and other health service personnel). Doubtless, most of the uncleared problems arise around the interests of enterprise workers, in cases when the efficiency of the enterprise is low and its future uncertain. At such times the viewpoints of the present and the future, as well as the consciousness of the citizen and of the individual, are in conflict in the workers. If the individual is not filled by some community consciousness and interest, he perhaps gives notice and makes off. The problem arises here precisely from the lack of community (group) interest. The raising of enterprise efficiency, development of the common action of working communities absolutely requires the *strengthening of common enterprise interest* because, though this also entails some dangers, it still *may lead to a situation where the interest of society is concretely realized in the working masses*. Starting from individual interest and from a personal way of looking at things there is no real leap to knowing and subscribe to the actual social interests. The way to the latter leads through adherence to community (group) interests.

What, indeed, is the social interest in concrete economic problems? There are important problems — among others, the development of whole economic branches, government support to big enterprises, the problems of production and consumption patterns — for which there is no "social interest" worked out which is valid once and for all and can be taken off the shelf, ready-made, and any time. In such matters the interests of society may change. In many cases

such questions can only be defined by thorough debates. I believe we need more and more profound debates in several such problems of our public life, which should be discussed in a concrete form, applying democratic approach that is, neither of the parties should behave as if it were his side alone which exclusively represents the "social interest". *An approach to social interest through democratic discussions* — I should like to stress — *would be important in many questions for the development of both economic policy and public thinking.*

Experience has also shown that the assertion of social interest requires not only the co-ordination of objectively and vertically divided interests, but also that of horizontally divided various social valuations and viewpoints of valuation, and in certain most important problems even their amalgamation. No doubt, we are living in an age where jobs and together with them — unfortunately, to a great extent — also views are getting specialized. In our society it can be observed that phenomena are approached in a one-sided way from an "economistic" aspect, on the one hand, and from an abstract humanistic, as it were, anti-economic aspect, on the other. From the viewpoint of socialism none of them is better than the other. In addition, the "economistic" view is further divided into a technological and an economic approach, and the "humanistic" view into a legal and a cultural one. It is from these that the synthesis of the socialist approach and recognition of true social interest must be brought about. This is by no means an easy task; it must be performed partly by the social sciences and partly by policy and not by liquidating the differences in approach (at certain times this is impossible anyway), but by "linking" them. That is, from time to time society must be "re-ideologized", "re-sociologized" and "re-politicized" in order to make people capable of working with open minds, with a way of thinking adapted to the given situation for socialism, and not thinking in the past and living physically in the present. As a matter of fact, the latter contradiction has some dangers which must not be underestimated.

I know that the development of democracy in economic life requires much beyond what has been mentioned, yet I wanted to *underline the importance of clarifying interest relations,* because democracy can be given a socialist content in most cases in this way alone. I believe that *the approximation and implementation of social interest is the most essential substance of socialism.* The assertion of social interest is the objective and democracy is the safest compass for progress. Without a compass, the danger of getting lost is great indeed. But if we do not exactly know the direction in which we wish to proceed, in vain do we possess the most perfect compass. I believe, that the latest, the tenth congress of our party has created, by setting in principle the direction, good conditions for defining the social interests in a concrete form and rendering them actual. At the same time, it has provided a good send-off for the development of socialist democracy.

ВЕНГЕРСКАЯ ЭКОНОМИЧЕСКАЯ ПОЛИТИКА В СВЕТЕ ПРАКТИКИ

Р. НЬЕРШ

Автор на основании решений X съезда ВСРП подытоживает выводы, которые можно сделать относительно прежней и будущей практики экономической политики.

Выдвинутая съездом основная задача: *продолжение строительства социализма на более высокой основе,* с точки зрения теории развития отражает следующий подход: 1) социалистические отношения в Венгрии нуждаются еще в значительном развитии; 2) на повестке дня пока еще находится совершенствование социалистических отношений и страна еще не вступила в период подготовки коммунистических отношений; 3) продолжение строительства социализма на более высоком уровне является источником новых забот, но заодно и показателем достигнутых результатов. Основная дилемма настоящего этапа заключается в обеспечении согласования между преемственностью и необходимостью в проведении назревших изменений.

Важная черта начавшегося *четвертого пятилетнего плана* по сравнению с предыдущими планами, которые выдвигали на передний план количественный рост, а в осуществлении требований пропорциональности полагались на дисциплинированное выполнение планов, заключается в том, что он уделяет основное внимание требованиям пропорциональности, оставляя количественному росту некоторый диапазон движения в ту или иную сторону. Новый план особенно подчеркивает значение требования эффективности, которого до сих пор не удалось осуществить в должной мере в области капиталовложений. Задача в области решения проблемы равновесия заключается в следующем: требуется найти оптимум роста и равновесия, а внутри этого следует уделить особое внимание структурным изменениям, как решающему фактору данного оптимума.

Главное звено *экономической политики* — это повышение эффективности. В значительно большей мере нужно воспользоваться изменением структуры, как инструментом повышения эффективности. Внутри этого следует в первую очередь улучшать структуру выпускаемых изделий. Следует улучшать также и отраслевую структуру производства путем предоставления преимуществ более эффективным отраслям в государственной инвестиционной деятельности. Следует улучшить планирование структуры.

В области *народнохозяйственного управления* нужно укреплять согласованность народнохозяйственной плановой концепции с инструментами экономического регулирования. Эти два фактора совместно составляют народнохозяйственный план. Как в планировании, так и в управлении следует согласовать осуществление производственных и социальных целей. В политике заработной платы в первую очередь следует исходить из необходимости осуществления этих двух целей, нужно повышать различия в ставках заработной платы в соответствии с качеством труда, а в движении доходов классов и семей надо обеспечить тенденцию к нивелированию, то есть выдвинуть на передний план социальные соображения. Срочной задачей является повышение уровня руководства и планирования на предприятиях. Нужно пресечь попытки к злоупотреблению возможностями рынка, но одновременно следует повысить влияние спроса на производство предметов потребления, развивать коммерческие методы в обращении средств производства, стимулировать конкуренцию между предприятиями, в особенности в интересах осуществления конкретных государственных целей (например, повышение экспорта).

И в дальнейшем следует укреплять *демократические черты экономической жизни* (роль профсоюзов, кооперативная демократия, осведомление общественного мнения, защита интересов потребителей, расширение экономических компетенций местных советов). Путь от личного интереса до осознания общественного интереса ведет через укрепление коллективного (группового) интереса. Приближение общественных интересов путем демократических дискуссий является в равной мере важным с точки зрения как экономической политики, так и развития общественного сознания. Приближение и осуществление общественного интереса — это наиболее глубокая сущность социализма.

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INVESTMENT EQUILIBRIUM: MECHANISMS OF CONTROL AND DECISION

The article analyses the causes of investment disequilibrium in state planning, enterprise planning and in the decision system, as well as the causes of negative features in executing investments. In conclusion, the primary conditions for creating investment equilibrium are outlined.

In recent years economic literature all over the world has devoted much attention to various aspects of economic equilibrium, yet several problems of disequilibrium have been left without unequivocal or efficient solution. What has engaged the attention of politicians, economists and the people in capitalist countries is mainly "financial equilibrium", or more concretely, inflation. In Hungary, where we have essentially succeeded in solving the earlier tensions between purchasing power and commodity supplies, public interest has centred on the equilibrium problems of investment activity, though equilibrium problems of economic growth are also discussed in a broader sense.

The phenomena in the investment sphere can only be understood by examining the economic policy and planning aspects which, in my view, are generally related partly to the specific features of our age and partly to those of the socialist management and control system or, rather, to the simultaneous existence of both.

On the phenomenon itself

If a citizen, whose interest in economic problems is above the average, were asked about his opinion regarding the investment situation, he would answer something like this: 1. The money available for investment purposes is too much compared to the capacities; the ordering party has much trouble and frequently does not at all succeed in getting the necessary capacity. 2. The completion of investments takes too much time; it seems that, in contrast to the popular saying, in our country "time is *not* money". 3. Too many minor and major projects are carried out in bad quality, justified objections, complaints are numerous, yet the ordering party is glad if the executing party undertakes the work at all. Thus, as it is generally said: ordering parties are at the mercy of the executing organizations.

We could also formulate it in this way: it is a general phenomenon that the executing organizations participating in the implemention of investments cannot carry out the work for which "purchasing power" otherwise exists* without fragmentation of resources and prolongation of gestation periods.

Under such a situation it is understandable that the stock of unfinished projects shows an unsatisfactory picture: it was 32 thousand million forints in 1965, and 70 thousand millions in 1970; amounting in 1969—1970 to 80 per cent of total annual investments (in 1965 this ratio was 73, in 1968 86 per cent).

The phenomena showing hypertension of investments must be paid attention to in time since, with resources engaged for too long, the national economy incurs substantial losses in net income (national income; the problem being not simply a "loss of interest") which put a brake on future growth. On the other hand, excess demand and the price-pushing effect of a loose cost economy may start an inflationary process through secondary effects, and an approach neglecting costs may render generally loose the normatives of management (this is perhaps where the "social" danger is greatest).

In spite of all this, if leaders of individual organizations (ministries, enterprises, institutions, councils) are asked about investments, they usually complain against the executing organs; and there is a widespread opinion that monetary sources of investments are scarce, and more should be invested.

Thus we can witness efforts exceeding our forces, which is clearly expressed by our financial situation, while on the other hand we may also observe a "partial public opinion" encouraging such efforts. Is this a contradiction? Yes, this is a real contradiction of our present life, which has been accompanying our economic development in a hidden or open form for two decades. We must also preceive that, unfortunately, this contradiction has again been enhanced. It is worth paying attention to its causes. Namely, when in spite of the tensions of the government budget (that is, relative shortage of state money), time lags in execution, increasing costs etc., continue to persist, and the pressure of partial interests for more and more extensive investment can be felt, it will perhaps not be unjustified to reflect on whether everything is in order in the dominating economic thinking and behaviour? Are the social, political and economic driving forces — affecting the investment processes — shaped by the real economic and political processes, by efficiency and quality requirements, etc. or do wishes, intentions (sometimes very spectacular and appealing ones) play a part in them, and if so, to what extent? More exactly: what is the weight of the first and what of the second?

In our society, building socialism, the working people are used to consider it as natural that the state bears actual "responsibility" for their living conditions in the broadest sense. This is generally true, though it is often over-

* As we shall see, its existence is not at all self-explanatory.

looked that the state is not omnipotent either, and is limited by the resources available and by the efficiency of their utilization. (It is another question whether public opinion is aware of this fact, whether it acknowledges this fact and to what behaviour it is educated and stimulated.) The investment expectations towards the state get distorted if public thinking separates them from resources and from the norms of performance, that is, the efficiency of creative work. It seems as if the inclination for sound accounting were pushed far into the background in economic and political thinking, raising expectations towards the state, in fact — and this is perhaps an even greater evil — frequently even our "normatives" are unclear when the results expected from the resources invested must be formulated for our own use.

All these circumstances produce an unfavourable "behaviour" for equilibrium in a wide sphere of those working in the institutional framework of economic control and management, in the social and government apparatus shaping and informing public opinion. Integrated on the social level, these behaviours merge into a "particular line of force" in economic life, aimed at procuring state support. If this trend prevails, it may divide the unity of state control and management, since on one pole it creates "claimants", on the other, "refusers". Though such claims are not restricted to a smaller scope than under the old mechanism, on that lower level their volume has been growing. We must not be surprised that these "lines of force" will carry decisions always towards overstraining investment claims if society allows them to develop. This overstraining existed in our economy even at times (and this is a kind of a proof) when the monetary sources of accumulation and investment increased at a fast rate and their share in national income was rather high. It must thus be perceived that on government level it is a *particular institutional, managerial and decision "mechanism"* that creates the forces driving towards overstraining.

This thesis leads to the *practice of our planned economy* (its methods, institutional and decision framework, and its human factors) as well as *to the motivation relations established—or not established—in our control and management system*, as basic subjects of an analysis searching for the causes.

On the causes

The direction of analysing the *central* institutions of economic management is set by the interpretation of the equilibrium problem. The disequilibrium of the investment sphere may be examined from three interdependent aspects:

a) Financial aspect: the *tension in the state budget* means that the state undertakes to implement objectives not sufficiently covered by revenues (resources), if it yields to unscreened "claims". Searching for the reasons, the problem must be formulated by asking what "forces" result in overstraining the budget.

b) Technico-economic aspect: the *weakness of execution and technological designing* (i.e. the level of the technology designed, the organization, labour discipline and standards of work) is certainly one of the causes of long gestation periods, but by no means of excessive investment, as erroneously believed by many. It is very important to see clearly that the slow execution of investments is not in direct and immediate causal relationship with the financial tension, with overheating. (Theoretically, the organization of execution, labour discipline and standards of work could be better, in spite of the relatively large amount of money on the investment "market".) Looking for the causes we must ask ourselves why we have not yet succeeded in creating more efficient, more organized executing capacities.

c) Regional aspect: this means that the concentration of investment tasks in certain areas is not in line with the material and human conditions that can be concentrated there. Here, the question arises whether the problem is rooted in the location objectives of investments or in the mobility of execution.

These problems can only be answered by *analysing our present planned economy*. The analysis is meant actually to include: 1. Determination of the rate and structure of development, the assessment of development resources in national economic planning. 2. *The system of forums deciding on individual investments, its institutions*, the "style of work" developed in this system, the ordering principles, as well as the "motivation" relations. 3. The factors influencing the standard of work in our *apparatus executing investments*.

1. The system of planning

In the sphere of investments, the *planning work* (setting the objectives, pointing out the tasks and allocating the resources) is carried out under the new control and management system on more levels than earlier, in several cross-sections, as it were, in different forms and is also less centralized. The assessment of investment tasks, the setting of objectives and the allocation of resources are part of an institutional planning work on the *state level* (by the central and specialized government bodies, as well as by councils) and of *autonomous* (enterprise and council) *planning*.

As regards their form, planned resources are coordinated and allocated on a national level partly in enacted five-year plans and partly as calculation material broken down to central management bodies. But many investments are planned not by the state but in a decentralized manner, owing to enterprise and council autonomy. These are state-controlled indirectly, through the activities of ministries and councils. The structure (organization) of investment planning outlined may be said to be satisfactory, but its quality is not satisfactory on either state or enterprise level.

The most important stage of *state* planning from our point of view is the assessment of accumulation resources (financially and from the aspect of the capacity of executing organizations), the determination of the main allocation proportions (for the state and enterprise spheres, for the main branches and for development tendencies to be followed) considering such objectives of the medium-term plans as the rate of growth and the transformation of structure. In our present practice this involves a preparatory planning of about two years on the highest level with several high-level discussions in due course. In this respect planning is fundamentally synthetic or uses highly aggregated economic methods and is autonomous as regards the professional viewpoints reflecting mainly the five-year proposals of the National Planning Office and of the financial planning agencies. The final indicators are enacted by Parliament; these determine the actual proportions in which the resources should be used.

Another stage of state planning (parallel to the first and recurring in the detailed and annual planning) consists in examining whether the "scope of movement" established for maintaining the possible and necessary dynamics of growth is approximatively sufficient; and in studying the aims and projects as well as direct state allocations on which decisions are to be taken. In this stage of the planning process the planning centres are no longer autonomous participants, since they must rely, to a great extent, on information supplied by the specialized apparatus (ministries, design institutions, enterprises, councils, etc.). This process may be regarded rather as joint planning. This is the moment where most aberrations can be found and where distortions of the ordering principles of planning can be caught red-handed. This is, namely, where the limits established for investments begin to burst and the economic premisses established in the first stage begin to be violated.

How is this possible? It has three fundamental causes: 1. The pressure, already mentioned, to procure state money, based on the view "develop at all costs". This is, therefore, a specific distortion in the approach. 2. There is no uniform view establishing the *primacy* of final resources of the state (including foreign loans) over the actual "development" concepts and declaring that, therefore, the latter are objectively limited. 3. There is no clear viewpoint or unequivocal definite stand regarding the requirements of efficiency and competitiveness.

Thus, the practice of planning development objectives often at unreasonably low costs in the hope of ulterior state support when "settling the accounts", or the practice of approaching the development plan and formulating the arguments supporting them from a "physical" and technical angle can be traced back to weakness in clear sight and to poor planning.

Those who know the possibilities and the scope of authority of state institutions from practice, also know that if this practice becomes general in the whole network of planning institutions, and tense planning becomes a

custom, equilibrium can no longer be secured by some (otherwise necessary) "super-revision" of one or two central institutions (be it the National Planning Office, the Ministry of Finance or the bank), since these — if only for lack of time — are unable to find and prove the unfounded character of planning in the actual projects. (Nor are they competent to investigate the details and, in addition, as a result of underestimation, they frequently get "doctored" figures.)

The following conclusions can be made concerning state planning:

a) The central planning agencies are responsible for determining the volume and main proportions of investments in the planning process, but, within this framework, for working out the development concepts of individual branches and projects and for the relevant information the authority controlling the special branch can alone be held responsible, where a specialized apparatus necessary for the preparation is available (such as institutes with a large staff of designers, special experts, etc.). Supported by adequate and reliable information, investment projects requiring individual decision are again fed into the coordination process and fitted into the national economic plan by the Planning Office.

b) It must be made unequivocally clear that specialized planning can only rely on state resources within the financial framework of the plan, and make its decisions accordingly. The state cannot, in principle, undertake to correct "errors in calculation" or unplanned but indispensable outlays; therefore, both the branch management authorities and the enterprises themselves must build up reserves in their plans. (The central reserves of the state are, namely, not called upon to correct "errors" of the branches. If the central management, the state authorities were to correct these "branch errors" "automatically", these could grow into a tactical weapon for deliberately infringing upon plan discipline.)

Experience of the past years has shown central planning to be weak in some respects in controlling the volume of investments and to lag behind in working out the measures of planned intervention into the process. Several economic factors affecting investment activity have not yet been sufficiently cleared up.

Investment planning on *enterprise level* is always aimed at actual development programmes. Its methods and the process itself (always referring to individual cases) differ from central planning (indeed, the central authorities can be left out entirely of this stage of the planning and, partly, of the decision process). In addition, enterprise intentions and behaviour are better motivated by effects deriving from the economic regulations. According to our experience, two phenomena deserve here a more thorough explanation and analysis: Why is decentralized enterprise purchasing power greater than the planned one and how does it affect over-tension? Why is the interest of enterprises in investments

"overheated", in general, and their orientation towards resources of the state budget, in particular? The answer to these questions can be found by analysing the mechanism of control and regulation, rather than the planning mechanism itself.

The answer to the first question is easier. It can readily be seen that the formation of decentralized funds is inevitably accompanied by some "overfulfilment" or "lagging behind", since central planning is unable to calculate exactly the size of decentralized enterprise incomes and funds or their pattern. The permissible deviation from the plan, the margin of tolerance conceivable in this sphere may attain annually about 2,000 million forints. A greater deviation than this has a disturbing effect on management. In 1970, e.g., the investment possibilities of the enterprises exceeded the planned volume by about 10,000 million; in 1971, however, the difference — according to present indications — will be a minimum. It must be realized that central planning needs time to get properly trained in planning the development of enterprise incomes.

The answer to the second question is more complex and may give rise to much discussion. I would point out three causes which cannot be separated:

a) *The economic results expected from investments are not sufficiently "demanding"* (they are not "competition requirements"), even where it is quite clear what and whom to compete with (exports). This, of course, is not simply a matter of standard of the economic leadership in the enterprises, but also a problem of economic guidance provided by the state, which fails to give impulses to higher requirements, to secure adequate motivation while capital is engaged; it permits foreign exchange multipliers to be used as efficiency "normatives" in development calculations though these are not suited for this role mechanically; uniform and low amortization coefficients are demanded in industries exposed to dynamic technological competition, and "obsolescence" is hardly taken notice of in the economic competition of our age; in calculating incomes, subsidized prices are taken for basis, and the "perspectives" of prices are rarely examined.

The loose requirements are often meant to reduce political difficulties to a minimum, yet, in the long run, they are dangerous to the whole society since they make enterprises believe that their investments meet adequate requirements and that the central authorities are responsible for the lack of competitive capacity. (It would be worth pondering on why, in the wake of some of our development ventures, we cannot compete in price and net income, and soar high above the average domestic circumstances with each investment project where the most up-to-date import technologies are applied, foreign materials used and the much lower time wages paid than those by competitive firms on the world market!)

b) *The possibility of enterprise self-financing is small* and, in addition, it is regulated in a schematic manner. This is one of the reasons why demand for

state "complementary money", for preferences is great. We can hardly find an enterprise development without asking for state support. And it is hardly a coincidence that dynamically developing great enterprises get into the most delicate position. Most means collected by the state eventually flow back in a roundabout manner, to where they come from, and the picture becomes more and more intricate. If all other factors are taken as invariable, this depends on the practice of regulation actually followed. We have developed a "theory" for the uniform (mechanical) regulation of the volume of enterprises resources, but for self-financing there exists, in fact, no such a "theoretical normative" according to which the extent of self-financing would be determined by the conditions of simple reproduction. To put it mildly, this is rather debatable, nor can it be quantified, if only because the premises of simple reproduction cannot be related either theoretically or practically to a dynamically developing plan. As a matter of fact, the problem should be decided upon in a pragmatic manner; weighing the practical activity and its contradictions.

If we really intend to compete, it may also be asked whether self-financing should be regulated in a uniform manner. In principle, this could be justified only if the requirements of development were the same in each industry; but this is not the case. The obsolescence of technology is different, so is the extent of risk-taking, the quality and profitability requirements, and so are the perspectives of the market, the conditions of productivity and the labour situation, the expected role of the enterprise in shaping the future, the requirements to be raised in respect of the rate of net income, etc. Clearly, a central uniform order is an awkward instrument for regulating in a differentiated manner. Therefore a more differentiated system of regulation and, of management (decision-making) should be created also organizationally. These problems are not yet sufficiently explored either theoretically or practically, they must be listed among the tasks of applied economics.

But the extent of self-financing is not only a problem of "regulation techniques". On a higher level there looms the problem of economic policy: how much of state resources is it expedient to centralize for the purposes of super-enterprise, central decisions? Infrastructure, social policy and some fundamental investment programmes which the enterprises would not, presumably, undertake by themselves, make it obvious that we cannot shift to "complete" self-financing. But if the redistribution of decentralized state revenues is more closely examined, we may be surprised by the large amounts flowing back to enterprises, for not really central purposes. It seems, therefore, that in the present situation this extent of centralization is brought about by some self-generating necessity. Let us admit, that the present contradiction emerging between fixed and moving prices has a considerable share in it. The order of magnitude of money participating in the enterprise sphere (flowing back thereto) seriously endangers interest in the economic use of the enterprises' own

assets. Money grants or the presence of "over privileged" money play a substantial role in economic thinking, giving rise to anxiety and feeding the overheating, the inclination for economic irrealities.

c) The weakness of the *enterprises' propensity* to save is a concomitant, and partly an amplifier of the "overheated" state. The reasoning that "great tasks may be tackled with little money, and things will go somehow" — i.e., it is not worth saving — leads to an increasing number of simultaneously performed, insufficiently planned investment projects, compelling the state, to throw a "life belt" with increasing frequency to such projects, that is, to the investing enterprises, to help settle their finances. The social threat of the phenomenon resides in the fact that the interest of the enterprises in managing their own assets fades away. Many are of the opinion that this is only a problem of interest rate and that interest rates should encourage savings. But, in itself, the rate of interest cannot be sufficiently stimulating if the efficiency requirements are generally loose. Thus, the transitory deposits of enterprise resources ("their savings") cannot be raised to a satisfactory level unless stricter efficiency requirements are established, and unless the enterprises' own resources are given a greater and more differentiated scope in development than they have at present.

2. The decision system

We have discussed some factors disturbing planning and economic thinking. But investments are not only planned and prepared, but also decided upon in line with certain considerations and in a given system of institutions. The distortions of motivation, and of economic thinking in general, can of course be analysed thoroughly in the planning and preparatory stages rather than in the decision sphere. If, however, we intend to use practical experience we cannot avoid the statement that the practice of decision-making reacts on planning, preparations and public mentality.

In my opinion, the shortcomings of our present system of decision-making are the following:

a) The instances where decisions are made are too detached from the executing (investing) economic units, and this reduces the feeling of responsibility of the latter. Even the preparation takes place in a system of too many stages, with the approval of too many authorities.

The forced hierarchy of decision-making necessarily involves an exaggerated moral responsibility of the agencies of higher management, thus unduly enhancing "collective" responsibility, and leaving little "individual" (ministerial, enterprise, planning, executing) responsibility proper.

b) In some cases, the information available at the moment of decision-making is not suited for final decisions, yet such are made and, since a positive

decision is in itself a powerful argument in the "fight" for state support, we can witness an unhealthy proliferation of insufficiently founded decision and proposing activity. This is accompanied by a rigidity in the decision-making of higher authorities, that is, by the practice of not accepting any withdrawals which, however, would be a natural concomitant to a flexible decision system.

c) The requirements concerning the preparation of decisions have become loose on every level (the economic parameters promised are seldom fulfilled, not only in state decisions but also in the enterprise field). The reason is that — although decisions without sanctions are inconceivable — a decision in our practice is some kind of "grace" in the shade of which anything can be done, and many people look upon a decision as a "blank cheque" to be drawn on the state budget.

One, if not the most important factor accompanying our shortcomings is the lack of discipline in the preparation of decisions. In my opinion, this is related not only to direct leadership, but also to motivation. Those preparing a decision (the economic and technological planners, designers) are, eventually, far from the realized project; they are not interested financially in its operation in four or five years' time, nor has a powerful good system for the moral recognition of such activity developed. On closer examination, the number of real experts — mainly in the economic field — would perhaps be found too small, and this is why errors of a considerable order of magnitude are not infrequent in the preparation of investments, considerations of thrift do not prevail, nor do they play a role in assessing the work after completion.

It would be a great mistake if we wanted to fight these shortcomings by establishing a "controlling body" beside each planning and executing authority. This is not an organizational problem, but one of leadership, of labour morals and responsibility, always within the framework of the tasks of the given organization.

3. On the execution of investments

From what has been said it may seem that the problem of investment equilibrium is only one of planning, decision and finances. But this is not so. The "technical" features and shortcomings of the investment tension can only be explained to a small extent by the financial equilibrium problems of the macro-sphere, by stating that there is too much purchasing power in the hands of the investors. Although this plays an important role, shaping the general environment of investment activity, it cannot alone explain the technical and organizational backwardness and weak labour discipline of the executing sector.

If we speak about bottlenecks of the executing organs, we mainly think of the building trade, the specialized fitting industry, technological fitting, and partly of the long time required for technological planning and designing. The

picture is more diversified but frequently open to sharp criticism in the machine-building industry turning out investment goods as well as in the practice and coordination of procuring imported machinery. At any rate, the insufficiency of "supply" in the sphere of investments can only be cleared up by the analysis of a very complex chain of causes. In addition, it must be confessed that the standards of building are not uniformly developed. E.g. the technical development of housing projects goes fast enough, but we are not sufficiently prepared for the building tasks related to public utilities and, particularly, to the large industrial investment projects. I wish to stress only a few factors:

— The most important cause is an *insufficient development of capacities in the last decade.* The data on the last two five-year plan periods testify that the development of fixed assets in the executing trades (construction, building materials, fitting) has been considerably lagging behind. Backward technology and a poor level of organization get on well together. Also the lack of adequately qualified and trained leading and organizing experts is quite marked, greater than in other industries. The fourth five-year plan intends to make up for this lack by providing for a growth rate high above the industrial average both in executing capacities and in the development of material-supplying branches.

— *The tension in the structure of executing capacities* is mostly due to slow development. This is shown mainly by the fact that the executing bodies are unable to concentrate forces to an extent that would make a quick realization of large investment projects possible. This tension is also indicated by the fact that the various kinds of executing capacities (civil engineering, overground construction, specialized and technological fitting, etc.) are not in harmony with one another, and this greatly protracts the gestation period. Another relevant feature is the regional tension between executing capacities, which again testifies to the lack of flexibility in these organizations.

— The efficiency, organization and thus the supply capacity of executing work are greatly hindered by the poor preparation of investments, by *the insufficient activity of the investors* in this respect. Beyond other problems, this alone renders a quick and efficient execution impossible. The gradual, stage-wise supply with plans and designs, the lack of harmony between different working processes, the lack of organizational plans, etc., are all important gaps slowing down the work of execution and increasing disorganization.

— The relative insufficiency of executing capacities of long standing against "solvent" demand has created a *peculiar monopoly situation for executing organizations.* The emergence of such a situation is regular in a shortage economy. The harmful consequences of a monopolistic situation are: extensive development of the executing organs, underestimation of the necessity of technical progress, labour fluctuation, neglect of production organization tasks, loose organization of work, and poor labour discipline; all these reduce the efficiency of investment-executing activity.

The division of labour among the enterprises executing investments seems to be in need of revision. The existing system of a general contractor with innumerable subcontractors and suppliers is not only cumbersome and of low efficiency but also makes it impossible to enforce responsibility to a sufficient extent. With such an organization, there is no common interest in respecting the deadline for commissioning the project, in observing costs, etc. Among the executors, the "primacy" of the general contractor does not assert itself. Every executing and supplying organization is individually interested in proving its own activity or in justifying the lack of activity.

The investors are not sufficiently prepared to deal with the complicated tasks of executing investments. Particularly in the case of major investment projects, the investor possesses neither the proper organization nor the necessary instruments for controlling the complicated team of executing bodies.

— In practice the executors are not sufficiently interested in accelerating their activities and in performing a greater volume of work. In principle, their motivation can be demonstrated since they obtain no sales receipts before performing the work, and if this gets protracted, they will have financial difficulties. But the present system of settling accounts (particularly, the possibility of settling by stages, in the form of progress payments, and perhaps also the theoretical problems involved) acts against this motivation, enabling the executing organs to obtain income even without a proper speed of execution. Of course, problems of motivation cannot be reduced to one single factor. (E.g. a great role is played in the lack of motivation by the inadequate work of the investors, since they provide the executors with an excuse, by being able to refer to "objective difficulties", and thus to avoid financial consequences.)

Thus, great national economic importance continues to be attached to improving executing activity. We would like, however, to stress that success cannot be attained without *developing the industrial background and organization as well.* Otherwise the internal disproportions of development will reduce the efficiency of the resources devoted to this purpose.

The tasks associated with the equilibrium of investment activities penetrate our whole planning and economic policy and require a revision of many special problems on almost every management level. From the social and political point of view, the most important conclusions are perhaps the following:

1. The primary condition of equilibrium in general, and of investment equilibrium in particular, is that the planned proportions established as a basis of economic policy — with due regard to the patterns of growth and income formation and to the volume of resources — should be observed in a disciplined manner on all levels of execution. Ventures disregarding the limits of financial resources must be prevented from being entered upon. This, however, requires stricter state and plan discipline in the control organizations, relying on a clearer definition of rights and duties. Our political authorities should exhibit

a corresponding behaviour. We must be aware that the positive elements of the new system of economic control and management are often prevented from asserting themselves precisely by the lack of equilibrium in the field of investments.

2. In the execution of investments, it is necessary to revise the actual practice of general contracting and the organizational framework in order to prevent the dissipation of resources and to strengthen the principles of responsibility and motivation. It must be realized that construction capacities are at the disposal of the enterprise management — in justified cases of the government. The capacities of an enterprise may only be split up among different sites in order to concentrate the optimum of forces in each. The management must not be influenced by either social or political organizations in undertaking work and in a competent and optimal use of enterprise capacities.

3. The links between the motivation of the investor, of the planner (designer) and of the executing body should be revised with regard to efficiency. Interest in economic results is still weak today, nor is it coordinated among those executing the projects.

4. More complex methods should be used in creating favourable conditions for executing investments. It must be repeatedly emphasized that the execution of investments depends not only on the building industry, but also on the harmonious development of industrialization in construction. To this end, the production and a widely organized availability of standardized, listed elements, spare parts and fittings must be increased.

Beyond the above, it is extremely important to raise the number of highly qualified technical and economic personnel at building sites and to create proper financial and moral incentives for them.

РАВНОВЕСИЕ КАПИТАЛОВЛОЖЕНИЙ, МЕХАНИЗМ УПРАВЛЕНИЯ И ПРИНЯТИЯ РЕШЕНИЙ

Й. ДРЕЧИН

Отсутствие равновесия в сфере капиталовложений уже давно представляет собой сопутствующее явление венгерского экономического роста. Отсутствие равновесия имеет свои финансовые, технико-строительные и аллокационные аспекты.

В государственном планировании причины этого явления кроются в том, что 1) на основании воззрения «развитие любой ценой» возник неправильный подход к инвестиционной политике, 2) не признается примат финансовых ресурсов по отношению к стремлениям развития, 3) не выяснены четким образом требования эффективности и конкурентоспособности. *В планировании на уровне предприятий* возникновению такого положения способствуют следующие причины: 1) Заниженность требований, предъявляемых к результативности капиталовложений, 2) Ограниченность возможности самофинансирования предприятий, что усиливает нажим на центральные фонды. 3) Слабая склонность предприятий к сбережениям.

Что касается причин, заключающихся в *системе принятия решений*, автор перечисляет следующие недостатки: 1) Иерархичность системы принятия решений ослабляет у исполнителей чувство ответственности и индивидуальную ответственность вообще.

2) Недостаточная подготовка решений. 3) Общее снижение требований к подготовке решений.

Однако все это лишь отчасти объясняет отрицательные явления в области осуществления капиталовложений. В области строительных работ имеются и дальнейшие проблемы, а именно: 1) Недостаточное развитие строительно-монтажных мощностей на протяжении истекшего десятилетия; 2) Диспропорция между отдельными частными мощностями (инженерное строительство, надземное строительство, отделочные работы и т. д.) внутри строительных мощностей в целом. 3) Пробелы в деятельности заказчика по подготовке капиталовложений. 4) Монопольное положение подрядчиков и недостатки в разделении труда между ними. 5) Недостаточная материальная заинтересованность подрядчиков.

Автор следующим образом подытоживает основные предпосылки установления равновесия капиталовложений:

1) усиление государственной и плановой дисциплины;

2) пересмотр практики и организации строительных работ;

3) улучшение увязки интересов отдельных участников инвестиционной деятельности (заказчиков, проектировщиков, подрядчиков);

4) комплексное совершенствование условий освоения капиталовложений.

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J. ZALA

CENTRAL INTENTION AND PLANNING

Relying on factual analysis, the article seeks an answer to the question whether central intentions have been better asserted after the introduction of the reform than they were prior to it. The author explains that the central will, aimed at the improvement of national economic *equilibrium*, has been asserted to a greater extent *after* the introduction of the reform than was the case earlier. From among the problems which have not yet been solved, the author mentions the lack of equilibrium on the investment market, or rather she points out the circumstances which now hinder the solution of this problem.

For the past three years the method of economic control and management, the question of "how" has been in the centre of economic discussions. The question of "why", that is, why did the reform in economic control and management become necessary, has hardly been dealt with at all in recent times. This is quite understandable since this issue was in essence cleared up in the years preceding the reform.

I do not want to repeat the many-sided arguments which have been heard earlier regarding the "why" but would only return to one of them which, in my opinion, is the most important of all. This can be summarized as follows: the former method of economic control did not sufficiently ensure the operation of central will (or intentions). In other words, with the former method it was not possible to achieve that in certain highly *essential issues* the goals defined by supreme level resolutions should be realized and, therefore, the new methods must better ensure the assertion of central will.

Three years have passed by since the introduction of the reform. These were three *special* years; they were in no way *average*, or *typical* years. Nevertheless, I feel that we can ask: what does the economic balance of these three years show? Did what we wanted to happen actually take place, or did it not? And since reality is never finite, the reply cannot be a simple *yes* or *no*. Hence we must formulate the question more realistically. Was central intention more or less realized than prior to the introduction of the reform? This is the question to which we are searching for a reply through the analysis of facts.

Central will and the national economic plan

As in most cases in economic literature, here too it is first necessary to clarify concepts. By *central will* I mean *fundamental economic policy decisions* (intentions) on the part of leading party and state bodies, affecting the direction and nature of development. The forms of appearance of the central will can differ vastly. They are generally embodied in congress or central committee resolutions, in parliamentary and government reports, and are expressed in the preamble to the national economic plan proposals and the national budget, and in the Act on the plan as well.

The form of central will is a quantitative or qualitative requirement, a goal or a system of goals for a definite period, which need not in all cases be determined numerically. For example, a form of expressing central will is that in the coming period the rate of economic growth must be increased, the external and internal balance of the national economy ensured, technical progress accelerated, the efficiency of investment activities improved, or the living standard continually and evenly raised, etc.

The *national economic plan* and the budget compare the intentions and the assumed possibilities *numerically*. The goal of these numerical provisions is the expression of central will; nevertheless, they are not identical with it. The plan (and the budget) express *how much* of the central intentions can be realized by taking the *assumed* possibilities of the planners as a basis. If therefore, in the course of the plan preparation, the possibilities are underestimated and in the end the performance of the national economy is greater or more favourable, this does not mean that in reality central intention did not operate. And vice versa, if in the course of preparing the national economic plan, we overestimate, or incorrectly assess possibilities, and for this reason do not fulfil the numerical plan directives, this does not necessarily mean either that central will did not operate. It may even happen that one of another essential numerical directives of the plan is realized, and nevertheless, central will is not. (Namely, if the central will was not originally expressed in the numerical plan directives.)

The following serve to illustrate the above: in the early 1960's central will was directed at ensuring the external and internal balance of the national economy. One of the measures of the national economic equilibrium position is the possible limitation of the growth of inventories. When preparing the plans it did not seem possible numerically to ensure that the rate of inventory increase should drop, and therefore, the plan took a comparatively larger part of the national income into consideration for inventory increase than was economically justified.

Therefore, the numerical directives of the plan did not express central will in these years, and in this respect. The plans were fulfilled: rises in inventories from one year to the next, equalled indeed the amounts calculated

in the plan. But can we say that in this respect the central will was fulfilled? Obviously not. The most we can say is that the central will — namely, that in this respect national economic equilibrium must or could be ensured — was not realistic. More precisely, when elaborating the plan indices, we did not consider it realistic that we would be able to sell all what we produced. This is of course possible but it does not change the fact that despite the numerical fulfilment of the national economic plan, central will in this respect did not assert itself.

Naturally, it is possible to fulfil precisely the numerical directives of the plan, and at the same time to realize central intentions. If the data of the plan reflect at the outset already the realistically attainable degree of central intentions, as supported by facts, then numerical fulfilment of the plan will indicate, at the same time, the realization of central will.

This does not necessarily imply that what finally takes place in the course of fulfilment, is realistic. It is possible — and this is the more general case — that the central will is fully realistic, that the numerical directives of the plan are a very good expression of central will, and that, nevertheless, in reality something else takes place. In this case neither the central will, nor the plan directives have been fulfilled. Exposure of the reasons for this is a major task of economic analysis.

Central will and the national economic plan are to be distinguished not only because the former is mainly a verbal requirement, and the latter takes a numerical form, but also because of another feature of the national economic plan (and of the budget). The national economic plan extends to the whole of the economy and to a substantial part of social life as well. As a consequence, its calculations are far more detailed, and extend to cover a far broader sphere than the central will must and can cover. Therefore, numerical provision regarding one single detail of the plan and the budget can in no way be identical with the central will. The fact that it is not "identical" does not mean that it is contradictory, but only that — taking all its consequences into consideration — it is *different*. It is a different category even if the national economic plan and the budget become legal acts.

However, it would be a mistake to draw the conclusion from the above, as if the central will and the national economic plan (and budget) were not in close relationship with one another, more precisely, that they did not have a reciprocal effect on one another. Those preparing the national economic plan endeavour, in general, to quantify as much as possible of the central will, in any case as much of it as they consider realistic. Central will is, at the same time, limited by numerical bounds deemed realistic by planners. This reciprocal relationship is, however, not so smooth. Central will may extend beyond realistic limits (and there have been examples when it did go beyond them), and at times it can happen that these unrealistic intentions appear in numerical form in the plans. Or vice versa: sometimes the numerical logic of planning,

and the suggestive force stemming from this has a greater influence on the central will. This, however, does not justify the acceptance of a more or less precise fulfilment of the national economic plan, as either the sole, or the most important yardstick of the realization of central will.

After stating this by way of introduction, I would like to study the operation of central will prior to and following the reform, in the sense described above. My starting premiss is that the more central intention asserts itself in *essential, fundamental* questions, the higher the efficiency of the planned economy, and the more *pronounced* is the *planned character*. Therefore, I am studying the assertion of this character from the *qualitative aspect, independently* of the *numerical fulfilment* of the concrete national economic plans for the individual years (or five-year periods). I would like to limit my study solely to this question, and I have not, nor could I have endeavoured in the framework of a brief article, to give a comprehensive, many-sided economic analysis of the events of either the previous period, or of present events.

The years prior to the introduction of the reform

We can put the beginning of the socialist planned economy at the year 1949. This was the year in which nationalization was essentially completed, and when the transformation of the small agricultural units from private ownership into cooperatives began. Therefore, in 1949 ownership relations became in the main socialist, and this is what we consider the basis of socialist planned economy.

In the first five year plan — the variant approved in 1949 — the central will was expressed in the following requirements. "The industrialization of the country must be accelerated, the backwardness of agriculture eliminated, the living standards of the population further raised, and national defence advanced." In 1951 the directives of the first five-year plan were numerically modified but these declared goals did not change essentially. The central will became only modified — mistakenly, as is now known — in its degree: development had to be accelerated *even more*.

The results are well known: the increase in production of industry and the building industry accelerated — and in this respect the central will asserted itself — but the backwardness of agriculture was not eliminated, and living standards hardly rose. Workers' real wages were, practically speaking, on the 1949 level in 1954. In these years the central will was asserted primarily — or just about solely — in the plan indices, while in reality it did not operate on highly essential issues. (I do not want to discuss now the well known fact that in the second half of the plan period the central will changed essentially.)

In order to illustrate the above, let me make a comparison of the original and the increased directives of the first five-year plan, and its numerical fulfilment.

Table I

Data on the period of the first five-year plan
(1954 as percentage of 1949)

Indicators	According to the original plan	Raised directives	Fulfilment
National income	163	230	150
Manufacturing output	186	310	255
Building industry production	231	438	270
Agricultural output	142	154	112
Living standards*	135	150	—
Consumption	—	—	130
Real wages of workers and employees	—	—	102

* This was the term used in the first five year plan. However, living standards can not be measured with a single indicator.

Table 2

The 1958—1960 three-year plan
(1960 as percentage of 1958)

	Major directives	Fulfilment
National income	113	123
Industrial production	122	139
Building industry production	120	140
Agricultural output*	112	110
Real wages per earner	106	112
Consumption	110	116

* The average of the years 1958—1960 as percentage of the average in the years 955—1957.

Afterwards, following the consolidation in 1957, the next medium-term plan was for the three-year period between 1958 and 1960. In this period the central intention was to take well founded, balanced forward steps. This central intention was expressed in the comparatively modest numerical plan-directives, more precisely in that the rise in production (the national income) and consumption was not large, but it was balanced and proportionate. The relevant results are also known. Just about all the essential indices of the numerical plan directives were overfulfilled to a large extent.

If we identified the numerical directives of the three-year plan with the central will, we would either have to conclude that the central will was not

fulfilled, or that the directives of the plan did not express the central will. In reality neither of these conclusions would be true. The directives of the three-year plan were a very good reflection of what the central intentions considered realistic at the time. The fulfilment indicates, however, that in this period the national economy developed well, proportionately, and in a balanced way, and thus the central will prevailed. (This conclusion refers primarily to the first two years of the period, because in 1960 tangible signs of certain equilibrium problems already appeared which became even sharper later.)

In the course of preparing the second five-year plan, running from 1961—1965, the essential goal system was increasing efficiency. "The decisive link of industrial development in the coming period should be to increase productivity, considerably raise the technical level of industry, and to improve the quality of industrial products." Furthermore, "The possibilities and advantages of international specialization in industrial and agricultural production should be more daringly applied, in order to accelerate technical progress and to be able to raise the efficiency of production."*

However, it seemed as if the numerical directives of the second five-year plan did not sufficiently reflect this central intention. It is strongly debatable whether the requirement of "efficiency" was expressed in a directive which alongside a 36 per cent increase in the national income, reckoned with not more than a 22—23 per cent rise in consumption by the population. The second five year plan quantified the central will rather regarding production directives, and most likely at that time it did not consider it realistic that production might be able to adjust better to realization possibilities. It followed that the plan assumed a rather large *undistributed* production, in essence, an accumulation of stocks. We should immediately add: this was contradictory to the requirement of the central will that efficiency should be increased. By increase in efficiency we should understand an increase in the productivity of labour, and a better use of capital, or at least, not a deteriorating use of it. And if investments and inventory taken together rise substantially more rapidly than production (the national income), this means that the use of capital deteriorates. The plan reckoned with a rise in the national income by 36, and in consumption by 22—23 per cent. What is hidden behind this arithmetic is that "Accumulation" could rise by over 70 per cent. The fact that the undistributed part meant a "planning reserve" as well, does not alter this fact. We did not declare the magnitude of the reserve, and mainly, the plan did not extend to indicate the realization goals for the undistributed surpluses. In other words, the surpluses were permitted to take the form of stockpiles.

What does fulfilment show? Not one of the production directives quantified in the second five-year plan was realized (though within this, industrial

* Act II: 1961, Chapter I.

Table 3

The second (1961—1965) five-year plan
(1965 as percentage of 1960)

	Major directives	Fulfilment
National income	136	124
Industrial production	148—150	147
Building industry production	140	136
Agricultural output*	122—123	108
Per capita real income of workers and employees	116—117	118
Per capita real income of peasants	116	117
Consumption	122—123	121

* In comparison to the average of the previous five years.

production almost reached the planned level). The economy was more successful insofar as, alongside a 24 per cent increase in the national income, consumption increased by 21 per cent. However, problems of equilibrium became more serious in the first four years of the period, and, for this reason, in the last year of the plan period, the growth rate was severely restricted in order to improve the equilibrium position. Regarding this period we can state that the numerical data of the plan did not correctly express the central will. Fulfilment — to a great extent due to effects of the measures taken in 1965 — produced better results, more corresponding to the central will, than those reckoned with in the plans. Finally, the "decisive link in development" was not grasped, in contradiction with central intention. At the same time, in these years the problems, which afterwards led to the central resolution of the reform in economic control and management, became increasingly clearer.

With that we have arrived at the next medium-term period, and the 1966—1970 third five year plan.

A simple comparison of the data on directives and performance might put the reader in a dilemma similar to the one concerning the period between 1958 and 1960. Were possibilities really that grossly underestimated in planning? Or was central will left unrealized to this great extent? However, the truth is that the case of this plan period is different. When the third five-year plan was enacted into law — in June 1966 — the central intention to begin the reform in economic control and management during the course of the plan period was already known. The introductory wording of the law on the plan indicates that — alongside modest directives — the central will counted with the fact that development could be even faster. "Through the comprehensive reform in the economic mechanism, to be realized during the plan period, control activities must be made more efficient, together with enterprise manage-

Table 4

The third five-year plan (1966—1970)
(1966—1970 as percentage of 1961—1965)

	Major directives	Fulfilment
National income	119—121	131
Industrial production*	132—136	135
Building industry production*	124—128	162
Agricultural output	113—115	116
Per capita real income*	114—116	134
Consumption fund	118—120	126
Investments	132	150

* 1970 as percentage of 1965

ment, as must the use of national economic resources which will come about as a result of the former measures. The possibilities exposed by the reform must be used to accelerate the development of the national economy."*

Nevertheless, reality would be concealed if in the study of the realization of central will this period were treated as a uniform one, and the numerical directives expressed in the plan were compared with the fulfilment data for the five-year period. (This problem also exists in treating any medium-range period as a unit, and not only because no single year ever resembles the next but also because in just about all the plan periods, the element considered *essential* changed within the goal system of the central will.)

The introduction of the reform in economic control and management, which is the dividing line from the point of view of analysis too, was implemented at just about the middle of the third five-year plan. The question is precisely whether or not the central will was asserted better *following* the reform than prior to it. For this reason I am not studying the extent to which the directives of the third five-year plan expressed the central will at that time, but rather whether the direction and nature of the development of the three-year period between 1968 and 1970 conformed to the central intentions bringing about the reform, and if so, to what extent.

One of the problems of the years prior to the reform in economic management, as is known, was that disequilibrium looked chronic. (By disequilibrium I mean the following: we were producing *more* than the *amount* we could sell, or, what is the same thing, we were producing items *different* from the ones *in demand*, and we were importing more than exporting.) Therefore, the disequilibrium expressed in real value appeared in the form of inventory accumulation on the one hand, and in a passive balance of foreign trade on the other.

* Act II: 1966. § 6.

In the three years following the introduction of the reform, the central will was directed if not at solving this major problem, at least at reducing it essentially. For this reason the exportability of products had to be sharply increased (with a more modest rise in imports), and inventory accumulation had to be reduced or at least slowed down.

From the point of view of the external balance of the national economy the major problem was not increasing exports in general, but increasing exports to the capitalist countries (from here on "capitalist exports", for the sake of simplicity). Following a brief break in 1968, in 1969 and 1970 combined, the value of capitalist exports increased by over 60 per cent. Never since the start of planned economy was there an increase of this size — particularly in two consecutive years. It has to be admitted that this growth was influenced by circumstances beyond our control (the boom on capitalist markets), but at any rate, our enterprises were capable of making use of this favourable opportunity. This in itself is an achievement which can hardly be separated from the introduction of the reform.

There were opportunities for increasing the growth rate of exports to the socialist countries, insofar as our export capabilities were concerned, but in this respect there was no need for a change. In the past 6—8 years our exports to the socialist countries have been rising at an even rate of 7—10 per cent annually. (Single years might be exceptions.) A larger increase in the rate of exports than this, alongside with a comparatively smaller increase in imports from the socialist countries, would have disturbed the internal balance. Therefore, the central intention could not be a larger rate of increase in exports to the socialist countries. Eventually, with regard to exports, central intention operated with a good degree of effectiveness in the past period.

Regarding *imports*, central intentions required, in order to ensure external balance, a smaller increase in capitalist imports and a larger increase in imports from the socialist countries, than the exports directed to these regions.

In 1969 capitalist imports truly grew at a lower rate than capitalist exports. (Here too, the change in 1968 is not of special interest, because, similarly to exports, there was also a slight drop in capitalist imports.) However, the picture is not all that positive, for in 1970 capitalist imports increased to an unusually large extent, and far in excess of 1970 capitalist exports. Matters are no better even if we consider — just as with exports — certain extraordinary circumstances, (e.g. the special meat imports in 1970, and the additional imports caused by the flood). Taking the two years (1969 and 1970) together, capitalist imports grew at about the same rate — over 60 per cent — as capitalist exports.

Despite the undesirable rate of increase in capitalist imports in 1970, taking the three-year period following the introduction of the reform as a whole, the deficit in our *capitalist foreign trade balance* was, even in an absolute sense,

smaller than in any three-year period following 1960. Regarding its ratio, the total capitalist imports of the period between 1968 and 1970 were only 5.7 per cent below exports to similar markets.

In socialist imports the turn, in accordance with central intentions, took place in 1970, to no small extent as the result of measures taken in 1969. In 1970 the rise in imports from the socialist countries was substantially higher than the increase in exports. In the final analysis, taking the period of 1968—1970 as a whole, socialist imports increased more rapidly than exports.

Therefore, in the period following the introduction of the reform the central will was partially realized in the capitalist context of external balance (it was realized in exports, and not realized in imports in 1970), while it was fully realized in socialist context (the change here took place in 1970). If we think of the fact that in the past the major problem was to increase the capitalist exports, then we can conclude: these export increases in the past two years show a better realization of the central will in this respect.

Another form of disequilibrium at the time of the introduction of the reform was the excessively high *inventory accumulation.*

Exaggerated or unnecessarily high inventory accumulation is "equilibrium disturbance" insofar as a *larger part of production than necessary* is not used for either consumption or exports or investment, therefore, a share of the products does not eventually return into the bloodstream of the national economy but is accumulated as inventories. However, unnecessary inventory formation is more than a simple disturbance of equilibrium. Stocks unnecessarily blocked damage the efficiency of production, for they cause unnecessary costs, without any hopes of regaining them. (Not to mention the damage caused by deterioration, moral depreciation, etc.)

What determines the right level of inventory formation above which accumulation is unnecessary? In this respect only past, and primarily international, comparisons can give us some support. There were years — more than one — when a comparatively smaller part of the national income went into inventory formation — without any greater disturbances in supply — than in the years when the size of inventory formation was quite large. International comparisons clearly indicate that we used a substantially higher ratio of production (and continue to use it) for inventories than other countries on a similar level of development.

The data of the past three years indicate that there have been changes in this field too, in a direction suited to central intentions, even if the extent of these improvements is not yet satisfactory. In the period between 1968 and 1970 the average level of the gross national product was 20 per cent above the average of the previous three years. In this same period the sum used for increasing inventories grew to a smaller extent, at an average of about 10 per cent for the three years. In this respect the favourable change came in 1969. In

that year the share of GNP used for increasing inventories was the lowest since 1965 (2.9 per cent), but it was still higher than in the majority of the capitalist countries whose development level was similar to ours.

The balance of the national economy, with respect to the foreign trade balance and inventory formation, has truly become stabilized. This, however, does not mean that there is nothing to be done in this field. The size of inventory formation is by no means near optimum; and the marked increase in capitalist imports in 1970 indicates that tremendous efforts are required in order to raise capitalist exports further.

However, there are other problems too, the solution of which receives similar emphasis, insofar as central intentions are concerned, but the results can hardly even be considered as initial steps in the right direction.

One of the most important tasks we are facing is to lessen the tension between intentions and possibilities regarding *investments* (mainly in the area of construction). I am deliberately using the rather non-economic terms "intentions" and "possibilities" in this case. If it were simply a case of the disproportion between demand in the economic sense (solvent needs), and production capacity (rationally used production capacities; that is, the disequilibrium between the two), it would be hard to understand why it was not possible — if not immediately, then within two or three years — to adjust demand to existing capacities. As known, despite central intentions, the tension has not lessened in the period following the introduction of the reform.

In the period prior to the introduction of the reform, neither financial nor other economic consequences were attached to investments, or to the utilization of investments (at most the investors were given raised plan indices). Hence, application for investments was free of any risk; and indeed *not* applying for them was detrimental in every respect.

By introducing the reform we wanted to change this situation too, at least insofar as productive investments were concerned. The enterprises are now expected to provide the majority of the capital covering productive investments (from their profits, and the amortization of earlier invested assets). Credit used for investments must be repaid from the same sources. A comparatively smaller share of productive investments was left within the scope of central financing. Despite all these financial measures, *investment "demand" did not become economically realistic.* Since the introduction of the reform, in 1969 and mainly in 1970, total investments, despite central intentions, grew to such an extent that the tension already existing and inherited from the past was further increased. (In 1969 investments were 8 per cent and in 1970 15 per cent higher than a year earlier.) The fact that the size of the increase was not even greater was not due to limits forced on the investors nor on their orders, that is, it did not depend on "demand" but rather on the limits of the producers

(executors). For this reason, it is the factors of "demand" and their "nature" following the reform, which must be placed under scrutiny.*

The first difficulty we come across is that we cannot even determine the true size of "demand". It should be remembered that in the year immediately prior to the reform, that is in 1967, the volume of investments increased to a great extent (22 per cent). Therefore, in 1968 the executors (producers) had very large orders on hand and the real demand behind them — since these were investment projects already in process — was not limited by time. (The *full* sum of funds allocated to a single approved or ordered investment project, over a period of years, means "demand" to the executor, and to the enterprise producing the machines for the investment.)

Following the introduction of the reform, substantial and successful efforts were made to restrict the starting of new projects — regarding centrally financed large-scale investments. However, investors know that the time required for the realization of investments is very long. For this reason they do everything in their power to see that the investments they consider necessary are begun as early as possible. And once an investment is begun, the entire funds allocated to this investment become demand, even if it is not solvent in the given year. Investors know, and reckon with the fact that they have time to cover the complete costs of the investment project over a period of four or five years. And this kind of "airborne" investment cannot be efficiently limited. This circumstance throws some light on why the central will, and the substantial efforts made to realize it, have been unable to limit successfully investment demands so far.

We still are facing the task of transforming investment intentions into demand in the economic sense of the term. Regarding solution to the problem it is, in essence, a goal of equal standing to expand construction capacity (together with the branches of production supplying construction) and, on the other hand, it is no less important to make the building industry organizations interested in shortening construction time. For the moment we only see the problems increasingly clearly, but the possibilities for solution and their alternatives have yet to be elaborated and discussed. One thing that seems certain is that it would be just about impossible to limit investment demand efficiently by returning to the annual "rationing" investment sums. This was the system used in the past, and as we know, it was not successful then either. No doubt, we will find the correct solution in the spirit of the reform in economic management. We must search for a solution which places the actual national economic burden stemming from the long period required for execution on the shoulders of the executors and investors (e.g. in such a way that excess time

* This aspect is further analysed by J. Drecin on pp. 275—288 in this issue. — *Ed. note.*

required for investment execution should reduce their profitability). Above and beyond this, we must limit demands for investments whose sources are not profitable activities when they receive state support.

The central will directed towards reducing investment tension is at present well reflected in our plans. However, in order that this should operate, further analytical work, and purpose oriented decisions are still necessary.

ЦЕНТРАЛЬНЫЕ НАМЕРЕНИЯ И ПЛАНОМЕРНОСТЬ

Ю. ЗАЛА

В статье на основе анализа фактов автор ищет ответа на вопрос, лучше реализовались ли центральные намерения после введения реформы, чем до нее. Центральные намерения автор не отождествляет с количественными наметками народнохозяйственного плана и государственного бюджета, хотя и подчеркивает их тесную взаимосвязь. Она на примерах доказывает, что более или менее точное выполнение цифровых наметок планов не является единственным или главным критерием наличия или отсутствия реализации центральных намерений. Может случиться, что в количественных заданиях плана предусматривается относительно небольшая возможность осуществления центральных намерений. В этом случае их перевыполнение может означать большую реализацию центральных намерений. Но может случиться и то, — как это и произошло в 50-ых годах, — что план содержит слишком высокие количественные задания, причем в соответствии с центральными намерениями. В таком случае невыполнение планов происходит не по вине исполнителей, а указывает на нереальность центральных намерений и строящихся на них планов. Автор приводит и такой пример, когда цифровые наметки недостаточно отражали центральные намерения, выраженные в описательной форме, и в действительности эти намерения реализировались в большей мере, чем это было выражено плановыми цифрами.

Во второй части статьи автор развивает мысль о том, что после введения реформы центральные намерения, направленные на улучшение народнохозяйственного *равновесия*, осуществлялись в большей мере, чем ранее. Относительно замедлилось образование запасов, и улучшилось равновесие внешнеторгового баланса. Эти проблемы в настоящий момент не представляются «хроническими». Автор из числа еще неразрешенных вопросов указывает на отсутствие равновесия в сфере капиталовложений, вернее, на обстоятельства, препятствующие в настоящее время решению этой проблемы.

required for investment execution should reduce their profitability). Above and beyond this, we must limit demands for investments whose sources are not profitable activities when they receive state support.

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Ö. Éltető–Gy. Láng

INCOME LEVEL — INCOME STRATIFICATION IN HUNGARY

The authors survey the main features of Hungarian income policies over a period of 25 years, comparing the extent and characteristics of income differentials today with those before the war. As against the extreme differences in the latter, the present income situation in respect of the fundamental strata and groups of Hungarian society is characterized rather by a levelling. Still, within the total population and within individual social strata significant differences in per capita incomes may be found, though the levelling process continued even in the sixties. As a major conclusion the authors state that the problem in present Hungarian income stratification is not the size of differences, but the low income level of the lowest categories and that the differences in income depend less on the character of the work done or on performance, and more on the composition of the family, on the ratio of earners to dependants.

Income stratification in Hungary appears, depending on the angle from which it is viewed, to be too egalitarian and simultaneously too differentiated. In a similar manner, incomes policy can be judged, on the one hand, as socio-centric (built on social consideration) and, on the other hand, as production-centred (concentrated on stimulating economic development). In order to draw a balanced picture of the income level, and the problems of income distribution and income policy, the question must be studied from a number of aspects.

For a realistic evaluation, it is first worth our while to review how, through what development the whole population and its major strata reached the present level.

Looking back

Today the per capita national income is more than three times the 1938 level. The per capita consumption level grew to a somewhat smaller extent, but the income and consumption relations of the population have improved substantially, nevertheless. In 1969 the per capita real income was about 2.5 times that of 1938.

In judging the living standards of the population, the size of the per capita real income alone is not determinative, for its distribution must also be taken into consideration. In this field the changes taken place since 1938 have been far greater than in the growth of the real income.

Pre-war Hungary — as was general in the backward agrarian or agrarian–industrial countries — was characterized by a disproportionate distribution of per capita incomes. The income average came about from outstanding incomes for a comparatively narrow stratum and from a low, or even poverty level for the masses. The per capita income of about 80 per cent of the population was below-average (with further differences within this sphere), while 20 per cent of the population had incomes about 2.8 times higher than the average. Within this latter 20 per cent, privately employed administrative employees and civil servants, the technical intelligentsia, doctors, teachers, etc. — that is, a rather broad stratum — maintained an income level about twice the average, while a thin (though not negligible) layer had incomes reaching the multiple of this, sometimes 20—40 times the average.

The income equalization which followed the liberation of the country (1945) made the largest improvements on peasant incomes. The changes within the peasantry were also important: through the land reform the improvement in the living standards was most outstanding among the poorest strata. The income differences between the workers and the intellectuals also diminished. In the period of post-war reconstruction the economic position of the country did not make it possible for the real wages of the intelligentsia to reach the former level. Another aspect of this same phenomenon was that with the elimination of the large estates and the nationalization of industry, commerce and the banks, the stratum with outstanding incomes was substantially reduced numerically. This means that the former extreme income differences between the major groups of the population were essentially mitigated.

Therefore, the process of levelling began immediately following 1945. This was followed, as a result of the fast rate of industrialization, by a general stagnation in the real wage level, by an actual drop even in the early 1950's and later, following 1956, by a comparatively quick rate of increase in the real wages of the lowest income strata. As a result of all these factors, the pre-war real wage and real income pattern was completely transformed. The real wages of unskilled and semi-skilled workers increased substantially, while the real wages of skilled workers and particularly qualified workers rose to a far smaller extent. The position of trades with high demand for labour, particularly of those requiring hard physical work (e.g. mining) improved substantially. Income levelling extended also to the reduction of the difference between the earnings of foremen and skilled workers, and particularly between workers and intellectuals. In the pre-war years the salaries of technical employees in industry were three times higher on average than those of the workers, while the administrative employees in industry received almost 2.4 times higher salaries than the workers. Today the ratio is 1.7 regarding technical staff, while the salaries of administrative workers are about equal to the wages of blue collar workers.

The process of levelling of earnings which showed a steady increase from 1950 on, has stopped in recent years, and in fact a slight differentiation can be noted. This is partly related to profit-sharing.

Between 1949 and 1969, if the entire period is taken as a whole, the income positions of the two large population groups, that is, those living on wages and salaries and the peasantry, improved to a similar extent. However, within the whole of the period, development was not smooth in the case of either strata. In the period 1949—1953 the real incomes of workers and employees dropped, while those of the peasantry, despite a gradual reduction following the initial rise, never again dropped below the 1949 level. In the period 1953—1959 the real incomes of workers and employees rose to a greater extent, while since 1959 those of the peasantry have shown the sharper rise. As a result, in the past few years the differences in incomes — which existed between the workers and the peasants to the disadvantage of the latter — have been practically eliminated.

The large-scale improvement in the income situations of the two strata following 1950 was realized under conditions when the net production of agriculture increased to a small extent, while the net production of non-agricultural branches rose four- to fivefold. In the meantime, the employment in the non-agricultural branches doubled, while in agriculture it was substantially reduced. In order to judge the change in income ratios, trends in production per man-years must be taken for basis. There are no precise data available, but even on the basis of approximate calculations it can be concluded that productivity rose more rapidly in the non-agricultural branches than did the real incomes of those employed in these branches. In contrast, the rise in real incomes in agriculture was higher than the increase in productivity. However, it must also be taken into consideration that the rise in productivity is not solely the merit of the branch which achieved it. The interests of the entire society may require that one branch receives a substantially higher portion of production equipment than the other. The differences in productivity increases can for the most part be attributed to the substantially deviating degree of new investments (to increase capacities) received by industry and by agriculture.

However, above and beyond this, a certain social equalization of incomes, depending on the social goals and on the interests of the whole society, had to take place. The justification of this process is most obvious in the sphere of the services, where no doubt productivity increased to a smaller degree than in industry (in fact, in a broad field of services productivity cannot even be interpreted), real wages, correctly, nevertheless followed those of the industrial employees, for without this it would have been impossible to maintain production and employment ratios in accordance with social needs.

The income disadvantage of the peasantry which existed until 1966 held back agricultural production through a number of indirect means, including

the mass migration of the younger peasant generations into the cities. Therefore, desirable production and employment ratios demanded the rise in the peasant living standards above and beyond strictly peasant interests from the point of view of the working class and the entire population as well.

In 1966 the 9th Congress of the Hungarian Socialist Workers' Party devoted a great deal of attention to the position of the peasantry. "We are endeavouring" concluded the resolution of the 9th Congress, "that as a final result, the difference between the living standards of the working class and the cooperative peasantry should be eliminated. In coming years we will take important steps that the living standards and supply of the peasantry should increasingly approach that of the working class." This goal was served, among others, by the substantial advance in the system of pensions and family allowances for cooperative farm members. In order to increase agricultural production the (contractual) purchase-prices of a number of agricultural products were raised in 1966 and in the following years. As a result of the incentives, the growth rate of production accelerated. The supplementary industrial and other ancillary activities of the cooperative farms also expanded and this made employment opportunities for the membership more regular while increasing them significantly at the same time.

The outcome of these measures was the rise of peasant incomes to a degree beyond the accelerated growth rate of agricultural production: 6 per cent in 1966, 10 per cent in 1967 and 8 per cent in 1968. During this same period workers' real incomes rose 5 per cent annually. Since the difference between the personal incomes of the workers and peasants was not too large even prior to the 9th Congress, in 1967 the latter reached the average income level of the workers and in 1968 it even exceeded it by 4 per cent.

In 1969 there were no great deviations by strata in the rise in real incomes and therefore the 1969 income ratios mostly coincided with those in 1968 [1].

The following parts of this paper will provide a more detailed review of the present income ratios among the major strata.

Income differences among the major social strata

First of all, it must be noted that *adherence to a social stratum in Hungary today determines household incomes to a comparatively limited degree.* Nevertheless, analysis of the differences among the average income levels of different social strata and groups is an organic part of a study of the population's income situation and it is also of fundamental importance from the point of view of income policy. Differences by social strata can be studied from several aspects. First of all, Table 1 shows the income ratios of the so-called *major population*

Table 1

Per capita personal incomes of the major population groups as percentage of workers' incomes

Population groups	1967	1968	1969	Per cent ratio of the population groups to total population in 1969
	Workers' income = 100			
Workers	100.0	100.0	100.0	39
Peasants	101.3	104.2	104.1	19
Households with double incomes	105.7	107.0	106.6	12
Intellectuals	132.1	132.0	133.3	19
Independents (self-employed)	114.9	115.8	114.9	2
Pensioners	74.3	74.7	73.8	9
Total population	104.8	105.6	105.7	100

*groups** introduced as from 1969 into the current income macro-statistics of the Central Statistical Office.

As already mentioned, in 1697 the *personal incomes* of the peasantry reached the income level of the workers, and in 1968 and 1969 they moved slightly ahead of the latter. However, there were rather strong regional differences within these income levels. In 1969 the per capita incomes of workers' households in Budapest were 13 per cent higher, those of the workers living in provincial towns 7 per cent higher, and those in the villages 11 per cent lower than the incomes of the peasantry. It is important to note that only 23 per cent of the workers live in Budapest and nearly 50 per cent live in villages. The majority of the workers living in villages have plots which provide them with larger or smaller supplementary income. The income level of this latter group is only 5 per cent below that of the peasantry, while village workers who have no plots are in a much worse position. Their income level is about 30 per cent below that of the peasants.

*These population groups are used with identical content in *microstatistics* (current household budget surveys and large-scale income surveys carried out at 5-year periods) as well as in *macrostatistics* of incomes based on balance sheets, pension payments, the nation-wide data of the National Bank of Hungary, etc.

The contents of the population groups in brief are as follows:

Workers: the head of the household is employed for manual work in a non-agricultural branch, and there is no active manual worker in the household who works in agriculture.

Peasants: the head of the household is a manual worker in agriculture, and there are no manual workers in the household employed in other branches.

Households with double incomes: the head of the household is a manual worker, and there are active manual workers within the household in both agriculture and in other branches.

"*Intellectuals*": the head of the household is a white-collar worker.

Independents (self employed): at least one of the earners of the household is non-agricultural self-employed (private craftsman, etc.)

Pensioners: there are no active earners in the household.

Of the other major population groups, the income level of "intellectuals" is substantially higher than the per capita national average, being 26 per cent above it (33 per cent above that of the workers). In contrast, the so-called "pure" pensioners (living in independent households), who account for 9 per cent of the population, reach only 70 per cent of the nation-wide income average.

The income differences among the major population groups are the result of the joint effects of a number of factors. The two most important of these are the earning capacity of the earners, and the ratio of earners to dependants. Social benefits in cash also play a role here, quite naturally. In studying the role played by these factors, e.g. in the almost identical income situation of the workers and peasants, we can make the following statements: (1) There is no difference in the earner-dependant ratio between these two major population groups. (2) In contrast, the work of peasant earners (in the cooperatives and in the household plots) is slightly more profitable and because of this the per capita personal incomes derived from work of those living in peasant families is about 100 forints higher than that of workers' families. (3) The worker families, on the other hand, receive on the average by about the same amount more social benefits in cash resulting primarily from the differences in pension rules.

The slightly higher income level of the so-called double income group, when compared to the workers and peasants, stems almost completely from a more favourable ratio of earners to dependants. This group contains, by definition, households in which there are at least two earners. While in the households of the workers and peasants, one earner must support about one other person, in the group of double income households there are on the average only two dependants for every three earners. In the group of intellectuals, on the one hand, the ratio of earners to dependants is more favourable than in that of the workers and peasants — although it is not as favourable as in the double income group — and, on the other hand, their income earning force, which can be characterized as the sum of income per earner originating from work [2], is substantially higher than in the other population groups (2400 forints, while this indicator is only 2010 forints in the next stratum, the peasants.)

It is also worth noting that contrary to the common belief, the dispersion of incomes, the income inequality is essentially the same within the worker-employee population and the cooperative peasantry and, in fact, the distribution of peasant incomes is slightly more equal, or at least this was the case in 1967. This was true despite the fact that the incomes of cooperative farm members earned in the cooperatives are dispersed to an incomparably greater extent than the earnings of workers or employees. However, there are smaller differences in the sizes of the household plots and, as a result, in the incomes originating from them, than in annual incomes from work in the cooperatives, and in many cases it is precisely the higher income from the household

plot which compensates for a low share in cooperative income. Thus, the total annual incomes from work of the cooperative farm members are generally dispersed to a far smaller extent, than their earnings in the cooperative itself.

Going beyond personal incomes proper, there are substantially larger differences, and in opposite directions, among the different strata with respect to social benefits in kind (see Table 2.). The peasants receive an approximately one fourth smaller share of these benefits than the workers, while the intellectuals receive almost 40 per cent more than the workers and almost twice the amount received by the peasants.

There are further deviations in respect of the individual benefits. The per capita amount received by peasant families in the form of free nursery care is one third of that of the workers, while recreational benefits for them are only one fifth of those of the workers. Families of the intellectually employed receive — per capita — twice the holiday benefits, and six times

Table 2

Utilization of some major social benefits in kind according to major population groups, as percentage of workers' per capita benefits in 1969

Category	Workers	Peasants	Households with double incomes	Intellectuals	Independents	Pensioners	Total population
Health service	100	82	71	110	71	226	105
Of this:							
hospital care	100	85	72	98	96	158	98
pharmaceutical benefits	100	76	56	137	30	383	110
Social services	100	64	67	109	68	44	85
Of these:							
nurseries	100	35	40	112	38	—	73
Education	100	90	92	144	108	28	99
Of this:							
kindergartens	100	76	76	114	41	—	85
higher education	100	74	77	617	277	125	193
Culture, sports	100	54	56	166	75	56	93
Of this:							
recreation	100	21	28	226	51	58	93
Other	100	17	339	206	83	86	93
Of this:							
rent subsidies	100	14	49	292	137	184	115
canteen meal contributions	100	14	48	134	31	—	72
Total	100	73	72	140	86	112	100

the higher education benefits, than workers' families. Pensioners, following from their age, make use of free medical benefits at more than twice the rate of the average population.

With respect to total income including the social benefits in kind, the ratio of the major population groups to one another deviates from the picture drawn in the study of personal incomes only insofar as it results from the larger share in the use of free benefits; the position of the pensioners appears as somewhat more favourable. The position of the workers is also more favourable: on the basis of total income, the income levels of the workers and peasants are at present completely identical. Summary data can be seen in Table 3.

Table 3

Per capita monthly income of the major population groups in 1969 (at current prices, forints)

Population group	Personal income	Social benefits in kind	Total income	Per capita total income of workers = 100
Workers	1300	191	1491	100.0
Peasants	1353	139	1492	100.1
Households with double income	1385	137	1522	102.1
"Intellectuals"	1733	267	2000	134.2
Independents	1494	165	1658	111.2
Pensioners	960	213	1173	78.6
Population average	1374	190	1564	104.9

There are substantial differences regarding the use of free services, between urban and rural families. As a result of the low development level of the village infrastructure, and the lower standards of village health supply, the families living in Budapest utilize these social benefits in kind (schools, hospitals, etc.) to a far greater extent than those living in villages. Understandably, this is disadvantageous not only to the peasantry but to a considerable part of the workers as well. The difference in total incomes also favours the Budapest workers in comparison to the peasantry; the total income of village workers is also below that of the peasants, as are their personal incomes.

Income differences according to employment status

We get a picture of income differences from another aspect by grouping the population according to *employment status*. This contrasts the income of

the employed with those of cooperative farm members.* According to the data of a sample survey of households inquiring for household incomes in 1967, the incomes of cooperative farm members were on the average higher than those of the employees. The advantage appears to be even greater if the household incomes of various groups working as employed and as cooperative farm members (intellectuals, non-agricultural manual workers, and manual workers in agriculture) are compared separately. On national average, per capita incomes in the households of skilled, semi-skilled or unskilled workers working as cooperative farm *members* were 15 per cent higher than those of *employed* workers, and in the villages this advantage was as high as 20 per cent. But as can be concluded from Table 4, even the incomes of *those performing agricultural work as members* of cooperative farms were substantially higher than the income levels of employed workers' families in 1967. The difference was 9 per cent on national average, but in the villages it was 15 per cent.

Table 4

Per capita average incomes in the major groups of the households of employees and of agricultural cooperative members, 1967

The head of the household	In villages			On national average		
	Employees	Agricultural coop. members	Income of coop. members as percentage of that of employees	Employees	Agricultural coop. members	Income of coop. members as percentage of that of employees
	per capita average monthly household income, forints			per capita average monthly household income, forints		
Intellectual	1357	1532	113	1505	1604	107
Non-agricultural manual worker	1067	1283	120	1130	1298	115
Agricultural manual worker	990	1226	124	1010	1227	122
Total	1099	1243	113	1215	1251	103

The higher income level of cooperative farm members' families is primarily the result of a more favourable ratio of earners to dependants. In the families of the employees the ratio is 92 dependants to 100 earners, while among the cooperative farm members there are only 76 dependants to 100 earners. However, the favourable earner/dependant ratio in the households of cooperative farm members is in fact an unfavourable phenomenon due

* This grouping deviates from the previously used major groups in that here the cooperative farm employees and workers in state farms are by interpretation included in the category of the employees, while in the former classification cooperative farm members, cooperative farm employees, and workers in state farms were included in the "peasant" category. (We continue to consider only members of agricultural cooperatives as cooperative farm members, while members of industrial cooperatives are included among the employees.)

to their age distribution, which is shifted much towards the higher age-groups, as compared with the employees. There are no great differences between the two groups in the average income earning capacity of the earners, with the exception of the small group of cooperative farm members in intellectual occupations, where the sum of income per earner originating from work is outstandingly high.

Regional income differences

Although regional differences in Hungary are not as large as in many other countries, either with respect to economic development level, or regarding the related income level, for the sake of completeness income differences must be studied from this aspect as well.

In past years a certain amount of levelling has occurred in this field too. One of its manifestations is that income differences between the Budapest and the provincial population have markedly diminished. In 1967 the per capita income of the Budapest households was only 19 per cent higher than that in the provincial towns, and 26 per cent above that of the village population (in 1962 the corresponding ratios were 26 and 36 per cent). The major reasons for the higher income level of the Budapest households is that, as a result of substantially more work opportunities, the employment rate of women is much higher in Budapest than in the provinces. Consequently, in Budapest there are 87 dependants to 100 earners while in the villages, 115. In addition, in Budapest the per capita social benefits in cash are 90 forints higher than in the villages, primarily as a result of the higher ratio of pensioners and the higher average pension.

Substantial levelling took place not only with respect to Budapest and the provinces, but the income levels of the different counties also came closer to one another. To some extent this was caused by the location of new industries into rural areas, and partly also by the growth of agricultural incomes exceeding that of wages. In 1962 the difference between the counties with the highest and with the lowest income level was almost 150 per cent (Komárom and Szabolcs-Szatmár), while in 1967 this ratio dropped to 20 per cent (Baranya and Szabolcs-Szatmár). The ranking of the counties by income level became also modified. The trend of the changes was that the relative positions of the agricultural counties became generally more favourable (see Table 5).

Due to the more rapid rise in peasant incomes and the levels attained, income deviations among the counties, in contrast with earlier periods, are no longer explained by the industrial or agricultural character of the county, or the employment pattern of the population. Differences among the counties concerning the major sources of income are considerably higher than the differences in per capita income. E. g., the proportion of income originating from wages varies by county between 37 and 69 per cent, while the proportion of

Table 5

The absolute and relative income levels by counties in 1967

County	Per capita average monthly income		County	Per capita average monthly income	
	forint	Szabolcs-Szatmár county = 100		forint	Szabolcs-Szatmár county = 100
Baranya	1192	120.8	Nógrád	1087	110.1
Tolna	1180	119.6	Veszprém	1059	107.3
Fejér	1163	117.8	Szolnok	1059	107.3
Békés	1158	117.3	Zala	1029	104.3
Csongrád	1157	117.2	Hajdú-Bihar	1024	103.7
Komárom	1149	116.4	Vas	1018	103.1
Győr-Sopron	1146	116.1	Borsod-Abaúj-Zemplén	1006	101.9
Pest	1146	116.1	Szabolcs-Szatmár	987	100.0
Bács-Kiskun	1141	115.6	Counties, total	1096	111.0
Somogy	1108	112.3			
Heves	1097	111.1			

incomes of agricultural origin is even greater. Here we can find threefold differences. The sharply deviating counties (in respect of ratios indicating income sources) no longer show large differences in average income level. This is because of the rather similar level of income of wage-earners and of peasants.

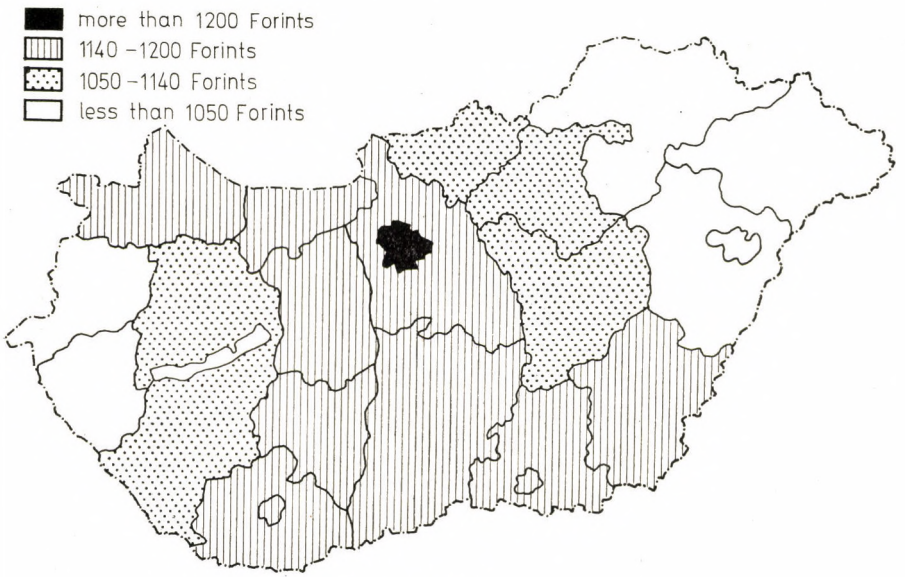

Fig. 1

Income stratification of the population

The *average* income of the total population, or of its major groups, does not illustrate the broad scale of actual income differences depicted by the income distribution.

For this purpose distributions and certain indicators, characteristic of income inequality, can be used. The income distribution in the narrow sense of the term shows the percentage of the population (or households) within given income brackets. The so-called decile distribution indicates more directly the inequality of income distribution, for this shows how tenths of the population ordered according to the increasing value of income share in the total income of the population (in percentages). The inequality indicators condense the degree of inequality into one single figure. For instance, one of these indicators is the quotient which shows to what extent the average incomes of those living above the average income level exceeds the average of those living below the average income [3, 4, 5].

Comparing 1967 with 1962, it can be concluded that the about 30 per cent average rise in per capita incomes in the five-year period improved the position of the low income strata to a higher than average extent, and therefore, the degree of inequality was substantially reduced. In 1962 the average incomes of those with incomes above the average exceeded the average incomes of those below the average income by almost 110 per cent, while in 1967 this ratio dropped to 92 per cent. In a similar manner, a comparison of the one million people with the highest and the same number with the lowest incomes (that is, the highest and lowest income deciles) also shows a decrease in inequality: in 1962 the per capita average income of the highest decile was nearly six times the per capita average income of the lowest tenth, while in 1967 this difference was only slightly more than four and a half.

Moderation of the inequality of the income distribution which took place in recent years *was not the result of wage levelling.* In harmony with economic policy goals, wages became rather differentiated. The levelling of incomes is to an extent due to the faster growth rate of peasant incomes, and is partly the result of certain demographic changes (people with higher pensions taking the places of those with the old, low pensions) and social policy measures (the extension of and increase in family allowances and the raising of pensions).

However, the decrease in income inequality does not at all mean that there are no substantial differences among considerable population groups. The four and a half-fold difference between the highest and lowest deciles already mentioned causes tremendous deviation in living standards between these two extremes in the population, comprising one million people each. But not even the extreme deciles are homogeneous from the income point of view. Everyone whose per capita monthly income exceeded the fairly moderate

sum of 1740 forints, was in the highest income decile in 1967. If we look at the upper and lower five per cent of the population, each group still comprising half a million people, the difference is seven-fold, or, expressed in absolute figures, 365 and 2500 forints monthly.

Partly as a result of the rise in average income, and partly due to the moderation in the inequality, *the number of those living on low income levels was substantially reduced* in comparison with 1962. In 1962 three and in 1967 one million people lived on less than 600 forints per capita monthly income, while in 1969 this figure dropped to about 600—700 thousand people or 6—7 per cent of the population. This is an important achievement even if the increase of the cost of living is taken into consideration. The drop in the proportion of those in the low income groups cannot hide the fact that a substantial proportion of the population is still living on a quite low income level. The 600 forint per capita monthly income is used here merely as an example, it does not indicate any sort of objective limit. Nevertheless, it is worth taking a slightly closer look at the one million people who were living on a monthly per capita income under 600 forints in 1967. The first fact worth noting is that in half of the households in this group the head of the household was a pensioner. Only 6 per cent of active families had per capita incomes less than 600 forints, while in contrast, almost one quarter — 22 per cent — of the pensioner families fell into this category. A substantial part of the low-income active families has a large number of children, almost independently of the occupation of the household head. Only one fifth of the total number of active families, but almost half of the active households with a per capita monthly income of 600 forints or less have five or more members. We will return to this practically greatest contradiction in our income distribution system later.

Simultaneously with the decrease in the numbers belonging to the lowest income categories, the proportion of the highest income categories increased. The full distribution can be seen in Table 6.

Major factors affecting income differences

Briefly summarizing the above we can state that the different social strata examined from various aspects (employees-cooperative farm members, workers-peasants-intellectuals-pensioners, ect.) show a comparatively moderate deviation in respect of their *average* incomes yet, taking the population as a whole, there are nevertheless large differences in income. In the following, we will show the factors generating the differences, and the degree of their effects on the basis of data collected in the income survey covering 1967.

It has already been shown that between the personal incomes of intellectuals and manual workers there was a 32 per cent difference in favour of the former, in 1967. If we break down these strata into more homogeneous groups,

Table 6

Trends in the distribution of the population by per capita monthly income

Per capita monthly income categories	Percentage distribution of number of persons		
	1962	1967	1969 (estimated)
under 600 forints	31.3	9.8	6.3
600— 800 forints	24.0	14.8	10.9
800—1000 forints	17.9	19.1	15.4
1000—1200 forints	12.1	18.3	16.6
1200—1400 forints	6.8	13.8	14.9
1400—1600 forints	3.4	9.8	11.8
1600—1800 forints	2.0	5.9	8.5
1800—2000 forints	1.1	3.6	5.8
over 2000 forints	1.4	4.9	9.8
Total	100.0	100.0	100.0

the differences, quite naturaly, become even greater but they can by no means be considered as yet as exaggerated. E. g. in 1967 the per capita average income level for households of leading officials and professionals on the highest levels was only 66 per cent higher than that of households of unskilled workers, janitors, etc. (See Table 7.)

However, the data in the table still show only large overall averages. *The differences within the groups are far greater than the average differences between the groups.* There is no single group which would not include families in the highest and in the lowest income categories, but quite naturally, the respective proportions show marked differences. E. g. from among the households of leading officials there are nine times as many households in the per capita monthly income category of over 2000 forints than from the households of the unskilled workers .(In 1967 the proportion of these households was 26.1 and 2.9 per cent, respectively.) With regard to the category of low per capita monthly incomes of under 800 forints, the situation is of course, the reverse. Here the proportion of unskilled worker households is eight times as high as that of the households of leading officials (29.3 and 3.5 per cent). The fact that the strata with high and low average incomes resp. appear in the low and high income brackets with a ratio sharply deviating from their numerical proportions indicates this same phenomenon from another aspect. This can be seen in Table 8.

What are the sources of the above differences? One of the sources is, beyond doubt, the differences in earnings. The relationship between earning and income is indicated by the fact that the relation between the rise in the

Table 7

Income levels of households according to the type of activity of the head of the household* in 1967

In households where the head is:	Per capita monthly income	
	Forints	of unskilled workers = 100
Leading official or high-level professional	1678	166
Medium-level professional	1459	144
Clerical worker	1319	131
Skilled worker or manual worker with vocational training	1233	122
Semi-skilled worker	1095	108
Agricultural manual worker	1175	116
Unskilled worker, janitor, etc.	1011	100
Pensioner or non earner	953	94
Total	1184	117

* When looking at the groups by the type of activity in the table, the contents of the manual groups are clearly reflected in the category. The content of the three groups of intellectual workers is briefly:

The group of *leading officials and high level professionals* includes, beside high and medium level executives, the intellectuals with university or other higher (post-secondary) qualification (engineers, teachers, doctors, economists, lawyers, chartered or certified accountants, etc.)

The group of *medium-level professionals* includes the professionally employed intellectuals with secondary education (technicians, foremen, primary school and kindergarten teachers, nurses, specialized administration workers, etc.)

The group of *clerical workers* includes clerical workers in the stricter sense of the term (administration workers, payroll accountants, secretaries, typists, ect.)

Table 8

Proportion of households grouped according to the type of activity of the head of the household in the extreme income brackets (percentages)

Head of the household is:	Households where the monthly per capita income is				All households
	under 600	600—800	2000—2400	over 2400	
	forints				
Leading official or high-level professional	1.2	1.7	14.5	30.6	7.1
Medium-level professional	2.8	4.4	21.7	18.2	10.2
Clerical worker	1.4	1.9	4.1	3.1	3.5
Skilled worker or manual worker with vocational training	17.2	27.0	25.7	21.4	28.7
Semi-skilled worker	15.4	15.5	6.6	4.8	11.8
Agricultural manual worker	30.6	26.0	21.7	17.8	23.6
Unskilled worker, janitor, etc.	31.4	23.5	5.7	4.1	15.1
Active households, total	100.0	100.0	100.0	100.0	100.0

"earning category" of the head of the household, and the average per capita income of the corresponding households is almost precisely linear.* (See Table 9)

There is, however, substantial dispersion hidden behind the averages and, therefore, the relationship between earning and income is by no means as clear as would appear from Table 9. All earning categories include house-

Table 9

Average per capita income in groups according to the size of earning of the head of the household

Monthly earning of head of household (forints)	Per capita income of household (forints)
under 1200	743
1200–1400	856
1400–1600	926
1600–1800	1006
1800–2000	1048
2000–2200	1110
2200–2400	1160
2400–2600	1208
2600–2800	1286
2800–3000	1337
3000–3200	1408
over 3200	1606

holds with low, medium and high per capita incomes. Of course, the higher the earning category, the greater the frequency of higher per capita incomes and *vice versa*. We illustrate the dispersion with three earning categories. These categories include, in turn, 9.8, 10.4 and 5.3 per cent of the "pure" worker–employee households. (See Table 10)

As a result of the dispersion illustrated in the table, the earnings of worker–employees and the per capita incomes of their families have a correlation coefficient of only 0.4 which indicates a weak-to-medium relationship. It should be noted that both distributions and correlation coefficients indicate that in the group of intellectual (white-collar) employees, partly because of the larger dispersion in earnings, a slightly closer relationship can be found between earnings and income levels. E. g. for leading officials and high-level

* This question is not being examined for the whole of the population but only for the "pure" worker–employee population — that is, only in households where all earners are employed — for it is only here that the relationship between earners and earnings is unambiguous. Furthermore, for the sake of simplicity, the analysis is restricted to the earnings of the head of the household.

Table 10

Percentage distribution of "pure" worker-employee households by per capita income in three groups by the size of earnings of the head of the household

Earning category of the head of household (forints)	Per capita monthly income of the household, forints										
	under 600	600– –800	800– 1000	1000– 1200	1200– 1400	1400– 1600	1600– 1800	1800– 2000	2000– 2400	over 2400	Total
1600–1800	9.5	12.9	20.4	19.0	12.9	10.3	9.6	2.8	1.3	1.3	100.0
2200–2400	3.2	11.6	17.3	18.6	16.6	9.6	7.6	7.0	7.5	1.0	100.0
2800–3000	–	3.8	14.2	16.5	17.3	17.9	10.3	7.0	7.5	5.5	100.0

professionals the correlation is nearly 0.6; in contrast, the relationship for manual workers is even weaker than average, with a correlation coefficient smaller than 0.3.

Another factor indicating the undoubtedly existing but nevertheless not too strong relationship between earnings and income level is the fact that only 26 per cent of the variance in the per capita incomes of worker–employee families is explained by differences in the earnings of the heads of households.

Therefore, the main source of income of the population, wages and salaries have a relatively limited role in determining incomes in Hungary. *The differences in incomes are far more due to the varying compositions of the households and to the different ratios of earners to dependants*, than to the place of the earners in the social division of labour. This disregards the principle of distribution according to work. Although the levelling of incomes which took place between 1962 and 1967 appeared also in the fact that the differentiating role of the size of families, and the earner–dependant ratio, respectively, *slightly decreased*, the latter, in general, but particularly within the pure worker–employee population, has still a determining role in bringing about income differences. For this reason the income position of the individual families is not a simple mechanical repetition of their earning position. For instance, the family of a skilled worker in the highest earning category can be in the lowest per capita family income category should he happen to have many children and, for this reason, an unfavourable earner–dependant ratio.

The close relationship between the earner–dependant ratio and income is clearly seen in the rapid rate at which the number of dependants per active earner decreases with higher income categories. As can be seen in Table 11, there is a more than twelve-fold difference in the average earner–dependant ratio between the income categories under 600 and over 2000 forints.

Another side of the exaggerated income differentiating role played by the earner–dependant ratio is the well known fact that the per capita income levels of large families are much lower than those of the small families or

Table 11

The earner–dependant ratio by per capita income categories

Per capita income (forints)	Number of pensioners and dependants per 100 active earners
under 600	330
600 — 800	217
800 — 1000	145
1000 — 1200	106
1200 — 1400	78
1400 — 1600	60
1600 — 1800	45
1800 — 2000	34
over 2000	27

persons living alone (the family size is obviously in quite close connection with the earner–dependant ratio). For instance, the per capita income of families with six or more members is only half of that of the single-member households. But even if we look at the income ratios projected to a "consumption unit" which better expresses the savings of the larger families in certain expenditure items, and the smaller cost of supporting children of different ages and old persons than adults, the position of the large families still remains substantially less favourable. (See Table 12).

It is also worth mentioning that, similarly to active families, there are also substantial differences in the incomes of pensioner families. The major reason behind these differences is the deviation in pensions but other dif-

Table 12

Income differences by the size of household

Number of family members	Per capita	Per consumption unit
	average monthly income in percentage of incomes of households with 6 or more members (active families)	
1	202	130
2	182	142
3	155	135
4	135	124
5	121	116
6 and more	100	100

ferentiating factors also contribute: incomes from employment, family support, household plots, etc. which do not exist at all in a part of the families, while they appear to a markedly differing degree in others. The relative size of income inequality is just as large within the stratum of the pensioners as among the whole population. The latest raising of pensions, particularly of low pensions, as well as the introduction of a pension system which follows changes in prices, not only improves the absolute and relative positions of this stratum, but it also reduces one of the unjustified factors of income inequality within the total population.

Some fundamental problems of improving income distribution

The present system of income distribution was established in the years following the Liberation. Although it was modified several times since, it has not changed fundamentally. One of the most essential elements of this system has been the free provision (or provision at very reasonable conditions) of health, education, and cultural facilities. The country's leadership considers this to be of primary importance in the interest of the population, but the population's lowest income strata generally attaches less importance to these and more to the primary elements of their needs (food, clothing, ect.). With these benefits the income distribution system serves the purpose that in these fields the supply to the population should not be limited, or not essentially limited, by social or income differences. It is certain that the method of distributing these benefits, its rules and system must be improved in a number of respects (we do not want to go into the details of this at present), but the whole of the system is, in our opinion, built on correct basic principles, that is, on free health service and education.

Social benefits in kind account for 12 per cent of the total income. Their ratio is similar in the rest of the socialist countries, while it is smaller in the European capitalist countries (7—9 per cent). However, with respect to the share of social benefits paid in cash, the situation is fundamentally different. Their proportion is only 10 per cent in the total income in Hungary, while in contrast in the majority of the socialist countries, and in many capitalist countries it is far higher. (It is the highest in France, 25 per cent.) In Hungary the level of family allowances and the sum of the old-age pensions* are particularly low, within the category of cash benefits. The family allowance, although it is nearly twice the 1960 amount, only covers about one fifth of the present cost of upbringing children.

In the past period the social benefits increased at a faster rate than did incomes from work. In the period between 1960 and 1969 the total per capita real

* The pensions of those who retired before the latest pension law (enacted in 1958).

income increased by 48 per cent, incomes from work by 39 per cent, and social benefits by 74 per cent. The most important of the social benefit increases was precisely the increase in cash benefits (114 per cent). In this connection we would refer to the opinion that in order to improve the incentive force of incomes from work, their proportion should be raised. In our opinion, the problem caused here is not by the ratio of the two sources to one another, but by their distribution taken individually. The incomes originating from work are insufficiently incentive, not because their proportion within the total income is low, but primarily because the *differences in earnings* do not sufficiently reflect the differences in the quantity and quality of the work performed, neither between those in identical nor between those in different occupations. The wage policy measures taken in recent years have brought about but a comparatively slight widening in the range of relative earnings. One of the reasons is that when wage corrections were made, large corrections were needed in the low categories, and the residual which could be allocated to differentiate earnings was insufficient to make any substantial changes in the original ratios.

The basic cause of the frequent recurrence of the need to raise the wages of the lowest earning groups is the low level of the family allowance. The majority of the costs for upbringing a child is not covered by the family allowance but by earnings. While the repeated central measures to raise low earnings have indeed narrowed down the differences between earnings, they have not sufficiently improved the conditions of the low income groups. *The low income group does not consist primarily of those with low earnings: aside from the pensioners, the majority of them are families with many children.* Therefore, increasing the wages alone of the low earning group could not be effective either from the incentive, or from the social point of view. As long as the ratio of earners to dependants plays such an important income determining role, living standard ratios can be influenced by wage differentiation to a limited extent only. This means that the increase of certain social benefits and, accordingly, the increase of the proportion of social benefits in general, does not contradict the principle of distribution according to work; in fact, it would be a prerequisite for the *consistent* assertion of this principle.

The road to reducing the present exaggerated role played by the earner–dependant ratio in income differentiation leads *through higher social contribution to support children and the aged.* This would not only make the dispersion of incomes more even but, at the same time, it would also work in the right direction, since differences in earnings would play a far greater role than at present in determining how people live.

The situation is slightly different regarding the peasantry. Here the size of the per capita income is less influenced by the size of the family, or by the number of children, because of the special division of labour within agriculture. At the same time work opportunities and work actually performed play a

greater role than in the worker–employee households. However, here too, the principle of distribution according to work operates in a limited manner only. The reason for this are the objective conditions which to a great extent determine peasant incomes (advantages stemming from the quality of the land, its location etc.) which the taxation system did not take sufficiently into account, at least not in the period prior to 1971.

As a final conclusion we may establish that the income differences within the population are quite marked but, with the exception of individual, special cases, they are not of a size which in itself is to be considered as problematic. The problem, on the one hand, is that the absolute level of the lowest income categories is low indeed and, on the other, that the given income differences do not depend on work performance in a considerable part of cases.

*

This study has intended to provide a picture of the income level and income differences. Although income is the most important element of living standards, it is, nevertheless, only a single component, and not the whole. There can be and there are large differences in the living standards of individual families or strata with identical incomes. Some elements of the living standards cannot be measured in money terms; typical examples are, among others, the well known differences between urban and rural living conditions, or between industrial and agricultural work. As a result, the living standards of urban workers and peasants are still so different today that they cannot really be precisely compared. Apart from this, many other factors (wealth, health and cultural conditions, working hours, etc.) cause differentiation in the positions of the individual strata, families, and even the individuals.

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УРОВЕНЬ И СТРАТИФИКАЦИЯ ДОХОДОВ В ВЕНГРИИ

Э. ЭЛТЕТЭ – Д. ЛАНГ

В начале своей статьи авторы дают краткий обзор основных черт венгерской политики доходов за последние 25 лет, сопоставляя степень и характер дифференциации доходов сегодня и до войны.

В отличие от крайних различий в доходах, наблюдавшихся до войны, сегодня в отношении основных слоев, групп венгерского общества скорее характерна нивелляция. Уровень личных доходов рабочих и крестьян по существу одинаков, а средний уровень доходов работников умственного труда превышает средний по стране уровень всего лишь на 26 процентов. Хотя в общественных льготах, получаемых в натуральной форме, между отдельными слоями и наблюдаются большие различия, они лишь в небольшой степени изменяют соотношения доходов в общем.

Довольно значительная выравненность наблюдается и в территориальном распределении доходов. Как между столицей и провинцией, так и между комитатами с крайними условиями доходов разница составляет всего 20—25%.

И все же, в отношении всего населения в целом, а также внутри отдельных социальных слоев имеются значительные различия в среднедушевых доходах, хотя в этой области еще в шестидесятых годах произошла существенная нивеллировка. Среди рабочих и служащих один из основных источников различий доходного уровня кроется в различном уровне заработков. Анализ данных, однако, показывает, что между уровнем заработков и уровнем доходов имеется весьма слабая связь, особенно в кругу работников физического труда. В дифференциации среднедушевых доходов определяющая роль принадлежит, главным образом, величине семьи, соотношению между самодеятельными и иждивенцами в семье.

Важнейший вывод авторов заключается в том, что при нынешней дифференциации доходов в Венгрии проблема кроется не в ее степени, а, с одной стороны, в низком абсолютном уровне доходов самых низких категорий, и, с другой стороны, в том, что доходные различия в меньшей мере зависят от характера выполняемой работы, от выработки, а скорее от семейного состава, от соотношения между самодеятельными и иждивенцами. Разрешению обеих проблем способствовало бы, в первую очередь, повышение общественного участия в содержании детей и нетрудоспособных престарелых.

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F. JÁNOSSY

KANN EINE »SHORT-CUT« METHODE MEHR ALS EIN NOTBEHELF SEIN?*

Der Vergleich des wirtschaftlichen Entwicklungsstandes verschiedener Länder kann entweder mit Hilfe des in Geldeinheiten berechneten — und auf eine gemeinsame Währungseinheit, z. B. den Dollar umgerechneten — Nationaleinkommens pro Kopf der Bevölkerung, oder aber mit Hilfe von — in Naturaleinheiten messbaren — Indikatoren des Entwicklungsstandes, d. h. mit als »short-cut« bekannten Methoden bewerkstelligt werden. Es wird gezeigt, dass die »short-cut«-Methoden nicht bloss ihrer Einfachheit halber, sondern auch aus prinzipiellen — in diesem Artikel ausführlich dargelegten — Gründen, den umständlichen Berechnungen in Geldeinheiten überlegen sind.

1.

Der Glaube, zu dem sich die Mehrzahl der Nationalökonomen bekennt — ein Glaube, der wie jeder andere irgendeinem Glaubensbedürfnis entspringt — betrachtet es als Dogma, dass das Geld der beste, ja der einzige ökonomische Massstab ist, an dem alles ohne Ausnahme gemessen werden könnte. Diese Möglichkeit in Frage zu stellen, gilt im Kreise der »Gläubigen« als Ketzerei und so laufe ich wohl Gefahr, auf einen aus Banknotenpäckchen errichteten Scheiterhaufen (Papiergeld ist ja heute als Brennstoff kaum teuerer als gute trockene Holzscheite im Mittelalter) verbrannt zu werden.

Nicht um dieser — in den Ländern der »Geldgläubigen« sowieso nicht reellen — Gefahr zu entrinnen, sondern um Missverständnisse zu verhüten, möchte ich einleitend bemerken, dass sich meine Einwände gegen die Universalität des Geldmassstabes vor allem und insbesondere auf den hier zu Diskussion gestellten Fall, nämlich den Vergleich des in Geldeinheiten gemessenen Nationaleinkommens verschiedener Länder beziehen.

Ich bestreite, dass die in Geldeinheiten berechneten Grössen des Nationaleinkommens die *einzige* oder die *einzig wahre* Grundlage für den Vergleich des Nationaleinkommens verschiedener Länder bilden oder genauer gesprochen bilden können und müssen. Ich bestreite also, dass jede Methode, die diese Grund-

* Vortrag gehalten auf der 12-ten Generalversammlung der International Association for Research in Income and Wealth, Ronneby, Sweden. August 30—September 4, 1971.

lage verwirft und andere Wege des Vergleichs sucht und vielleicht auch findet, bestenfalls einen mehr oder minder brauchbaren Ersatz für die einzig seeligmachende Methode des Rechnens in Geldeinheiten liefert. Die als »short-cut« bekannten Methoden werden von den meisten Fachökonomen zwar als *praktisch* verwendbar zugelassen, jedoch theoretisch verworfen, da infolge dieser Praxis der wahre Glauben, nach welchem das Geld den Mittelpunkt der ökonomischen Welt bilde, erschüttert werden könnte. Es ist eine alte Geschichte: auch der Kardinal Bellarmin musste, um die Schiffahrt über den Ozean nicht zu verhindern, das praktische Rechnen mit der kopernikanischen Astronomie zulassen. Die Schiffer durften mit dieser short-cut-Methode rechnen, aber ohne an dem Dogma zu zweifeln, dass Gott die Erde als Mittelpunkt der Welt, um den alle Gestirne und die Sonne kreisen, erschuf.

Soweit meine Ketzerei; aber genau so, wie ein vernünftiger Atheist erkennen muss, dass die Bibel grundlegende Menschheitserfahrungen vieler Jahrtausende gesammelt hat, anerkenne ich, die Bedeutung der »Volkswirtschaftlichen Gesamtrechnung« als die Sammlung von ökonomischen, man könnte auch sagen, buchhalterischen Erfahrungen. Es steht mir fern, dieses mit viel Scharfsinn, minutiöser Arbeit und Bedacht aufgebauten System einer — mir als Aussenseiter nicht zustehenden — Kritik zu unterziehen.

Und doch darf die Hochachtung vor einem Werk uns nicht daran hindern, die Frage aufzuwerfen, wozu es eigentlich dient, wozu es brauchbar ist und wo die Grenzen seiner Verwendbarkeit gesteckt sind. Dieser Frage möchte ich mich nun bezüglich der Volkswirtschaftlichen Gesamtrechnung zuwenden, insbesondere vom Gesichtspunkt der Berechnung des Nationaleinkommens.

2.

Das System der »Volkswirtschaftlichen Gesamtrechnung« dient wohl vor allem dazu, alle Moleküle des Einkaufens, bzw. Verkaufens so zu summieren, dass man das Nationaleinkommen eines Landes als eine Summe erhält, die *alles* in Betracht zieht, ohne etwas doppelt zu zählen. Um die Komplikationen, die sich bei der Lösung dieser Aufgabe ergeben, richtig zu beurteilen, muss man vor Augen halten, dass das Nationaleinkommen — im Gegensatz zum Nationalvermögen — keine Wert*menge*, sondern ein Wert*strom* ist. Das Nationaleinkommen hat die Dimension »Werteinheit pro Zeiteinheit« oder in Geld ausgedrückt die der »Geldeinheit pro Zeiteinheit«. (Dass man das jährliche Nationaleinkommen, d.h. das Nationaleinkommen pro Jahr, oft als eine innerhalb eines Jahres aufgehäufte Wertmenge betrachtet, ist irreführend, da diese Menge in der Wirklichkeit niemals tatsächlich aufgehäuft wird, also auch nicht gemessen werden kann. Man denke, zum Beispiel, an das täglich gebackene Brot, das von Tag zu Tag aufgegessen wird, also nur als Stromstärke, aber niemals

als jährliche Menge existiert. Man sollte auch nicht in Vergessenheit geraten lassen, dass ein Wertstrom von z.B. 365 Millionen Dollar pro Jahr identisch mit einem von einer Million Dollar pro Tag, von 41 600 Dollar pro Stunde, oder von 11,6 Dollar pro Sekunde ist, genau so, wie eine Geschwindigkeit von 41,6 km/Stunde identisch ist mit einer von 11,6 m/Sekunde.)

Das prinzipielle Problem, das sich aus der Tatsache ergibt, dass das Nationaleinkommen keine Wertmenge, sondern eine Wertstromstärke darstellt, kann gut anhand folgender Analogie erfasst werden: Die auf unserem Erdball gegebene Wasser*menge* ist objektiv eindeutig gegeben, als die Summe alles Wassers in den Ozeanen, Seen und Flüssen, als Grundwasser im Boden und als Feuchtigkeit in der Atmosphäre. Das Messen dieser Wassermenge stösst zwar auf rein *praktische*, aber keineswegs auf prinzipielle Schwierigkeiten (die praktischen Schwierigkeiten wachsen selbstverständlich mit der Einengung der zulässigen Fehlergrenze). Wenn man hingegen ein Mass für die Zirkulation dieser sich andauernd in Bewegung befindlichen Wassermenge bestimmen wollte, die man z.B. in m^3/Sek. messen könnte, so würde man auf ein *prinzipielles*, von der *Zielsetzung* dieser Messung *abhängiges* Problem stossen. Da gibt es eine Zirkulation zwischen dem Wasser auf der Erdoberfläche und der Atmosphäre, zwei andere, von der vorher genannten unabhängige Zirkulationen, nämlich eine innerhalb der Atmosphäre und eine andere im Ozean selbst, z.B. den Golfstrom. Dann könnte man noch weitere Zirkulationen in Betracht ziehen, z.B. die innerhalb der Flüsse, die als Wasserwirbel wohl bekannt sind. Ja, wenn man alle turbulenten Bewegungen der einzelnen Wassermoleküle mit in die Berechnung der Wasserzirkulation einbeziehen würde, käme man zu Grössen astronomischen Ausmasses. Das Messen einer Zirkulation, als einer Durchflussmenge pro Zeiteinheit, hat also eine unbedingte Voraussetzung, nämlich die eindeutige Festlegung der Durchflussquerschnitte, an denen diese Zirkulation gemessen werden soll.

Um demnach das Nationaleinkommen als Wertstromstärke, seiner Definition gemäss, zielgerecht zu messen, müssen vorest alle Querschnitte festgelegt werden, an denen die einzelnen Wertströme aus der Produktion austreten, um in die Konsumtion einzufliessen. An diesen Querschnitten, die gar nicht so einfach und nur mit viel Bedacht ausgewählt werden können, muss man die »Messuhren« aufstellen, die alle jene und nur jene Wertströme messen, deren Summe den Gesamtwertstrom des Nationaleinkommens ergibt.

Allerdings messen diese Messuhren nicht die *Wertströme* selbst, sondern bloss, die mit diesen Wertströmen parallel, aber in entgegengesetzter Richtung, fliessenden *Geldströme*. Wenn ein Wertstrom von A nach B fliesst, so fliesst der Geldstrom, den man misst, von B nach A. Die Messung stützt sich auf die mehr oder minder berechtigte Annahme, dass der gemessene Geldstrom tatsächlich ein Mass für den in die entgegengesetzte Richtung fliessenden Wertstrom der Güter darstellt.

3.

Solange man nicht in Vergessenheit geraten lässt, dass das Nationaleinkommen im Grunde genommen, also primär, aus den Gütern (und Dienstleistungen) besteht, die unaufhörlich aus der Produktion in die Konsumtion fliessen, so kann das Messen in Geldeinheiten kaum irreführen. Dass der aus Gütern bestehende Strom und nicht der Geldstrom primär gegeben ist, kann an der Tatsache erkannt werden, dass auch ein Volk, das sich noch im Zustand der Naturalwirtschaft befindet — gleich ob heute noch irgendwo in Afrika völlig vom Welthandel, also vom Warenverkehr isoliert, oder vor Tausenden von Jahren, in einer Zeit, als es noch keinen Privatbesitz, keinen Tausch, geschweige denn Geld gab —, über ein bestimmtes Nationaleinkommen verfügt. Das Nationaleinkommen eines primitiven Volkes besteht aus den Früchten seiner Arbeit als Jäger und Fischer, als Hirt und Landbebauer, als Handwerker usw. Das Volk »produziert« und »konsumiert«, und wenn die Leute untereinander oder mit benachbarten Stämmen Güter austauschen — z.B. ein Rind für 20 Tontöpfe —, so ohne die Zwischenschaltung des Geldes. Die Grösse des Nationaleinkommens könnte man, insbesondere in diesem Fall mit Hilfe einer Marxschen Bestimmung: als ein Mass der Intensität des »Stoffwechsels zwischen Mensch und Natur« auffassen.

Das Nationaleinkommen existiert als eine in der Wirklichkeit — durch die Bevölkerungszahl, die Naturbedingungen, den Entwicklungstand der Produktivkräfte usw. — gegebene Grösse, ganz unabhängig davon, ob die Menschen überhaupt wissen, dass es eine solche Grösse gibt, geschweige denn diese messen wollen oder gar messen können.

Die Bestrebung, alles was uns umgibt zu messen, ist uralt. Dieses Bestreben entspringt jedoch nicht einfach einer Freude am Messen oder einer allgemeinen, dem Menschen angeborenen Neugierde. Das Messen ist immer irgendeinem Zweck untergeordnet, und dieser Zweck hat ausnahmslos eine gemeinsame Grundlage, nämlich die Notwendigkeit des Vergleiches. Das Feststellen, von »mehr oder weniger« von »grösser oder kleiner« ist ursprünglicher, als das Messen mit einem Massstab und die Festlegung von Masseinheiten.

4.

Doch bleiben wir vorerst bei der Zielsetzung des Messens. An einem einzigen simplen Beispiel wollen wir zeigen, wie ausschlaggebend die *Zielsetzung der Messung* für die Bestimmung des Massstabes ist, an dem zweckentsprechend gemessen werden kann, ja gemessen werden muss, um der Zielsetzung der Messung Genüge zu tun.

Das Alter eines Lebewesens ist an der Zeitspanne, d.h. an der Anzahl der Jahre und Tage, die seit seiner Geburt verstrichen sind, völlig präzis messbar.

(Die einzige, praktisch unbedeutende Fehlerquelle dieser Messung ergibt sich aus der Bestimmung des Zeitpunktes der Geburt; die Stunde steht wohl objektiv fest, doch gibt es kaum eine Definition, die die Sekunde der Geburt bestimmbar machen würde.) Und doch ist diese präzise, eindeutig bestimmbare Anzahl der seit der Geburt verstrichenen Jahre und Tage, nur ein wager Anhaltspunkt für das biologische Alter. Wenn eine solche Unterscheidung unsinnig wäre, so wäre es auch sinnlos, von jemandem als jung oder alt im Vergleich zu seinen Jahren zu sprechen. Ja, der Agent einer Versicherungsgesellschaft begnügt sich nicht mit dem Alter nach dem Geburtsschein; er lässt den Betreffenden vom Arzt auf Herz und Nieren prüfen, nicht bloss, um einer eventuellen Krankheit auf die Spur zu kommen, sondern um das *biologische* Alter des zu Versichernden, so gut es geht, zu messen oder zumindest abzuschätzen. Dieser Mensch, sagt er, ist zwar schon 60 Jahre alt, aber so rüstig wie ein Fünfziger, d.h. seine Lebenserwartung muss bei der Versicherung wie die eines Fünfzigers einkalkuliert werden. Noch grösser als derartige individuelle Abweichungen, sind die, die man bei Menschen verschiedener Völker erfährt: eine Engländerin ist mit 12 Jahren noch ein Kind, eine Zulu-Kafferin bringt in diesem Alter schon ihr zweites Kind zur Welt. Und wenn wir die Kategorie des Alters nicht bloss auf Menschen beziehen, so ist es nicht verwunderlich, wenn ein Zirkusdirektor sich empört: »Für Deine drei *alten* Kamele willst Du meinen *jungen* Elephanten haben«, wobei die Kamele bloss 15, der Elephant bereits 50 Jahre alt ist.

Kurz die Lehre aus dieser Geschichte: Vorausgesetzt, dass man das Nationaleinkommen eines Landes in Geldeinheiten, so eindeutig und genau wie das Alter eines Lebewesens, an der Anzahl der Jahre und Tage, die seit seiner Geburt verstrichen sind, messen könnte, so bliebe es immer noch fraglich, ob dieses präzise Mass dasjenige ist, das uns interessiert. Wenn wir den Entwicklungsstand verschiedener Länder vergleichen wollen, wenn unser Interesse darauf gerichtet ist, festzustellen, ob sich das eine oder das andere Land — bildlich gesprochen — noch in früher Kindheit oder bereits im Pubertätsalter befindet, so können ganz grobe, schwer quantifizierbare Merkmale für das »biologische Alter« der einzelnen Ländern aufschlussreicher sein, als die präzisesten, aber am Wesen der Frage vorbeigehenden Messungen.

5.

Um zwei Dinge nicht bloss unmittelbar miteinander zu vergleichen, sondern diese auch messen zu können, braucht man einen *Massstab*. Wenn ausserdem die Messungen verschiedener Leute untereinander vergleichbar sein sollen, so müssen sie Massstäbe haben, denen die gleiche *Masseinheit* zugrunde liegt.

Eine der wesentlichsten Bestrebungen und Errungenschaften aller Wissenschaften — vor allem und zuerst nur der Naturwissenschaften — bestand und besteht darin, Masseinheiten festzulegen. Alle, auch die grundlegendsten *Dimensionen*, wie Raum, Zeit und Masse sind in der Wirklichkeit unabhängig vom Dasein der Menschen gegeben, aber erst der Mensch schafft, um die Grössen nicht bloss vergleichen, sondern auch messen zu können, Masseinheiten, und mit Hilfe dieser, einheitliche Massstäbe. Je präziser der Mensch zu messen trachtet, umso genauer muss er die Masseinheiten festlegen. So erwiesen sich z. B. die Masseinheiten der Länge, wie Zoll (Daumen), Fuss, Elle, usw., die der Mensch ursprünglich mit der Länge seiner eigenen Gliedmassen fixierte, als zu ungenau. Es wurden immer genauere Etalone festgelegt, der Meter, ursprünglich als der 40millionste Teil des Erdumfanges, dann als die Länge eines Platinstabes (der »Pariser Meter«). Als Zeiteinheit diente dem Menschen die Umdrehungszahl der Erde, die einen »Etalon« für die Zeiteinheit »Tag« lieferte. Und als mit Hilfe der Quarzuhr unglaublich genaue — von der Erdumdrehung unabhängige — Zeitmessungen möglich wurden, erkannte man, dass die Umdrehungszeit des Erdballs Schwankungen unterworfen, also auch dieser Etalon der Zeiteinheit nicht völlig präzis ist.

Nicht nur im Vergleich zu diesen und anderen Masseinheiten der Physik ist die Masseinheit des Geldes schlechter fixiert als der Fuss zu Zeiten, als für jeden sein eigener Fuss die Masseinheit bildete. Mit der Fixierung der Masseinheit zum Messen der wesentlichsten Dimension der Nationalökonomie, des Wertes, steht es heute nicht besser, ja vielleicht schlechter als vor einem Jahrhundert. Die Fixierung der Masseinheit des Geldes, als Wert einer bestimmten Goldmenge, die nicht nur in Gedanken, sondern in der Tat zur Geldeinheit gemünzt wurde, gehört ja der Vergangenheit an.

Um uns, an diesen heikelsten Punkt angekommen, nicht im Dschungel der Wert- und Geldtheorie, im Dschungel der nationalen Währungspolitik sowie der internationalen Währungsparität auswegslos zu verstricken, — insbesondere da der Autor dieser Schrift eingestehen muss, von diesen Fragenkomplexen im Detail nicht allzu viel zu verstehen —, wollen wir uns auf die kurze Darlegung jener Probleme beschränken, die wir bezüglich des Messens des Nationaleinkommens in Geldeinheiten für prinzipiell wesentlich halten.

Um dem Schulaufseher zu imponieren, stellt der Lehrer seinem Liebling die Aufgabe: »Wieviel ist 2,5 km minus 3 Angström.« Der Musterschüler schreibt an die Tafel: »$2{,}5 \cdot 10^5$ cm $- 3 \cdot 10^{-8}$ cm $= 249999{,}99999997$ cm« und schreitet, sich stolz umsehend, mit einem wohlverdienten »Ausgezeichnet« zu seiner Schulbank zurück, er wird wohl später von der Schulbank zur Nationalbank fortschreiten aber niemals Physiker werden. Als Schulaufseher würde ich für diese Aufgabe, d.h. die Ausrottung statt des Erweckens eines tieferen Wirklichkeitssinnes, dem Lehrer ein Nichtgenügend geben, denn ein solcher Unterricht ist unter anderem eine Vorbereitung dafür, die Jahresbilanz einer Aktien-

gesellschaft für wahre Münze zu nehmen, nur weil sie, als elfstellige Zahl, von Milliarden Dollar bis zum letzten Dollarcent berechnet und veröffentlicht wurde.

Kauft man sich eine Schachtel Streichhölzer, die 3 cent kostet, und zahlt mit einem 1000 $-Schein, so erhält man 999,97 $ zurück und wird von der Präzisität des Geldes tief beeindruckt. So und auf ähnliche Weise wird man daran gewöhnt, bzw. dazu verleitet, auch die Angaben über das Nationaleinkommen für unbedingt glaubwürdig zu halten, wenn die Zahlenwerte mit 6 oder noch mehr Stellengenauigkeit berechnet und im »Statistischen Jahrbuch« veröffentlicht wurden.

Anderseits weiss jede Hausfrau, dass die Preise auf dem Markt wieder gestiegen sind, dass ihr Mann von einem drohenden Streik spricht, um zumindest eine der Teuerung entsprechende Lohnerhohung auszufechten. Der Direktor der Fabrik hingegen beruft sich bei den Preissteigerungen, die er vornimmt, auf das Steigen der Löhne. Die Nationalökonomen und die Politiker sprechen und klagen über eine Lohn-Preisspirale. Sie wissen also alle, dass die Geldeinheit keine so stabil festgelegte Masseinheit ist wie z.B. der Pariser Meter.

Auch in dieser Frage muss ich mich — zumindest in den Augen jener, mit denen ich in dieser Schrift polemisiere — zu einer ketzerischen Ansicht bekennen: ich halte nämlich die Marxsche Werttheorie für die einzige, die eine klare Wertbestimmung gibt. Marx schreibt: »Es ist . . . . . die zur Herstellung eines Gebrauchswertes gesellschaftliche notwendige Arbeitszeit, welche seine Wertgrösse bestimmt.« [1] An einer Reihe von anderen Stellen präzisiert Marx, dass es sich bei dieser Wertbestimmung einerseits um die zur *Reproduktion* notwendige, andererseits nicht bloss um »gesellschaftlich notwendige«, sondern auch um durchschnittliche, einfache Arbeit handelt.

Die »ursprünglichste« Werteinheit wäre demnach die Arbeitsstunde, u. zw. eine solche, die der Bedingung, eine durchschnittliche, einfache und gesellschaftlich notwendige zu sein, entspricht. Marx stand es aber fern, die Arbeitsstunde *unmittelbar* in den Rang einer praktisch brauchbaren Werteinheit, geschweige denn einer Geldeinheit, erheben zu wollen. Alle seine Ausführungen über die verschiedenen Funktionen des Geldes weisen auf die Absurdität einer solchen Vorstellung hin. Allerdings gab es, insbesondere am Anfang unseres Jahrhunderts, Marxisten die — in der Illusion, dass das Geld im Sozialismus alle Funktionen mit Ausnahme des »Rechengeldes«, also der Funktion eines Massstabes verlieren würde —, die Arbeitsstunde in den Rang der Geldeinheit erheben, d.h. diese anstatt einer Geldeinheit, in die Buchhaltung einführen wollten. Diese Vorstellung ist schon deshalb naiv, weil sie die von Marx betonten Atribute, wie »durchschnittliche«, »einfache« und »gesellschaftlich notwendige« ausser acht lässt.

Da wir uns im weiteren mit dem *Geld* bloss als *Massstab* des *Wertes* befassen werden, wollen auch wir von allen Funktionen des Geldes — ausser der

als Massstab-abstrahieren, allerdings betonend, dass es sich hierbei bloss um eine Abstraktion und keineswegs um die vorher erwähnte naive Vorstellung handelt.

Nennen wir ein Geld, dessen Geldeinheit in jedem beliebigen Zeitpunkt den Wert repräsentiert, der während einer Arbeitsstunde als »value added« geschaffen wird, ein »wertbeständiges Geld«. Die Frage ist nun, wie sich in einem Land, in dem das Geld wertbeständig ist (abstrahieren wir einstweilen von allen wirtschaftlichen Verbindungen dieses Landes zur Aussenwelt), die Löhne und Preise mit der Entwicklung der Produktivkräfte, d.h. bei wachsender Arbeitsproduktivität gestalten würden. Um die Antwort auf diese Frage zu vereinfachen, wollen wir des weiteren eine *konstante Proportion* von Löhnen und »value added« annehmen, also — in der Terminologie von Marx ausgedrückt — eine konstante Mehrwertrate. Unter diesen Voraussetzungen ist es an der Hand liegend, dass der durchschnittliche Nominallohn, unabhängig vom Steigen der Arbeitsproduktivität per definitionem, unverändert bleibt, die Preise der Waren hingegen mit dem Steigen der Arbeitsproduktivität fallen. (Die Reallöhne steigen in diesem Fall infolge der Preisverminderung, im Durchschnitt dem durchschnittlichen Steigen der Arbeitsproduktivität proportional.)

Heute gibt es kein einziges Land mehr — ja es kann keines geben (weshalb, soll hier nicht weiter erörtert werden) —, das eine derartige »wertbeständige« Währung hätte, kein Land, in dem die Geldeinheit in diesem strengen Sinne wertbeständig wäre. Nur solange das Geld noch tatsächlich, d.h. nicht nur formell, sondern faktisch an das Gold gebunden war, und zwar durch das — sich im Geldverkehr befindliche — gemünzte Gold, hat es Zeitabschnitte gegeben, in denen das Geld in diesem Sinne wertbeständig war. Die Wertbeständigkeit des Goldgeldes war aber bloss insoweit gesichert, insoweit sich die zur Gewinnung von einem Gramm Gold notwendige Arbeitszeit nicht veränderte. Es ist möglich, dass diese faktisch mehr oder minder gegebene Wertbeständigkeit des Goldes als Resultat zweier sich gegenseitig kompensierender Faktoren zustandekam. Während sich nämlich die Technologie der Goldgewinnung vervollkommnete, versiegten allmählich die reichhaltigsten Goldminen und Goldfelder. Doch bleibt auch die Frage offen, bis zu welchem Zeitpunkt der Wert des Goldes — und hiermit der der Geldeinheit — von der zur Gewinnung des Goldes notwendigen Arbeit bestimmt wurde, und *wann* sich dieser Zusammenhang umkehrte. Heute wird nämlich zweifellos der Wert der Geldeinheit, d.h. seine Kaufkraft primär durch die gesamtwirtschaftliche Zirkulation von Produktion—Geld—Konsumtion selbst erhalten, bzw. verändert, also letzten Endes bestimmt, die gesetzmässig festgelegte Parität zum Gold hingegen gibt bloss die minimale Produktivität an, die bei der Goldgewinnung erreicht werden muss, um diese als Produktionszweig rentabel zu gestalten. Die reelle Kaufkraft des Geldes und die Geldparität bestimmen also den Um-

fang der rentabel ausbeutbaren Goldminen und Goldfelder und hiermit die jährlich gewonnene Goldmenge.

Mit dieser Ausführung sind wir unversehens bei der Charakteristik der heute faktisch bestehenden Währungen angelangt, die keineswegs mehr wertbeständig sind. Allerdings werden sie fälschlich für wertbeständig gehalten, wenn sie einer weit weniger strengen Forderung Genüge tun, nämlich der Forderung, im gewogenen Durchschnitt konstante Preise zu gewährleisten. Um eine solche quasi-wertbeständige Währung von einer de facto wertbeständigen zu unterscheiden, wollen wir erstere »preisbeständig« nennen. Während also im Falle eines *wertbeständigen* Geldes die Entfaltung der Produktivkräfte (unter der vorangehend angenommenen Voraussetzung einer konstanten Mehrwertrate) zu konstanten (im Durchschnitt konstanten) Nominallöhnen und fallenden Preisen führt, führen die gleichen Umstände, im Falle eines *preisbeständigen* Geldes, bei konstanten (im Durchschnitt konstanten) Preisen, zu steigenden Nominallöhnen. Selbstverständlich bleiben auch bei einem preisbeständigen Geld die Preise nur im gewogenen Durchschnitt für alle Waren konstant. Die Preise der einzelnen Waren steigen oder fallen, je nach dem, ob bei ihrer Produktion die Arbeitsproduktivität langsamer oder schneller wächst als die für die Gesamtproduktion durchschnittliche.

In den letzten Jahrzehnten sichern in der Regel die Währungen der meisten Länder nicht einmal die Preisbeständigkeit des Geldes, geschweige denn eine Wertbeständigkeit. Die Preise steigen auch im gewogenen Durchschnitt für alle Waren, und demgemäss wachsen die Nominallöhne schneller als die Reallöhne.

Jeder von der Geldentwertung Betroffene ist über diese ungehalten, und doch wäre es begründet, sich eher über die mehr oder minder gewährleistete Stablilität eines Geldes zu wundern, dessen Geldeinheit durch keinerlei zeitbeständigen Etalon fixiert ist. (Von der formellen Parität zum Gold und anderen Währungen, die sich schon des öfteren als wirkungslos erwiesen haben, können wir hier berechtigt abstrahieren.) Wir erwähnten bereits, dass die Kaufkraft einer Währung letzten Endes von der gesamten wirtschaftlichen Tätigkeit des betreffenden Landes bestimmt wird, von dem Zirkulationsprozess der Produktion und Konsumtion, in dem sie als Vermittlungsglied fungiert. Dies bedeutet jedoch, dass die Geldeinheit auf irgendeine mystisch erscheinende Weise ihren Wert selbst bestimmt. Das ist im Vergleich zu dem einleuchtenden Prozess der — durch die Lohn—Preisspirale ausgelösten — Geldentwertung das wirkliche Rätsel.

Wie ist es zu erklären, dass der Dollar, das Pfund Sterling, die Mark, der Yen, usw. ebensoviel wert sind, wieviel sie eben sind, uzw. nicht dadurch, dass sie untereinander in Verbindung stehen, denn wenn die eine oder die andere Währung sich verbessert oder verschlechtert, wird früher oder später die Parität der de facto eingetretenen Wertveränderung angeglichen.

Die Frage lautet noch schärfer gestellt: Wie kann ein durch nichts oder scheinbar von nichts gedecktes Papiergeld seinen Wert, seine eigene Kaufkraft bestimmen.

Die Antwort auf diese Frage wollen wir mit Hilfe einer Analogie geben, u. zw. anhand eines Prozesses, in dem die »Selbsterhaltung« einer Grösse klarer als im allzu komplizierten wirtschaftlichen Reproduktionsprozess zu Tage tritt.

Man stelle zwei Tonbandgeräte des gleichen Typs in einem gewissen Abstand — zum Beispiel von einem Meter — auf den Schreibtisch. Dann lege man die volle Spule, mit einem unbespielten Tonband, auf das linksstehende Gerät und fädle das Band durch beide Geräte, sein Ende auf die Leerspule des anderen rechtsstehenden Gerätes fixierend, so dass das Tonband von dem rechtsstehenden Gerät abläuft und auf dem linksstehenden aufgespult wird. Schaltet man hiernach das linksstehende Gerät auf »Aufnahme«, das rechtsstehende hingegen auf »Abspielen« und lässt mit Hilfe einer Pfeife den Normalton »a« ertönen, u. zw. bloss so lange, bis der vom linksstehenden Gerät bespielte Teil des Bandes das rechtsstehende Gerät erreicht. Von diesem Moment an ertönt im Lautsprecher des rechtsstehenden Gerätes der Ton »a«, der vom Mikrophon des linksstehenden aufgenommen und auf dem Band fixiert wird. Dieses System der zwei gekoppelten Tonbandgeräte gewährleistet, dass der Ton »a«, solange das Band läuft, unverändert ertönt. Dann baue man im Nebenzimmer, mit zwei weiteren Tonbandgeräten, ein gleichartiges System auf, lasse aber dort beim Anlaufen der Anlage, statt des Tones »a« den Ton »c« ertönen.

Wenn beide Systeme bereits laufen, kann man sich den Spass machen, seinen Nachbarn, einen Nationalökonomen, herüberzurufen, um ihm beide Systeme zu zeigen, und um ihm die Frage zu stellen, weshalb in einem Zimmer die beiden Tonbandgeräte andauernd den Ton »a«, im anderen hingegen den Ton »c« pfeifen. Erst wenn er auf diese Frage keine Antwort findet, soll man ihm die nächste Frage stellen: »Weshalb ist ein Dollar einen Dollar wert, das Pfund Sterling hingegen ein Pfund Sterling?« Ja, man kann ihn auch vor die Frage stellen, warum ein ungarischer Forint, der überhaupt keine Golddeckung besitzt, und auch nicht konvertibel ist, eben den Wert eines Forints hat.

Was entspricht nun im Wirtschaftsleben eines Landes — denn dies ist der springende Punkt unserer Analogie — dem Abstand zwischen unseren zwei gekoppelten Tonbandgeräten, d.h. dem Zeitabschnitt, während dessen das Tonband von einem Gerät zum anderen läuft? Wäre nämlich dieser Abstand gleich null, so wäre die Stabilität der Tonhöhe nicht gewährleistet. (Je grösser der Zeitabschnitt ist, umso stabiler ist auch die Selbsterhaltung der Tonhöhe.) Der analoge ökonomische Zeitabschnitt ist leicht aufzufinden. Er besteht z.B. aus den Zeitspannen zwischen Vertragsabschluss und Liefertermin oder bei auf

Ratenzahlungen gekauften Autos, aus den Zeitabschnitten, die bis zur völligen Tilgung der Schuld vergehen. Bei Kollektivverträgen über Löhne zwischen Gewerkschaften und Unternehmern, ist ihre Gültigkeitsdauer der stabilisierende Zeitabschnitt, bei Fabrikanlagen hingegen die Zeitspanne zwischen ihrem Erwerb und ihrer völligen Amortisation.

Was geschieht, wenn in einer Wirtschaft solche Zeitspannen fehlen? In einem Land, in dem das täglich gebackene Brot mit dem Tagelohn bezahlt und aufgegessen wird, in einer Wirtschaft, die nur aus solchen innerhalb eines Tages ablaufenden Zirkulationsprozessen bestehen würde, wäre die Stabilität der Währung keineswegs gewährleistet; die Geldeinheit müsste, um stabil zu sein, »von aussen«, z.B. durch Goldparität gesichert werden. Die galoppierende Inflation, d.h. die galoppierende Schwindsucht der Geldeinheit des Papiergeldes, insbesondere nach einem Krieg, entsprang zum Teil eben dem Umstand, dass »das tägliche Brot« vorübergehend zum dominierenden Sektor des Wirtschaftslebens wurde.

Von all den bisher so lang und breit erläuterten Fragen, sind für unser Thema — nämlich den Vergleich des in Geld gemessenen Nationaleinkommens — bloss zwei Schlussfolgerungen ausschlaggebend.

1. Die Geldeinheiten der Währungen von heute werden — und dies auch nur in beschränktem Masse — vom Wirtschaftsleben des Landes selbst bestimmt, sie stützen sich kaum mehr auf einen, von diesem Wirtschaftsleben unabhängig existierenden »Etalon« der Werteinheit.

2. Diese prinzipiell vorhandene »Selbstbestimmung« der Geldeinheit, ihre Selbststabilisierung funktioniert bei weitem nicht mit einer solchen Vollkommenheit, wie dies bei unseren Tonbandgeräten beschrieben wurde (in der Wirklichkeit, bei den Tonbandgeräten auch nicht). Das Mass der Geldentwertung hängt vom *Reproduktionsprozess* ab, *eben von jenem*, den wir mit dem in Geld ausgedrückten Nationaleinkommen *zu messen trachten.*

Diese zwei Punkte ergeben ein verflixtes vice versa. Es ist nicht verwunderlich, wieviel Anstregungen der Nationalökonomen darauf gerichtet sind, diesen Bannkreis zu durchbrechen.

6.

Mustafa, der achtjährige Sohn eines Schlangenbändigers, — der sich um das Wachstum eines von ihm selbst gepflanzten Obstbaumes Sorgen macht — wickelt eine Schlange, die er seinem Vater geklaut hat, um den Stamm seines Obstbaumes, mit dem Ziel, dessen Dicke zu messen. — Die Schlange ist hierfür besonders geeignet, da sie durch das Muster auf ihrem Rücken, — wie ein Messband — in *Messeinheiten* eingeteilt ist. Mustafa kann auf dieselbe Weise auch die Dicke aller Äste seines Baumes messen, ja ihre Dicke mit der Dicke des Baumstammes vergleichen. Doch wie gross ist sein Erstaunen, als er im

nächsten Jahr seine Messung wiederholt, und es sich herausstellt, dass sein Obstbaum nicht dicker, sondern scheinbar dünner geworden ist. Er hat nämlich vergessen, an das Wachstum seiner »Mess-Schlange« zu denken. In seiner Betrübtheit über die Grenzen seiner Begabung, misst er erneut alle Äste seines Ostbaumes, und erfährt die Freude, dass nicht alle dünner als ein Jahr zuvor sind, da gibt es einige, die sogar dicker geworden sind. Wenn es ihm auch nicht gelungen ist, das Wachstum seines Baumes zu messen, so zumindest die Proportion zwischen der Dicke der einzelnen Äste.

Im Wesen unterscheidet sich das Geldmass, d.h. unsere »Geldviper« von der Mess-Schlange Mustafas bloss darin, dass sie, von den Phöniziern geboren, ihres hohen Alters wegen nicht mehr wächst, sondern von Jahr zu Jahr zusammenschrumpft. Die »Baumstämme« und »Äste«, die man mit dieser Geldviper misst, werden deshalb von Jahr zu Jahr dicker, und zwar viel schneller, als sie in der Tat an Dicke gewinnen. Selbstverständlich lassen sich mit der Geldviper, ähnlich wie mit der Schlange Mustafas, die Dicke aller Äste und Zweige der Wirtschaft messen; man kann diese Dicken miteinander und mit der Dicke des Baumstammes, d.h. dem Nationaleinkommen vergleichen. Und doch erfährt man dieselbe Enttäuschung, wie Mustafa mit seiner Schlange: Das Wachstum des Nationaleinkommens lässt sich mit der Geldviper ebensowenig messen, wie das Dickerwerden des Baumstammes mit der Schlange Mustafas.

Es dünkt mir, aus der Ferne einen Sturm der Empörung zu vernehmen, ausgelöst von meinem arglistigen Vergleich. Doch aufgepasst! Ich sprach von der lebendigen Geldviper, d.h. von dem lebendigen Geld, mit dem man zu jeweiligen Preisen misst. Dass *dieses* Mass von Jahr zu Jahr schrumpft, wie die uralte Geldviper, wird wohl niemand bestreiten. Ja, wenn die Nationalökonomen und Statistiker für ihre Zwecke, zumindest in Gedanken, die Geldviper totschlagen, und sie in Spiritus legen, um mit der Länge, die sie am Tage ihres Todes hatte, also »zu konstanten Preisen«, genauer genommen »zu Preisen vom Todesjahr der Viper«, z. B. »zu Preisen von 1960« zu messen, so steht die Sache ganz anders.

Das viel umstrittene Problem des Rechnens »zu Preisen von . . .« — dessen Grundlage durch die Verfeinerung der Rechenmethoden eher verschleiert, als zu Tage gefördert wurde, kann meines Erachtens, ohne es zu simplifizieren, allgemeinverständlich folgendermassen gefasst werden:

Um die einzelnen Waren (der Einfachheit halber wollen wir hier davon absehen, dass es sich, genauer genommen, um Warenströme handelt) in anderen als den tatsächlichen Preisen in Rechnung zu ziehen, muss man vorerst die beim Einkauf gezahlte Geldsumme in zwei Faktoren trennen, nämlich in eine *Menge*, gemessen in Stück, kg, m^3, usw., und in einem *Preis pro Mengeeinheit*, gemessen in Dollar pro Stück, Dollar pro kg, Dollar pro m^3, usw. In den meisten Fallen erscheint dieses Zerlegen in Faktoren eine erklügelte

Operation zu sein. Denn kauft man sich z.B. 40 Eier, dann ist die Anzahl der Eier und der Preis pro Stück, — z.B. 5 cent das Ei — primär gegeben, man braucht also die Geldsumme von zwei Dollar, die man auf Grund einer Multiplikation ausgezahlt hat, nicht erst *nachträglich* in zwei Faktoren zu zerlegen. Das gilt aber bei weitem nicht für alle Einkäufe! Lässt man sich z.B. die Pläne für ein Haus, ganz nach eigenem Geschmack, von einem Architekten ausarbeiten und dann das eigene Schloss aufbauen, und zahlt insgesamt 50 000 Dollar, so ist die Zerlegung in die beiden Faktoren, »1 Stück« und »50 000 Dollar pro Stück«, absolut sinnlos, da dieses »Stück Haus« nirgends in der Welt nochmals vorkommt, weder anderswo, noch vorher, noch nachher. In diesem Fall versagt also die Auflösung der gezahlten Summe in zwei Faktoren.

Hier liegt der Hund begraben, hier an einer Wegverzweigung: Von dieser Verzweigung führt nämlich der eine Weg, eine breite, viel befahrene, asphaltierte Strasse zu der Berechnung des Nationaleinkommens zu konstanten Preisen Der andere Weg, ein nur selten begangener Pfad, führt hingegen zu einem anderen Zielpunkt, nämlich zur Messung der Veränderung, bzw. des Wachstums des Nationaleinkommens im Laufe der Zeit. Will man dieses Ziel erreichen, und folgt doch — die Abzweigung nicht wahrnehmend — noch ein Stück wegs der bequemen Strasse, so muss man später, um zum Ziel zu gelangen, ein Gelände mit schlickigem Boden überqueren, nämlich das Gelände der Preisindexe.

Auf »der viel befahrenen Strasse«, bei der Berechnung des Nationaleinkommens zu jeweiligen Preisen, braucht man die einzelnen Posten, die man in Geldeinheiten an Messuhren ablesen kann, bloss zu summieren. Allerdings muss man darauf achten, dass an jedem einzelnen Querschnitt, an dem ein Wertstrom aus der Produktion in die Konsumtion fliesst, eine Messuhr stehe. Jede dieser Messuhren misst den Strom, der irgendeinem bestimmten Industriezweig entströmt, und so erhält man in der volkswirtschaftlichen Gesamtbilanz nicht nur das Nationaleinkommen als eine Summe, sondern auch die Grösse der einzelnen Stromstärken; schön übersichtlich, nach Industriezweigen geordnet. Nichts zwingt dazu, die an den Messuhren abgelesenen Grössen in die zwei Faktoren »Menge« und »Preis pro Mengeneinheit« zu zerlegen; diese Zerlegung wäre nicht bloss unnötig, sondern sogar störend. Hierbei ist es belanglos, dass die einzelnen Konten teils aus zerlegbaren, teils aus unzerlegbaren Posten bestehn.

Im Gegensatz hierzu bildet die Zerlegung in die Faktoren »Menge« und »Preis pro Mengeneinheit« die wesentlichste Grundlage für das Messen der *Veränderung* des Nationaleinkommens. Der Weg zu diesem Ziel, der selten begangene Pfad, beginnt also mit einer ganz besonderen Sortierung der ursprünglichen Daten des Wirtschaftslebens, und zwar in »zerlegbare« und »unzerlegbare«.

Zwar kennt die Statistik auch einen Weg von der volkswirtschaftlichen Gesamtbilanz zu unserem Ziel, doch führt dieser, wie wir bereits erwähnten,

über die Bildung von Preisindexen. Kehren wir nun, um dies zu illustrieren, zu unserem »Schloss nach eigenem Geschmack« zurück.

Für diesen Fall kennt die Statistik folgenden Ausweg aus der Klemme, auf dem sie zu den »zu Preisen von . . .« gelangt. Man multipliziert die 50 000 Dollar für unser Schloss mit einem »entsprechenden« allgemeinen Preisindex für das Bauwesen. Mit dieser Methode wird jedoch das wesentlichste Problem der Umrechnung nicht gelöst, sondern nur verschleiert. Wenn man nämlich die Frage aufwirft, wie der Preisindex, mit dem man multipliziert, gebildet wurde, ja gebildet werden kann, so stellt es sich heraus, dass dies nur auf Grund von Bauten, die wie ein Ei dem anderen gleichen, möglich ist. Nur bei solchen Bauten hat die Zerlegung in Faktoren »Stück« und »Preis pro Stück« irgendeinen Sinn. Hinter dieser statistischen Manipulation steckt jedoch die Annahme verborgen, dass sich der Preis meines — sich auf einem Entenfuss drehenden — Schlosses, in gleichem Masse geändert hat, wie der Preis der Reihenhäuser, die auf dem laufenden Band hergestellt werden. Diese »praktische«, d.h. zum Rechnen praktische Annahme widerpsricht aber den grundlegendsten Tendenzen der technischen Entwicklung.

Dieses Beispiel soll bloss auf einen allgemeinen symptomatischen Fehler der Berechnungen in konstanten Preisen hinweisen. Das Nationaleinkommen besteht objektiv aus Waren und Dienstleistungen, von denen sich nur ein beschränkter Anteil in die Faktoren *Menge* und *Preis pro Mengeneinheit* auflösen lässt. Es gibt aber auch viele Waren, bei denen eine solche Auflösung prinzipiell ausgeschlossen ist. Statt nun das Nationaleinkommen gewissenhaft, nach diesem Prinzip in zwei Gruppen von Waren, nämlich von *vergleichbaren* und *unvergleichbaren* zu trennen — und hiermit das prinzipielle Problem und *die Grenze der Vergleichbarkeit* an den Tag zu fördern, also auch die *Fehlergrenze des Vergleichs* zu zeigen, — werden die unvergleichbaren Waren unter die vergleichbaren gemischt, ähnlich, wie in einem Obstladen das faule Obst hinter das zur Schau gestellte versteckt wird.

Diese Polemik, d.h. die Aufzählung von schwachen — selbstverständlich den Statistikern selbst wohlbekannten — Stellen des Rechnens in konstanten Preisen, ist keine Haarspalterei. Es handelt sich nämlich um folgende grundlegende Frage: Es gibt eine offizielle, alt eingebürgerte, bis ins letzte Detail ausgearbeitete, mit den Formeln von Laspeyres, Paasche und Fischer verfeinerte Methode, d.h. die Methode, die alle Veränderungen der Gebrauchswertmenge in Geld gemessen zu erfassen strebt.

Wenn nun bewiesen werden kann, dass diese Möglichkeit des Umrechnens auf einem trügerischen Schein beruht, auf dem falschen Ordnen der Karten, bei denen die unvergleichbaren Posten unter die vergleichbaren gemischt, also bloss versteckt werden, dann wirft sich die Frage auf, ob es nicht besser wäre, nur das Vergleichbare zu vergleichen, d.h. bloss jene Indikatoren der Entwicklung, bzw. des Wachstums in Betracht zu ziehen, die tatsächlich messbar

und vergleichbar sind, und den quantitativ unvergleichbaren Rest — offen eingestanden — bloss groben Schätzungen zu unterwerfen.

7.

Um nicht in den Verdacht zu geraten, mit diesen Ausführungen beweisen zu wollen, dass das Messen des Wirtschaftswachstums prinzipiell unmöglich wäre, muss ich hier eine Stelle aus meinem — leider bisher nur ungarisch erschienenen — Buch »Die Messbarkeit des wirtschaftlichen Entwicklungsstandes und eine neue Messmethode«* [2] zitieren:

Die Feststellung, dass Schweden wirtschaftlich höher entwickelt ist als die Türkei, wird wohl niemand in Frage stellen; in diesem Fall taucht die Problematik der Vergleichbarkeit überhaupt nicht auf. Doch wagt jemand im Kreis von Fachökonomen die Behauptung, Dänemark sei wirtschaftlich entwickelter als Norwegen, so muss er auf eine heftige Diskussion gefasst sein. Wenn man ihn auffordert, seine Aussage zu beweisen, kann er leicht in die Enge getrieben werden. In der Debatte kämen wohl verschiedenste Argumente — für und gegen — zur Sprache: So ist einerseits die dänische Landwirtschaft, andererseits die Stromerzeugung der norwegischen Wasserkraftwerke unübertreffbar; dann wird man auch die hervorragende Lebensmittelindustrie Dänemarks der norwegischen Schiffahrt entgegenhalten; die dänischen Kühe den norwegischen Ölsardinen usw. Die Diskussion wird wohl — dies scheint unvermeidbar — in die Wiederholung einer abgedroschenen Binsenweisheit münden, und hiermit im Sande verlaufen. Die Binsenweisheit: der quantitative Vergleich qualitativ verschiedener Objekte ist an und für sich, d.h. prinzipiell unmöglich, also sinnlos.

So manche Diskussion — und nicht bloss unter Nationalökonomen — ist in dieser Sackgasse stecken geblieben. Und doch kann es geschehen, dass sich eben an diesem Totpunkt der Debatte Vertreter einer entgegengesetzten Richtung zu Wort melden und alle bisher vorgebrachten Argumente in ihr Gegenteil umdrehen, alles, was unumstösslich bewiesen schien, über den Haufen werfen. Sie argumentieren folgendermassen: »Wie könnt ihr die Vergleichbarkeit verschieden hochentwickelter Länder in Frage stellen, wenn ihr bei zwei — ihrer Wirtschaftsstruktur nach so grundverschiedenen — Ländern, wie die Türkei und Schweden, eindeutig und mit voller Gewissheit entscheidet, dass Schweden das höher entwickelte Land ist. Wer A sagt, muss auch B sagen, es kann doch prinzipiell kein Unterschied darin bestehen, ob man Schweden mit der Türkei oder Dänemark mit Norwegen vergleicht. Wenn eine Vergleichbarkeit, die ihr doch im ersten Fall zugibt, besteht, dann muss doch

* Die Besprechung des Buches, s. Acta Oeconomica Bd 1, No. 1—2. *Bemerkung des Herausgebers.*

diese für jeden beliebigen Fall bestehen. Alles liegt bloss an der entsprechenden Methode des Vergleichs, an der richtigen Auswahl der Indikatoren, die den Entwicklungsstand anzeigen. Habt ihr diese Grundlage geschaffen, so könnt ihr euch ruhig den Mathematikern anvertrauen. Ist der Unterschied im Entwicklungsstand sehr gering, so werden sie die entsprechend präzisen Berechnungsmethoden schon ausfindig machen. Oder wollt ihr doch behaupten, dass zwischen den zwei obigen Fällen des Vergleichs ein prinzipieller Unterschied besteht? !«

Der Unterschied ist tatsächlich kein prinzipieller, da wir ja in beiden Fällen qualitativ verschiedene Objekte quantitativ zu vergleichen haben. Bis zu diesem Punkt sind sich auch unsere erdachten Diskussionspartner einig. Und doch läuft ihr weiterer Gedankengang in entgegengesetzter Richtung.

Die einen kommen zum Schluss, dass derartige Objekte faktisch unvergleichbar sind; ohne jedoch die logische Konsequenz dieser Konklusion zu Ende zu denken: denn wären qualitativ verschiedene Objekte, quantitativ tatsächlich unvergleichbar, so wäre die Möglichkeit jedes quantitativen Vergleichs aus der Analyse der Wirklichkeit ausgeschlossen, da es in der Wirklichkeit qualitativ vollständig gleiche, d.h. in jeder Beziehung gleichartige Objekte, überhaupt nicht gibt.

Die anderen hingegen landen bei der Folgerung, dass dem quantitativen Vergleich keine prinzipiellen Hindernisse im Wege stehen, bzw. stehen können. Die Mathematik kann ja alle Schwierigkeiten überbrücken. Mit der Losung der unbeschränkten Vergleichbarkeit können sie sich über alle Schwierigkeiten, die sich aus der qualitativen Verschiedenheit der Objekte ergeben, hinwegsetzen.

Gleich, welche der beiden Schlüsse aus der Diskussion gezogen wird, die formelle Logik führt uns in beiden Fällen auf den Holzweg. Die berechtigt aufgeworfene Frage findet nämlich keine befriedigende, für den praktischen Volkswirt brauchbare Antwort. Die Diskussionspartner haben den gordischen Knoten, anstatt ihn zu lösen oder zu durchschneiden, einfach zum Fenster hinausgeworfen.

Dieses Problem der Vergleichbarkeit spielt nicht bloss in der Volkwirtschaft, sondern auch in allen Wissenschaftsgebieten und — ohne dass wir uns dessen bewusst würden — auch im Alltagsleben eine bedeutende Rolle. Da die wirtschaftlichen Prozesse sehr kompliziert und schwer durchschaubar sind, wollen wir nun die Frage der quantitativen Vergleichbarkeit an einfachen Beispielen aus dem Alltagsleben analysieren und erst dann, nach der prinzipiellen Klärung des Problems, zum Gebiet der Ökonomie zurückkehren. So bitten wir den Leser, besonders den Fachökonomen, um Entschuldigung, wenn auf den nächsten Seiten, statt des wirtschaftlichen Entwicklungsstandes, Kühe, Spatzen und Kugellager figurieren.

Jedes Kind weiss, dass ein Elephant grösser als ein Spatz ist. Auch wird es nicht bezweifeln, dass die Kuh kleiner als der Elephant, aber grösser als der

Spatz ist. Bemüht sich das Kind weiter, alle ihm bekannten Tiere ihrer Grösse nach einzuordnen, so wird es ohne Bedenken der Katze einen Platz zwischen der Kuh und dem Spatzen zuweisen. Fliege und Floh sind bestimmt kleiner als der Spatz; auch hat es sich überzeugt, dass der Walfisch noch grösser als der Elephant ist. Plötzlich bleibt es aber beim Pferd stecken: Ist das Pferd grösser oder kleiner als die Kuh? — Berauscht vom Zauber des neuen Spieles, wird unser Kind in gesunder Neugier fragen: »Sag mal, welches Tier ist grösser, die Kuh oder das Pferd?« Obwohl es sich bereits in die feinen Nuancen der Einordnung verstrickt hat, wird es sich mit einer Antwort »sie sind etwa gleich gross« nicht vertrösten lassen. Das Kind hat zwar keine Idee, was es mit einer genauen Anordnung der Tiere nach ihrer Grösse anfangen könnte, es ist aber trotzdem unzufrieden, da dieses »etwa gleich gross« die Klarheit seines Spieles vernichtet. Sagt man dem Kind, seine Frage sei nicht eindeutig beantwortbar, weil das Pferd höher als die Kuh, die Kuh aber dicker als das Pferd, und dass das Pferd vom Kopf bis zum Schwanz gemessen länger als die Kuh, die Kuh aber bei den Hörnern gemessen breiter als das Pferd sei, wird es verbittert, da es der Unvollkommenheit des Einordnungsspieles gewahr wird.

Betrachten wir nunmehr, wodurch eigentlich der Verfeinerung der Eingliederung Schranken gesetzt sind. Ob man ein Tier als »gross« oder »klein« betrachtet, hängt von seiner Länge, seiner Höhe, seinem Gewicht — also nicht lediglich von einer einzigen, sondern von mehreren Eigenschaften ab. Zweifellos ist die Kuh höher, länger und schwerer als der Spatz, ist also auf Grund all ihrer mit dem Begriff der Grösse verbundenen Eigenschaften grösser. Deshalb darf man ganz eindeutig behaupten, die Kuh sei grösser als der Spatz. Diese Eindeutigkeit verliert sich aber, wenn man zwei solche Tiere (oder andere Objekte, bzw. Erscheinungen) vergleicht, bei denen — je nach dem, welche Eigenschaft man als Kriterium nimmt — bald das eine, bald das andere sich als »grösser« erweist. Je unbedeutender die qualitative Verschiedenheit der verglichenen Objekte ist, umso kleiner werden jene Grössendifferenzen sein, bei denen ein eindeutiger Vergleich noch möglich ist. Zwei Kühe stehen einander qualitativ offensichtlich näher, als eine Kuh und ein Pferd: man vermag daher kleinere Grössendifferenzen eindeutig zu bestimmen, wenn man eine Kuh mit einer anderen, als wenn man eine Kuh mit einem Pferd vergleicht. Die Eindeutigkeit besteht nämlich so lange, so lange jene Kuh die längere ist, zugleich auch höher, schwerer und breiter ist als die andere, d.h. wenn sie in jeder Hinsicht grösser als die andere ist.

Man darf daher allgemeingültig festhalten, dass *ein Vergleich, bzw. eine Eingliederung hinsichtlich der Grösse, bei umso kleineren Grössendifferenzen noch eindeutig ist, je unwesentlicher die qualitativen Verschiedenheiten der verglichenen Objekte sind.* Oder umgekehrt: *je bedeutender die qualitativen Differenzen der verglichenen Objekte, umso grösser müssen auch die bestehenden Differenzen der Grösse sein, um die Eindeutigkeit des Vergleichs zu gewährleisten.*

Diesen Darlegungen möchte ich hier nur folgendes hinzufügen. So wie der Feststellung von »kleiner« bzw. »grösser« — infolge der qualitativen Verschiedenheit der verglichenen Objekte — eine Grenze gesetzt ist, so auch der Feststellung von »wievielmal grösser«, bzw. »wievielmal kleiner«. Bei Kugellager-Kugeln zum Beispiel, ist — im Vergleich zu einer gegebenen Kugel — eine zweimal so grosse von einer 2,0001mal so grossen schwer, aber objektiv noch unterscheidbar. Bei dem Nationaleinkommen pro Kopf der Bevölkerung zweier — ihrer Wirtschaftsstruktur nach sehr verschiedener — Länder muss man froh sein, vom zweifachen das 1,8, bzw. das 2,2fache objektiv unterscheiden zu können. Diese *objektiv* gegebene — im zitierten Buch als »kritische Vergleichbarkeitsgrenze« charakterisierte — Unbestimmtheit entspringt nicht der Unzulänglichkeit der angewendeten Messmethode, sie kann also auch durch die vollkommenste Methode des Messens nicht eliminiert werden.

8.

Das Problem der Vergleichbarkeit des Nationaleinkommens zweier Länder wird häufig so dargestellt, als ob es sich auf ein einziges Detailproblem reduzieren liesse, nämlich auf die Messbarkeit des Unterschieds der zwischen der Währungsparität und jener Verhältniszahl besteht, die man anhand der inländischen Kaufkraft beider Währungen erhält. Diesem Problem wurde so viel Beachtung gewidmet, dass wir uns hier darauf beschränken können, es als ein bekanntes — und als ein ungelöstes — bloss zu erwähnen.

Weniger bekannt ist die Tatsache, dass das in Geld gemessene Nationaleinkommen eines Landes in bedeutendem Masse davon abhängt, an welchen »Querschnitten der Wirtschaft« es gemessen wird. Die Festlegung dieser Querschnitte stösst jedoch nicht bloss auf *praktische* Schwierigkeiten, sondern wirft auch einige wesentliche *prinzipielle* Probleme auf, deren Bagatellisierung beim Vergleich des Nationaleinkommens *verschiedener* Länder zu bedeutenden Unstimmigkeiten führt oder zumindest führen kann.

Erstens können nämlich die Messuhren im allgemeinen nur an den Querschnitten aufgestellt werden, an denen die einzelnen Produkte *verkauft* werden, also nicht immer an der prinzipiellen Grenze zwischen Produktion und Konsumtion, sondern an der Grenze des Warenverkehrs. Um den Unterschied zwischen diesen beiden Querschnitten zu veranschaulichen, genügt es auf folgendes Beispiel hinzuweisen: Die Messuhr steht im Warenhaus unabhängig davon, ob sich eine Frau ein fertiges Kleid oder bloss Stoff zu diesem Kleid kauft und das Kleid zu Hause selbst zuschneidet und näht. Im erstgenannten Fall wird die Näharbeit (sowohl als ein Posten der Produktion wie auch der Konsumtion) in das Nationaleinkommen mit eingerechnet, im zweitgenannten hingegen fällt die Näharbeit »hinter die Messuhr«, bleibt also vernachlässigt. Solche und ähnliche Fälle ergeben bei dem Vergleich verschieden hochent-

wickelter Länder bedeutende Unstimmigkeiten, da mit der wirtschaftlichen Entwicklung nicht bloss die Produktivität der Arbeit wächst, sondern auch der Sektor der Warenwirtschaft im Verhältnis zur Gesamtwirtschaft.

Die zweite wohlbekannte Schwierigkeit bei der Bestimmung des Querschnittes zwischen Produktion und Konsumtion entspringt der Dauerhaftigkeit einer bedeutenden Menge von Gütern. Während nämlich die Bestimmung der Querschnitte bei den täglich reproduzierten und auch täglich konsumierten Produkten keinerlei Sorgen bereitet, werden die dauerhaften Güter erst im Verlaufe vieler Jahre oder Jahrzehnte konsumiert; — und so bleibt die Frage offen, an welchem Querschnitt die Messuhr aufgestellt werden sollte. Man denke z.B. an Wohnhäuser die — nach dem sie fix und fertig aufgebaut wurden, also aus der Produktion austreten — erst im Laufe vieler Jahrzehnte »verzehrt« werden: die Konsumtion dauert also so lange, bis die betreffenden Häuser aus irgendeinem Grunde, z.B. ihrer Baufälligkeit wegen, abgerissen werden. Der Querschnitt zwischen Produktion und Konsumtion — also jener, an dem man die Messuhren, die das Nationaleinkommen registrieren, aufstellen sollte — liegt eigentlich im Prozess des Wohnens selbst. Die Konsumtion kann zwar auch an diesem Querschnitt, u.zw. an den gezahlten Mieten gemessen werden, dann bleibt aber das Problem offen, wie die Produktion des Bauwesens — wenn diese nicht bloss dem Ersatz baufällig gewordener Wohnhäuser dient — in das Nationaleinkommen eingerechnet werden soll. Das gleiche Problem ergibt sich für die »produktive Konsumtion« dauerhafter Güter, z.B. von Maschinen und Fabrikanlagen.

Während nun bei dem Vergleich des Nationaleinkommens wirtschaftlich *verschieden hoch entwickelter* Länder — wie oben bereits erwähnt wurde — der Prozess der Erweiterung des Sektors der Warenwirtschaft zu einer nicht vernachlässigbaren Fehlerquelle führt, so ergibt sich aus dem zuletzt genannten Problem der *dauerhaften* Güter, insbesondere der Investitionen, eine Fehlerquelle bei dem Vergleich sich *verschieden schnell* entwickelnder Länder.

Drittens sei noch bemerkt, dass im Sektor der Dienstleistungen der Querschnitt zwischen Produktion und Konsumtion prinzipiell am eindeutigsten gegeben ist, da hier die Produktion mit der Konsumtion sowohl zeitlich, als auch örtlich zusammenfällt. Für diesen Sektor gilt nämlich ein allgemeines charakteristisches Merkmal, das darin besteht, dass sich die Arbeit nicht erst in einer Ware zu vergegenständlichen braucht, um konsumiert zu werden. Wenn ich von einem Friseur rasiert werde, so arbeitet er, produziert also, während ich konsumiere, indem ich rasiert werde. Wohl wird aber niemand mein glattrasiertes Gesicht für eine Ware halten. In diesem Fall ist zwar der Querschnitt, an dem die Messuhr steht — nämlich die Kasse beim Friseur, an der ich bezahle — klar gegeben, und doch wirft sich auch hier ein Problem auf, das den Vergleich des Nationaleinkommens verschiedener Länder beträchtlich verzerren kann. Wenn ich mich nämlich zu Hause *selbst* rasiere, so vermindere

ich hiermit das in Geld gemessene Nationaleinkommen, unabhängig davon, ob ich dies tue, weil ich zu arm bin, um zum Friseur zu gehen, oder aber aus dem entgegengesetzten Grunde, weil ich zu reich bin und soviel verdiene, dass es mich zu viel Zeit kosten würde, mich vom Friseur rasieren zu lassen.

Doch wirft der Sektor der Dienstleistungen bei dem Vergleich des Nationaleinkommens verschiedener Länder ein noch weit schwieriger zu bewältigendes Problem auf. Bei einer Reihe von Dienstleistungen — vor allem dem Unterricht, dem Gesundheitswesen und der Forschung — werden nämlich statt der in Geld nicht messbaren Resultate, die in Geld leicht erfassbaren Aufwendungen gemessen. Die verzerrenden Folgen dieses Notbehelfs können weder mit den Formeln von Laspayres und Paasche, noch mit anderen an das Rechnen mit Geld gebundenen Methoden aus der Welt geschaffen werden. Vereinfachen wir das Problem, um sein Wesen klarer erfassen zu können.

Vier schiffbrüchige Matrosen und zwei Pfarrer retten sich auf zwei Booten — auf jedem je zwei Matrosen und ein Pfarrer — und landen dann, von der Strömung auseinander getrieben, auf zwei verschiedenen unbewohnten Inseln. Auf beiden Inseln gehen die Matrosen Schildkröten fangen, Obst und essbare Wurzeln sammeln und als fromme Leute, teilen sie ihre »Produktion« zu gleichen Teilen, mit dem Pfarrer, der auch nicht untätig bleibt: er betet für ihre Errettung, liest ihnen die Bibel vor. Mit einem Wort: er »produziert« ihrer aller Seligkeit. Nun ist die Natur auf der einen Insel viel reicher als auf der anderen: die drei Bewohner der einen Insel essen täglich eine doppelt so grosse Lebensmittelration als ihre Leidensgefährten auf der anderen. Wie steht es nun mit dem Nationaleinkommen auf den beiden Inseln. Die »landwirtschaftliche Produktion« ist auf der einen zweifelsohne doppelt so hoch, wie auf der anderen. Die Dienstleistungen hingegen, in unserem Fall das Bibellesen und die Produktion der Seligkeit können nur vermittelt, u.zw. an den *Aufwendungen* für diese gemessen werden. Da der Pfarrer auf der reichen Insel doppelt so viel verzehrt wie sein Kollege auf der anderen, ergibt sich bei dem ökonomischen Vergleich klipp und klar, dass der besser genährte doppelt so viel Dienste leistet, er gibt also im Vergleich zu dem hungernden Pfarrer auf der ärmeren Insel — man kann die Sache drehn und wenden wie man will — doppelt so viel Seligkeit, also pro Person zwei Seligkeiten.

Zum Schluss noch ein Problem: Bei dem Vergleich des Nationaleinkommens verschiedener Länder geht man, um die Kaufkraft der Währungen zu vergleichen, zuerst von den Waren aus, die im Aussenhandel tatsächlich figurieren, dann geht man zu Waren über, die zwar faktisch nicht ausgetauscht werden, aber zumindest prinzipiell ausgetauscht werden könnten, bis man zum Schluss alle hier und dort geleisteten Tätigkeiten, auch solche, deren Konsumtion an Ort und Stelle gebunden ist, mit in die Rechnung einbezieht, so tut, oder zumindest so rechnet, als ob sie ausgetauscht werden könnten. In Gedanken und in der Rechnung lässt man die Kinder aus Äthiopien Schulen in Eng-

land besuchen, die englischen Kinder hingegen gehen in Äthiopien zur Schule. Nur so kann man bei der Berechnung des Nationaleinkommens von Äthiopien und England die Aufwendungen für den Unterricht vergleichen. Nur ein Umstand wird hierbei vergessen: Würden alle Kinder aus Äthiopien in englischen Schulen unterrichtet werden und umgekehrt, so hätte nach Ablauf einiger Jahrzehnte Äthiopien das Nationaleinkommen Englands, England hingegen würde auf das Niveau Äthiopiens zurückfallen.

9.

Fassen wir all unsere Darlegungen kurz zusammen, um die »short-cut«-Methoden mit jener Methode zu konfrontieren, die den Vergleich des Nationaleinkommens verschiedener Länder mit Hilfe der Volkswirtschaftlichen Gesamtrechnung der betreffenden Länder und deren Umrechnung auf eine gemeinsame Währung, z.B. den Dollar, bewerkstelligt.

1. Das Nationaleinkommen eines Landes besteht primär aus Gebrauchswertströmen und Dienstleistungen, die Geldströme sind nur sekundär.

2. Der wesentlichste, ja wohl der einzige reelle Zweck des Vergleichs ist die Bestimmung des wirtschaftlichen Entwicklungsstandes der einzelnen Länder, für welche das Nationaleinkommen pro Kopf der Bevölkerung tatsächlich eine brauchbare Skala liefert — ähnlich wie das in Jahren gemessene Alter von Lebewesen, die Skala, und bloss die Skala — für das biologische Alter liefert.

3. Die Genauigkeit des Vergleiches kann infolge der qualitativen Unterschiede der zu vergleichenden Objekte, d.h. der Wirtschaftsstruktur der einzelnen Länder objektiv — also von der Messmethode unabhängig — nicht bis zur Präzisität der Geldmessung selbst gesteigert werden.

4. Jeder reelle Vergleich in Geld fordert die Auflösung der Geldsummen in die Faktoren »Menge« und »Preis pro Mengeneinheit«, greift also objektiv auf den Vergleich von Mengen zurück.

Überdenkt man diese vier Punkte, so muss man meines Erachtens zum Schluss gelangen, dass die »short-cut«-Methoden, die den Entwicklungsstand verschiedener Länder unmittelbar mit Hilfe von Wirtschaftsindikatoren vergleichen (u.zw. mit solchen, die unabhängig vom Geld in Naturaleinheiten gemessen werden können) berechtigt »short-cut« genannt werden können, aber nicht weil sie Zeit und Mühe sparen, sondern weil sie in der Tat einen *unnötigen Umweg* abschneiden.

Wenn die Treppe, die zu dem Tor eines Tempels hinaufführt, nur von Ketzern betreten werden darf, dann müssen alle Gläubigen die Breite des Tores von einer Angel des Tores ausgehend, mit feinen geodesischen Instrumenten *und um den Tempel herum* messen, bis sie zur *anderen* Angel des Tores zurück-

gelangen. Nur *Ketzern* kann also der Einfall kommen, die Breite des Tores mit einer »short-cut«-Methode unmittelbar zu messen.

Es bleibt wohl nur ein Einwand gegen diese Auffassung: Die »short-cut«-Methoden bedürfen irgendeines Maßstabes, den sie für die Feststellung der Korrelation zwischen der allgemeinen wirtschaftlichen Entwicklung und der der einzelnen Wirtschaftsindikatoren nötig haben. Diesen Maßstab liefert ihnen das in Geld berechnete Nationaleinkommen pro Kopf der Bevölkerung: die »short-cut«,-Methoden könnten also auf sich gestellt nicht bestehen. Dieser Einwand ist zwar nicht unbegründet, und doch nicht völlig stichhaltig. Das Nationaleinkommen pro Kopf der Bevölkerung, z.B. in Dollar gemessen, ist zwar eine *eingebürgerte* und *deshalb* praktische Skala, aber weder eine absolute Skala, noch eine unersetzbare. Man könnte z.B. den prozentuellen Anteil der Landwirtschaft an der Gesamtzahl der Beschäftigten als Skala wählen. Selbstverständlich gäbe dieser Prozentsatz nur eine Skala, so wie die Jahre des Alters bloss eine Skala für das biologische Alter sind. Wie hoch der wirtschaftliche Entwicklungsstand eines gegebenen Landes auf dieser Skala gemessen ist, müsste genau so und mit den gleichen Indikatoren der Entwicklung festgestellt werden, wie auf der Dollar pro Kopf Skala.

Und doch bleibt ein unwiderlegbarer Einwand gegen die »short-cut«-Methode: »Weshalb einfach, wenn es auch kompliziert geht? !« Gäbe es nur die einfachen und wenig Arbeit verursachenden »short-cut«-Methoden, so könnte man viel weniger Doktor-Dissertationen schreiben, und auch für mich hätte sich keine so günstige Gelegenheit geboten, auf Staatskosten nach Schweden zu reisen.

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ЯВЛЯЕТСЯ ЛИ МЕТОД «SHORT—CUT» ЛИШЬ ДОПУСТИМЫМ ПОДСПОРЬЕМ?

Ф. ЯНОШИ

Уровень экономического развития различных стран сопоставим, во-первых, на основе национального дохода в денежном выражении, приходящегося на душу населения, — пересчитанного на общую валютную единицу, например, на доллар, — а во-вторых, с помощью различных показателей в натуральном выражении, достаточно хорошо отражающих уровень экономического развития, т. е. при помощи так называемых методов «short-cut» (упрощения).

В настоящей статье автор стремится доказать, что эти методы «short-cut» не только из-за простоты их применения, но и с принципиальной точки зрения более пригодны для сравнения уровней развития, чем традиционные методы, основывающиеся на сложных валютных пересчетах. Доказательство принципиального превосходства методов «short-cut» основано — прежде всего — на следующих положениях:

1. Национальный доход всякой страны в действительности состоит прежде всего из «потока» потребительных стоимостей и услуг; параллельный же, но обратный по направлению денежный поток всегда является вторичным процессом.

2. Важнейшая и, по сути дела, единственная подлинная цель сопоставления — это определение уровня экономического развития отдельных стран. В этом отношении показатели среднедушевых национальных доходов составляют в действительности пригодную шкалу измерения, но *не более, чем шкалу*, пригодную для единого выражения эквивалентов уровней развития, полученных любым методом и выраженных в единой валюте.

3. Точность сопоставления никогда не может из-за объективных (то есть совершенно независимых от применяемых методов измерения) различий объектов сопоставления — экономических структур отдельных стран — достичь максимально возможной степени, позволяемой — формально — точностью денежного исчисления.

4. Условием любого стоимостного сопоставления является предварительное разложение фактических стоимостных выражений исходных величин на два фактора —например (доллар/кг). Но тем самым стоимостное сопоставление заведомо сводится к учету «физический объем» (в кг, штуках и т. п.) и на «цену единицы физического объема» (нанатуральных величин).

В качестве критики методов «short-cut» часто указывают на то, что они «сами по себе» неприменимы, ведь сами сторонники их вынуждены пересчитывать результаты, полученные с их помощью, на шкалу «среднедушевого национального дохода». Действительно, этот факт не подлежит сомнению, но шкала «долларов в расчете на душу населения» в данной связи играет роль привычной — но не единственно возможной и не абсолютной — шкалы измерения. Ведь в качестве общей основы сопоставления можно принять и другие шкалы, например, шкалу удельного веса занятых в сельском хозяйстве.

Автор иллюстрирует правоту своих чуть ли не «еретических» воззрений на наглядных примерах, взятых из повседневной жизни, и с разных сторон освещает недостатки традиционных методов пересчёта (национальных счетов).

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GY. ÁDÁM

NEW TRENDS IN INTERNATIONAL BUSINESS: WORLDWIDE SOURCING AND DEDOMICILING*

The main thesis of this essay: worldwide sourcing is practiced no more only by a handful of American and West-European giants, is no goal projected into a more or less remote future, but an ongoing process, manifesting itself in a veritable mass exodus of labour-intensive industries from the developed countries into low wage developing ones.

It was widely believed that the final stage of the development of large firms with worldwide interests will be when they become transformed into international corporations, ceasing to attest loyalty to their home countries,** ceasing to put the welfare of any country in which they do business above that of any other,*** striving in the allocation of their resources for global optimization with no special regard for the country where the parent, by historical accident, is incorporated [3].

Indeed since the late sixties "large firms with worldwide interests" are establishing with growing frequency subsidiaries abroad with the express purpose of supplying not only local markets and/or exporting to third countries, but even to the home country of the parent company.

* Paper prepared for the International Conference on Multinational Corporations: Trade Union Global Strategies and the Public Interest, May 30—June 3, 1971, organized by the Faculty of Law, The Queen's University of Belfast. The proceedings of the Conference will be published by the Northern Ireland Legal Quarterly, 21 University Square, Belfast, in 1972.

** According to Professor C. P. *Kindleberger*: "While the large firm with worldwide interests has been called many things in its day—not all complimentary—, usage is beginning to settle on three major terms, with fixed distinctions among them. These are the national firm with foreign operations, the multinational corporation, and the international corporation . . . *The national firm* with foreign operations knows where it belongs. First and foremost it is a citizen of a particular country . . . *The multinational firm* seeks to be a good citizen of each country where it has operations . . . *The international corporation* has no country to which it owes more loyalty than any other, nor any country where it feels completely at home . . ." [1] (My italics.) Without entering into an argument about the definition of the national and particularly the multinational firm, I consider very relevant the closing sentence of Professor *Kindleberger*'s book: "At the moment, I think *the multinational corporation is evolving into the international one faster than national governments are girding themselves to produce adequate policies to meet it.* I suggest the need to hurry." (My italics) see [1], p. 210. I interpret this statement as positing unmistakably that the prevailing trend of evolution of the corporate giants is to grow into self-centered business empires.

*** The statement of a Union Carbide-executive quoted by D. M. *Kiefer* [2].

One may even talk of a third wave of direct investment in the LDC's: the first wave was oriented toward natural resources; the second toward import substitution; the third toward manufacturing "to produce in the LDC's in order to supply the home market"[4].

The spread of worldwide sourcing is the logical outcome of the expansion of "globalism", of the outlook that there is an international economy now just as there are national ones, that lines of production which previously made cost sense in a national setting lose their economic justification, putting on the agenda an international shifting of production with relocation of plants as a commonplace of competitive life [5].

US companies started the trend

US corporations—which despite European efforts and mergers still constitute the bulk of the "real internationals"—started the trend.

The issue was raised already in the mid-sixties in terms of global economics. As overseas markets expanded and became integrated, and as overseas plants began to match those in the US in size and efficiency, production for worldwide markets became more attractive economically. The question arose: will US firms transfer more production to foreign affiliates? Several US executives were quoted already then as saying that *if it were more profitable, they would do just that, even manufacturing abroad for the American market* [6].

Since then, worldwide sourcing gathered increasing momentum. *Paul Jennings*, President of the International Union of Electrical, Radio and Machine Workers stated at a recent Congressional Hearing:

"*There seems to be a kind of speedup on the part of multinational firms to transfer plants, production, products, technology—and jobs—outside the borders of the US. Entire industries, growth industries, in fact, badly needed here, and many thousands of urgently needed jobs, are exported. To many of us in the labour movement it portends a mass exodus.*" [7].

This assertion can be substantiated by ample evidence.

The transfer of US production and products takes place—although to a relatively minor extent—even to Western Europe. Spare parts and subassemblies of cars, tractors, and components of such sophisticated items as computers have long been produced there within the framework of an intracorporate international division of labour; this is no novelty indeed. There are, however, quite a few examples of subsidiaries of other American industries whose output is destined mainly or exclusively to the US market.*

* One often quoted example is that of Weyenberg Shoe Manufacturing Co., Milwaukee's plant in Northern Ireland, which plans to export its entire annual output being slated for exports to the US. Cummins Engine Co., Columbus, Ind. says it has

The same process assumes recently much bigger proportions in Latin America, particularly in Mexico: the contiguity of this country to the US has been availed of to develop a "border industry complex".* Under the so-called Twin Plant Complex plants on the Mexican side of the border assemble parts and components shipped to them by the US parent which are returned there after for final processing in a twin plant somewhere in the US.

According to the latest available estimate, since 1965 about 270 in-bond firms, mainly from the textile and electronics industries, have established plants near the US border and another 75 or so are expected to do so by the end of 1971 [13].

Twin-plant arrangements are reported also from Haiti, Barbados and other Caribbean countries; American imports from Brazil now include e. g. office machinery parts. Thus Burroughs has been gradually building up its

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captured 25% of the US diesel engine market for medium-duty commercial vehicles with engines made in Darlington, England. General Instrument Corp. transferred TV tuner and other component production to its Portuguese plants. Sears Roebuck manufactures shoes in Spain. Gleason Works, a medium sized US manufacturer of bevel gear production equipment with 1970 sales of $ 70 million, recently decided to switch a proposed $ 10 million investment for a new plant from the Rochester (New York) area to Mons, Belgium. See [7] p. 815—816 [8], [9].

* "Under Schedule 8 of the US Tariff Code, goods can be exported from the US for assembly or processing abroad and then sent back to the US at highly favorable tariffs. Duties are levied . . . only on the value added by foreign labor and not on the full value of the returning goods. This arrangement provides a kind of preferential access to the US market. Where the economics of transportation permit, US companies can perform technical or capital-intensive operations at home and labor-intensive operations abroad, and then bring the products home again for final processing and marketing . . . A special beneficiary of Schedule 8 is Mexico. The transportation costs permit such shuffling of goods across the border on a very substantial scale." Quoted from [10]. US companies have moved also into food processing in Mexico on a big scale.

Paul *Jennings* lists in his testimony an impressive number of further cases: In transferring production from Warwick Electronic's Illinois and Arkansas plants, approximately 2000 US jobs have disappeared. Advance Ross Electronics transferred 250 jobs to Juarez, Mexico, from El Paso, then set up a US facility with about 15 employees. Transitron has 1500 workers in its Laredo, Mexico, plant and only management personnel in Laredo, Tex. He quotes an advertisement from The Wall Street Journal of January 26, 1970: "What's going on in Tucson, Ariz., that caused Motorola, Control Data, Kimberley—Clark, Lear Stero, and Philco—Ford to establish plants there? The straight-to-the-point answer is: Twin plant in Nogales, Mexico, only 1 hour away . . . 30 cents per hour labour . . . more profitable than Japan, Hong Kong or Taiwan. In Arizona Daily Star of February 18, 1969, it was asserted that some 700 apparel companies may be looking for a location outside the US." (See [7] p. 816 and 817) In early 1971 it was announced that two "in bond" textile plants at Tijuana and Juarez on the US-Mexican border will be established soon. In Tijuana, Hilanderos Unidos plans to export "in bond" produced cotton, synthetic fiber cloths and threads. In Juarez, Originales de Piel S. A., reported to be 100 per cent US-owned, will make leather goods for the garment industry, as well as leather garments [11]. A hydrofluoric acid complex whose entire output is slated for export (annual capacity: 77 000 short tons) will be built for approximately $ 20 million in the next years by Continental Ore (a subsidiary of Minerals & Chemical) near Matamoros, Mexico. Due to a lack of suitable ocean-going vessels to carry the acid to overseas markets, the major portion of the plant's production will be exported in tank cars to US and Canadian customers. Through its Mexican subsidiary, Minera Continental, Continental Ore is already involved in the mining of fluorspar, the raw material of hydrofluoric acid [12].

operation in Brazil as a worldwide source for some of its office machinery, splitting with France the sourcing of Burrough's 10-key adding machines. A US shoe company relocated its sourcing to Colombia; some US drug companies are using Puerto Rico as an export base for sourcing their intermediary and raw materials for drug affiliates throughout the world [14].

In most of these cases not whole industries or plants, only part of the production process is being transferred.

Beside the spread of in-bond twin plants, however, another development worthy of attention can be observed: As it becomes too expensive for many US firms to renovate plant and equipment, and as materials and labour costs rise, they are projecting the idea of *using foreign-based subsidiaries to supply the US market*. Several of these corporations have been sounding out the possibility of *converting their subsidiaries in Mexico and other countries into main plants as they lose ground in the US* or are becoming marginal producers [15].

But the effects of worldwide sourcing may be observed most extensively in Asia. The rationale of the farming out of production: The international corporation's input will be capital, technical knowledge, global commercial intelligence, marketing expertise; the contribution of the developing countries: low-cost and teachable labour. With products where labour is a substantial part of total production costs and economies of scale are not especially great, the combination is deemed to be commercially successful. Such goods would include canned and frozen fruits and vegetables, textiles, clothing, leather products, furniture and other wood products, sewing machines, components and spare parts, forged hand tools, small motors, electrical parts and assemblies, lathes and other simple machine tools [16].

Apart from textiles, the industry most affected in the US is the electrical industry: "In my own industry, and in industries closely related, *we have seen plant after plant shut down in recent years, their production discontinued, products, technology and jobs exported to offshore manufacturing facilities of the same multinational firms*" — states the President of the IUE. His evidence is impressive, just as the extent of the relocation of US plants and production—to Japan.)*

* See [7] p. 815. Some items mentioned by *Jennings*: "Last year, Westinghouse closed its Edison, N. J. TV plant and transferred production to one of its Canadian facilities as well as to Japanese firms . . . *At this time, practically all radio sets, tape recorders and cassettes sold in this country are produced abroad and before long the same may be true of black and white and color TV sets.* Currently, about half the black and white sets and about 20—25 per cent of the color sets sold here are produced abroad. *Some growth products, such as home video tape recorders, will not be even produced in this country because patents held by Ampex Corp., have been licensed to Japanese firms* . . . Friden, a division of Singer Corp., and Burroughs both discontinued production of electronic desk calculators, which are now made for them in Japan by Hitachi and other Japanese firms . . . Sperry Rand's Remington typewriters are made in Japan under the Remington label by the Brothers firm. Just recently, Litton Industries shut down Royal typewriter plants, transferring production to a Japanese firm . . . *The "twin-plant" concept is already worldwide* . . . Thus, a small plant in Alabama is a "twin plant" with Japanese production . . ."

The involvement of some smaller Asia countries is even more far-reaching: *they have managed virtually to build their economies on the investment of international corporations* [17].

Take South Korea. With a total value of $ 36 m., foreign investment projects in the field of electronics and electrical appliances constitute the largest single group of overseas financed industrial projects. US companies such as Motorola, Fairchild, Semikor, Control Data and others are operating on a 100 per cent equity basis. Joint ventures, mainly with the Japanese and involving various kinds of technical link-up, numbered 16 in mid-1970. The products are designed and produced with overseas markets chiefly in mind and the economy of the industry is based partly on the bonded warehouse system which cuts the costs of imported raw materials intended for processing and re-export. In 1969, exports of electronic parts and finished goods reached the sum of $ 42 m. *The lion's share of these sales was made by American-owned plants: the principal markets were the United States, Hong Kong and Japan* [18].

A characteristic instance of the way American corporations operate: Signetics Corp., a Corning Glass Works subsidiary flies components to Seoul, where workers assemble them into integrated circuits that are flown back to the US to be fitted into computers. Incidentally, Fairchild Camera and Instruments conducts a similar assembly operation for integrated circuits in Singapore [19].

As regards *Hong Kong*, more than 50 manufacturing concerns started operations during 1969 and 1970. At the end of May 1970, there were 161 factories with foreign capital participation known to the government. (The actual number is estimated at 240—250.) Of these, 91 were wholly foreign-owned and 70 were joint ventures. They represented a total investment (fixed capital assets plus working capital) of about $ 135 m. Making allowance for local equity in the joint venture enterprises, actual foreign investment totalled about $ 110 m., the US accounting for 49%, the UK for 24%, followed by Japan: 19%.

Foreign investment is heavily concentrated in the electronics industry (30%), next in importance are the textile (19%), and shipbreaking, repairing and steel rolling industries (14%). Factories in industries surveyed employed a total of 55 000 persons, representing 9.5% of Hong Kong's labour force.

In 1969 exports by foreign-invested firms amounted to more than $ 200 m [20] .

International companies interested in doing business with China are considering having a base in Hong Kong to capitalize on its unique position in China trade [21].

Taiwan — renowned for the availability of inexpensive labour — is another favourite of "runaway" industries. Some 120 companies have built plants in a free trade zone set up by its government [23].

American industry is well represented. Zenith, Admiral, Ford-Philco, RCA and others have shifted monochrome and colour TV set production to Taiwan. *General Instrument Corp. is with 12 000 workers the island's largest employer, with more workers* than in all its US-operations combined ([7] p. 815). Taiwan is also a by-word for cheap textile products (garments, apparel fabrics, shirts etc.).

In *Singapore*, electronics again is one of the liveliest industries; more than 35 electronics factories operate now there. Having become the refining and marketing centre of the oil industry for the South-East Asian region, there is scope in Singapore for petrochemicals too [23].

Export processing zones

Supplying world markets from Asia is to be made more attractive for international corporations by the establishment of EPZ's (Export Processing Zones) provided with excellent facilities and many privileges. This is a relatively new development,* but already there is keen competition between developing nations to entice as many multinational giants as possible.

South Korea's first export processing zone is being built at Masan, about 25 miles west of Pusan. It is reserved for enterprises that are either exclusively foreign-owned, or in which the foreign equity is more than 50%. All enterprises must be engaged in the manufacture, processing or assembly of goods that have definite export prospects, high potential foreign exchange earnings, and are labour-intensive.

The government plans to build a number of standard sized factories that may be purchased outright or leased for 10 years. Construction work on the first stage of the zone is proceeding. In April 1971 the government began building 10 standard factory units slated for completion by the year's end. Perhaps as many as 30 such buildings will be constructed, each accommodating six factories, in accord with the recent government announcement that 30 more foreign firms will be accepted into the zone by late 1971. In addition, plans are going ahead to provide supplementary facilities (a trade center, utility center, housing, medical and recreational projects for foreigners) and *to establish related industrial estates* in areas adjacent to MAFEZ (the Masan Free Export Zone), as in Pohang and Ulsan.

It is planned to finish the Pohang complex by the end of 1971. With an area of 6422 acres, this estate will provide 1035 acres for industrial plant sites. The Ulsan development project is scheduled for completion by the end

* The difference between free trade zones and export processing zones: while free trade zones accommodate mainly warehousing and entrepôt trade, export processing zones are designed for ventures engaged in the manufacture, processing and assembly of export products from imported raw materials and components.

of 1972. When finished, the two industrial complexes will provide a total of 3435 acres for industry.

Besides Pohang and Ulsan, another major new town and industrial center is in the making at Kwangju, located 10 miles from Seoul.

A toy export industry complex is also planned this year to accommodate about 50 toy manufacturers on a 91-acre estate to be located near the Kurodong industrial estate around Seoul, or Inchon.

Enterprises wishing to build their own factories can either purchase or lease-lend in the zone.

Remittance of dividends is guaranteed from the first year of operation. As to tax-incentives, wholly-owned foreign enterprises are entirely exempted from income tax, corporation tax, property tax and property acquisition tax for five years from start-up and 50% of such taxes are waived for three more years etc. [25].

The Philippine Government proposed originally to establish its first EPZ at Mariveles, on the Bataan peninsula, but consideration is being given to transferring the zone to Cavite City. The reason: the ship repair facilities of the Sangley Point naval air station at Cavite City — to be turned over by the US Government in 1971 to the Philippine Navy — could enable it to be developed into a shipbuilding center, giving it a headstart for certain labour-intensive industries [26].

In *Taiwan* the Kaohsiung Export Processing Zone (KEPZ) dates from 1965; by mid-1970, there were 150 manufacturing and processing plants operating in the zone, concentrated in only a few industries: electronics, garments, knitted and woven goods, handicrafts, metal, plastic and leather products. From its establishment up to mid-1970, KEPZ exported a total of $ 142 m. of goods, 46% of which were electronic products and 22% garments.

The success of KEPZ has encouraged the Taiwan Government to establish a second zone: NEPZ (Nantz EPZ), expected to accommodate 200 factories, and a third: TEPZ (Taichung EPZ) slated for only 50 factories.*

Inspired by these examples, *Thai* industrialists are pressuring the government to establish two EPZ's: one on the eastern shore the Gulf of Thailand in Chon Buri province, and the other one near Changmai in the northern part of the country [29].

Nor does *Malaysia* acquiesce to be left out from the EPZ-boom. A law passed in March 1971 by the Malaysian Parliament gives authority to the Minister of Finance to declare any area in Malaysia to be a free trade zone

[27]. One of the latest items: RCA will become a 49% partner in Chungwha PicturesTubes, a Taiwan-based joint venture whose majority partner is to be the Chungwha Electronics Development Co. The new company will build a plant in Taiwan to make black-and-white picture tubes to be sold to both the TV set assemblers supplying the local Taiwan market and also assemblers active in exporting — both locally to Asian markets and, *increasingly, to the US and Europe as well.* See [28].

(after consultations with the state government concerned), and to appoint an authority to administer the zone. Penang will be the country's first free trade zone. Other major ports in both West and East Malaysia are likely to be designated as free trade zones in the next few months.

Although the law refers to free trade zones, it will effectively allow the creation of export processing zones. Manufacturing operations and wholesale trading, as well as related activities, such as packing, sorting, grading, and exhibiting will be allowed in the zones. The law seems to be aimed at giving a boost to sagging exports [30].

Legislation establishing Export Processing Zones was passed in *Mauritius* too in November 1970. They can be in one of many different sites scattered around the island and still benefit from official support. Factories there enjoy complete exemption from import duties, a corporate income tax holiday for 10—20 years, loans and electric power at preferential rates, tailor-made buildings and a host of other favors.

There is a new factory from Hong Kong producing wigs for export to West Germany and the US, and another wig factory is on the way. The ubiquitous Americans are also arriving: a US-company is coming to make, of course, electronic components. Their ranks will be joined by a number of Europe-based corporations [31].

The export processing zones are typical phenomena of worldwide sourcing, oriented mainly to supply international markets and/or the home market of the companies operating there.

Western Europe follows suit

There were sporadic instances of the transfer of products and plants by European internationals based in high-wage countries to low-wage ones already in the early '60s.

Landis & Gir, Zug, Switzerland (precision instruments etc.) transferred in 1963 whole production units to Salerno, Italy. Siemens of West Germany established a subsidiary in Sulmona, Italy, to manufacture capacitors; it operated so profitably that labour-intensive parts are produced there preferentially despite the fact that most of the material has to be shipped to Italy. AEG-Telefunken (West Germany) and Zanussi (Italy) started in 1967 a joint venture in Pordenone (Italy) to produce electric appliances, parts and finished products. The idea is to manufacture — in view of the much lower costs — all those items of the AEG-Telefunken product mix in Italy which Zanussi is able to manage [32].

A spokesman of Salamander AG, Kornwestheim, West Germany's biggest shoe manufacturer, stated in 1970 that the corporation is not much

interested in the enlargement of its productive capacity in the Federal Republic; the cheaper shoes should be made either abroad by own subsidiaries in the 'proper' countries or bought there. In the spring of 1971 the closure of two plants (Worms, Hatzenbühl) and the general rationalization of labour-intensive production was envisaged, believed to imply the relocation of labour-intensive plants abroad [32].

The West German garment industry is migrating too. Its foreign subsidiaries increased their labour force since 1966 to 1970 from 15 000 to 24 800 (+65%), while the number of employees in the home country decreased by 6%. The turnover of foreign affiliates rose from DM 300 m. in 1966 to DM 670 m. in 1970 (+123%) as against only 3% at home [34].

Most characteristic in this context is the rather categoric statement of a chief executive of Agfa-Gevaert, the big photochemical firm: "*Very labour-intensive products can be no more made economically in Western Europe and North America.* As labour costs account for a large proportion (up to 50%) of the production cost of cameras and other products, the importance of low wage-regions in the long-term planning of the enterprises is increasing." The most likely candidates for relocation are plants manufacturing cameras, objectives, accessories of cameras; it is projected to establish subsidiaries in low-wage countries, preferring, however, to do it in Europe (in Portugal f. i.) rather than in Asia [35].

The licensing agreement of Agfa-Gevaert with Minolta Camera Co. in Japan seemingly contradicts this strategy. According to it, Agfa-Gevaert is to have its new popular 8 mm movie cameras made under contract in Japan. The initial order is for 50 000 units. But Minolta will have no distributive rights: the cameras will be shipped to Agfa-distributors, the bulk going to West Germany. Such licensing agreements are considered a temporary expedient [36].

Some instances concerning West European countries other than West Germany: Sweden's Saab has completed a plant in Uusikaupunkt, an undeveloped area of Finland, to roll out 15 000 cars a year, about one third of which will be sent back to Sweden; the Finnish workers get about half the pay that Saab's Swedish employees do. Italy's Olivetti produces all its portable typewriters in Spain. Sweden's Billerud has opened a mill in Portugal producing viscosa pulp for the parent company (the Norwegian Borregaard a similar mill in Brazil). These plants use eucalyptus wood which is the best raw material for viscosa pulp and much cheaper than the resinous wood of Scandinavia. Although the latter is being used for other operations, *there has been a clear production transfer* [37].

Spain, Portugal and Greece are the countries in Europe most frequently selected whenever the transfer of manufacturing operations characterized by a high intensity of unskilled and semiskilled labour is being considered.

West European internationals join "the global scramble for cheap labour" in Latin America and Asia too, West German firms usually leading the way.

The Volkswagen car company is now importing spare parts from its Puebla subsidiary, Mexico, into West Germany and also shipping them direct to the US for the millions of VWs exported there from its home base [38].

Some production plants of Siemens in Latin America are to become the suppliers of the whole subcontinent and also of world markets. A Brazilian factory of Siemens which manufactures building blocks ships them not only to the Latin American free trade zone, but also to the United States, Australia and *West Germany* [39].

In Asia the Bauer and Son Optical Company — founded by the Bosch-group in partnership with a Japanese corporation — started the manufacture of optical parts for movie cameras in Taichung (Taiwan), in order to export them to *West Germany and Japan* [40].

Great attention has been attracted recently by the move of West Germany's Rollei Werke Francke & Heidecke, Braunschweig, to Singapore, where no less than 3 subsidiaries are being established. Rollei is venturing into the single-lens reflex field, a segment of the camera market dominated so far by the Japanese. The new manufacturing base is designed for world exports of the 35 mm reflex S/R models and to challenge the Japanese.

Beside Rollei, a number of other big West German corporations are rushing to Singapore, such as Daimler-Benz, Klöckner—Humboldt—Deutz (KHD), Grundig, Bayer, Hoechst, Siemens. They share company among others with Philips of the Netherlands, which is establishing a $ 70 million, four-plant complex in Singapore to manufacture a wide variety of household appliances and also production machinery for these appliances. This complex will serve as an export base for markets in Asia, *Europe*, Africa and South America initially, and North America in the future. *It is expected to become one of Philips' main manufacturing centers.* SGS (Societa Generale Semiconduttori), Italy's biggest maker of electronic components is building a transistor plant in Singapore [41].

A mixed Hong Kong–West German company is to manufacture toys in Mauritius. A Swiss company is employing Mauritians for the cutting and polishing of industrial diamonds [42].

British companies have likewise invested overseas in order to make use of cheap labour (e. g. among foreign investors in Hong Kong — as we have seen — they are second only to the US). This had, however, less impact upon their home market, according to the T. U. C. for the following reasons: Firstly, because the goods manufactured in British subsidiaries abroad have tended not to find their way back to the United Kingdom, but to be sold either in the host country or in third-country markets; secondly, because

the inducement to companies to operate in this way is not so acute with UK companies due to the distance of low wage areas from the UK; thirdly, because British-owned multinational companies have tended to be rather more home-oriented than their American counterparts [43].

French industry too is flirting with the idea of availing itself of the opportunities offered by low-wage countries. Suggestions are made to give bigger attention than hitherto to the exceptional advantages to be enjoyed in Mauritius. [44] At least one French company is reported to establish itself there in order to make garments [45].

Japan ventures into South-East Asia

Somewhat later than their American and European competitors, the Japanese corporations are also starting to set up factories in order to manufacture products for export back to their home country and are moving in force into the processing enclaves.

Since 1953 to 1968, the aggregate volume of Japanese direct investments in Taiwan amounted to $ 53,6 m and involved 264 operations [46]. Within the past four years alone, at least 40 Japanese firms have established plants in Taiwan. The factories turn out lingerie, computer parts, kitchenware and TV sets [47]. Toshiba Electric Co. has e. g. two wholly owned factories which *produce and ship to Japan* memory planes and receiving tubes [48].

Export processing is expanding particularly in the field of synthetic fiber, spinning and weaving; Japanese firms so far dominate South-Korea's Masan Free Export Zone [49]. The Sattahip industrial estate in Thailand is built with an eye to attract Japanese investors [50].

The Industrial Structure Council, an advisory body of MITI (the Ministry of International Trade and Industry) in a comprehensive report on the future evolution of Japanese overseas investments expresses the belief that over the next decade Japan will have no choice but to make heavy financial investments in the labour-intensive industries and processing operations as a way of nurturing the industrial build-up of the developing nations [51].

Also since November 1967, Japan has been gradually reducing tariffs on imports from the LDC's on a preferential basis. This too will certainly encourage Japanese firms to increase the number of their manufacturing plants in those nearby Asia countries from which their products can be shipped back to Japan.

Transfer of corporate headquarters and dedomiciling

New trends are discernible in the location of the management and legal domicile of corporations with big holdings beyond the borders of their country of origin, as evidenced by a growing number of instances.

1. In October 1970, H—D (Hunter—Douglas), a Quebec-incorporated manufacturer of building and architectural materials with a turnover of over $ 100 m in 1969, *transferred its central corporate headquarters from Canada to Holland in order to be closer to its largest production facilities and markets*, thus separating the concept of management center from that of legal corporate domicile. The rapid growth and expansion of its European companies (particularly Holland as a manifacturing base and sales area where regional HQ for Europe, the Middle East and Africa has been located for some time) shifted H—D's emphasis and *center of gravity* to Europe. *Today the larger share of the group's revenue is derived from its European operations.* The move was accompanied by a complete overhaul ("hollandification") of the firm's managerial structure. It offers advantages also from a tax point of view [52].

2. Holland America Line — based in Rotterdam for over a century and one of the world's leading passenger liner operators — announced in April 1971 *the transfer of its management to New York*, renaming simultaneously its passenger services hence known as Holland America Cruises with its headquarters in New York. A new president has been appointed too. His explanation of the move: "The name change and the transfer of management is indicative of the business we are now in, and where and how that business comes to us. Cruising is our business. *Our market is substantially in North America* and travel agents on this continent are responsible for a large percentage of our worldwide business. Thus *no longer can decisions only be made 3000 miles away. They must be made here.*" Holland America Cruises claims now to be the biggest cruise organization in the world, acting as agents for German Atlantic Line, while maintaining through a subsidiary, a majority interest in Westours Inc., a leading tour operator and shipping company based in Seattle with Alaskan and South Pacific tour interests [53].

3. Hudson's Bay Co. (HBC) — fixed assets about $ 100 m and annual sales of $ 500 m — is *moving its corporate domicile from the UK to Canada*, where 95% of its fixed assets and 98% of its 15 000 employees are located. (This is the outcome of a five-year struggle between the company's board and UK authorities; it took protracted unofficial pressure from the Canadian Government to obtain the permission to transfer HBC's corporate base tax-free* [54].

There were persistent rumors that Sweden's renowned SKF is shifting its headquarters abroad, and that the long-term plans of BASF, one of West

* It should not be inferred from the HBC precedent that it could be easily followed by other UK-based manufacturing companies with a majority of assets outside the UK, as a section of the 1952 Income Tax Act makes it obligatory for permission to be sought from the Treasury. Only two types of applications have so far proved successful: *A)* A number of plantation and mining companies registered in the UK have been permitted to move their tax base to Jamaica, South Africa, Bermuda, Malaysia and Australia; many of the remaining UK-based raw materials companies have similar applications pending; *B)* Companies whose shareholders are willing to pay a hefty tax charge, such as two UK-based investment trusts. See [55].

Germany's chemical giants, project the same move, inducing one of its executives to make the following statement: "The thinking in terms of big economic spaces leads to the establishment of new subsidiaries, to takeovers and joint ventures, *the centre of gravity* (of the operations of the corporation) *is shifting abroad*, although Ludwigshafen continues to remain the main manufacturing base" [56].

Similar intentions are being attributed by at least one French source to British industry. According to this analysis, the British industry is in a difficult position; its profitability diminishes [59] owing to the combined effect of rising wages and economic stagnation; the latter begins to affect not only the traditional, but also the growth sectors. Therefore *the big corporations* plan to migrate from Britain and establish themselves abroad. In this context reference is being made to the cancellation of substantial investments by Shell, British Petroleum, the British affiliate of Alcoa, and last but not least to the fact that Imperial Chemical Industries, Britain's No. 1 chemical giant, proposes to invest in 1971 in the UK only £ 100 m. (£ 8 m less than in 1970), while raising simultaneously its foreign investments from £ 54 m in 1970 to £ 90 m*. This is believed to be based upon the simple argument that if Britain joins the Common Market, it must urgently carry out substantial investments on the continent in order to compensate the reduction of tariffs; if the negotiations fail, the only way again open to ICI in order to preserve its world market share and in view of the slow rate of growth in the home country is to expand its foreign operations.

Even *C. Gordon Tether* of The Financial Times — in connection with the pro-Market campaign of the Confederation of British Industry — feels induced to ask the question: Do patriotic considerations motivate the attitudes of British businessmen in a meaningful way any longer? And by this he means: ". . . do they attach major importance to the implications for the country as a whole of different modes of behaviour when deciding which of the range of choices open to them has the greatest appeal?" [60].

It should be mentioned here that *Jack N. Behrman,* in his monograph [67] based on some 130 interviews with officials of business and governments, some 30 US parent companies and over 60 of their affiliates in Western Europe and Canada, as well as 25 European companies found that "some European enterprises feel that they might have to shift headquarters to the United States". Their motives: this would enable them to become more competitive

* See [57]. In 1946, Asia accounted for 76% of ICI's total overseas business in pharmaceuticals, Europe only for 5%. Today, Europe's share is over 40%, that of Asia a mere 12%. During the last decade, European sales rose from 1,5 m, to nearly — 15 m. The volume has now reached the point where the company is undertaking manufacturing in certain key markets. In France, a second plant has just been completed at Reims. Expansion of the Belgian facility is under way. *Icpharma*, ICI's Italian subsidiary has been expanding remarkably fast . . . See [58].

through achieving the economies of scale which come with integration of the entire set of affiliates, thus achieving the same ability of the American enterprise to command the full panoply of resources of parent and affiliate: it would bring the capital into the US where it could be used to expand in that market needed to build an adequate base for technological advances and introduction of new products etc. These projects are, however, up against the opposition of both shareholders and the present home governments [62].

On the other hand, in April 1971 an American source stated that a number of big US corporations with large foreign holdings consider seriously to "de-americanize" themselves and to transfer headquarters abroad; such a move is required—in their view—by their worldwide extra-US interests.*

It is fascinating to speculate what would happen if the principle of getting closer to the largest markets and production facilities were universally applied by international corporations.

According to the latest data relating to 1970, in a sample of 154 companies surveyed by Business International, 79 (51%) had more than 25%, 32 of them (including Woolworth, Fairchild Camera, Corn Products Corporation International, Ampex, AMAX, American Smelting, IBM, NCR, Pfizer, Squibb, Upjohn, Murphy Oil, Standard Oil of California, Standard Oil of New Jersey) more than half their net earnings outside the US; so had 61 firms more than a quarter of their sales and 57 more than a quarter of their net assets [63].

As to Britain, *Robin Murray* (University of Sussex) listed some 40 major corporations from among The Times 1000 with overwhelming, substantial and significant degree of international involvement in 1969 [64].

It is well known that most of the internationals of the smaller West-European countries transact the bulk of their sales outside their home market and derive a substantial part of their profits from foreign operations.

By all means the least that can be said is that the moves of Hunter-Douglas, the Holland America Line and the Hudson Bay Company, the shifting of the "centre of gravity" of the operations of a significant number of international giants, the projected migrations are important straws in the wind.

*

The main thesis of this essay is that worldwide sourcing is not practiced any more by a handful of American and European giants, is no goal projected into the future and to be obtained by the majority of international corporations in a decade or two, but a concrete objective to be implemented immediately, an ongoing process.

* The statement was made by an American participant of the S.A.I.N.T. (Salzburg Assembly: Impact of the New Technology) Seminar on The Multinational Corporation and its Environment in April 1971 and was based on private communications. No names were mentioned.

I would even venture to affirm that just as the establishment of a production basis abroad became in the 1950's an indispensable concomitant of oligopolistic competition, a prerequisite to stand up successfully to the challenge of a modification of the relationship of forces in terms of world market shares, worldwide sourcing is about to become one of the next inevitable phases of the operations of international corporations: no sporadic occurrence but an imperative of survival within the present structure of the capitalist sector of the world economy, an organic part of the strategy of the multinational company.

And it is not only wage differentials, but a number of other factors (the profit-squeeze, labour relations, strike-proneness, political and economic stability or instability, inflation, devaluation, freight or duty requirements, special incentives, the tolerance of 100 per cent ownership or insistence on joint ventures and the fade-out principle etc). which are pushing corporations committed to globalism inexorably to worldwide sourcing: *Every international firm* eager to maximize its profits is grappling with the problem of selecting the best sourcing alternatives *to supply its home and international markets*—reports Business International, a reliable source as to prevailing trends in international business [65].

We are probably entering an era in which long-, even medium-term business planning without worldwide sourcing in mind is becoming obsolete. New organs of its implementation, as e. g. Sourcing Committees are already making their appearence.*

The process of worldwide sourcing is so advanced that when the EEC suddenly decided to start applying preferences for LCD-manufactured goods and the UNCTAD to negotiate a generalized tariff preference scheme between industrialized countries and the LDC's, there was wide agreement that the main beneficiaries will be those foreign firms established in the "poor countries" whose homebased plants are less competitive than their subsidiaries abroad: they are going to profit on the one hand from the low wages of the LDC's in terms of low production costs, on the other hand from the high wages of the developed countries in terms of purchasing power. The preferences serve also as a tool to worldwide relocation of industrial activities, the developed

* "Hyster, a US-based international manufacturer of industrial vehicles and construction equipment, has found a solution to the problem of utilizing resources in the most profitable manner by *establishing a high level committee with specific responsibility for planning worldwide sourcing.* Hyster's Sourcing Committee, whose primary purpose is to determine where products can be manufactured and sourced most profitably in the world, has played a major role *in shifting the company's orientation from what is most profitable for its US operations or for a foreign subsidiary . . . to what is most profitable for the corporation as a whole.* . . . The committee's primary purpose is *to determine whether the production of goods currently manufactured in the US (or abroad) should be added to product lines manufactured overseas and vice versa.* It may also be involved in *deciding where to source outside the US products recently introduced domestically by the company.* . . . The overriding consideration is the total cost picture . . ." See [65].

countries tending to specialize in the advanced, capital-intensive sectors. By leaving the other sectors to the LDC's this trend will be substantially strengthened. [66] International companies even consider the preferences as incentives to expand investments in LDCs "in order *to produce for the parent's home as well as for other foreign markets*" [67].

It is thus something like a truism that competitive exports from developing countries in manufactured goods are already to a significant extent accounted for by internationals.

As we have seen, worldwide sourcing assumes many forms: the transfer of products and whole industries to low wage countries, in general the relocation of traditional, labour-intensive industries (textiles, shoe, glassware, electronic appliances, parts and finished products, optical parts and products etc.), in-bond industries and twin-plant arrangements; encompasses not only stagnating but also growth industries, not only sectors with a low, but also of high technology contents, not excluding dedomiciling.

Let us finally refer to a quite new development: the aforementioned labour-intensive industries are by far not the only ones to be relocated. At a recent meeting of the Overseas Development Council it was suggested that *polluting-intensive industries* might end up being shifted to DC's, or expanded in them, with trade being used as the method of supply. Such movement is already taking place from Japan to the "pollution-havens" of Taiwan and Korea. [68] The implications are far-reaching and require a special analysis.

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МИГРАЦИЯ ПРОМЫШЛЕННЫХ ОТРАСЛЕЙ И ПРЕДПРИЯТИЙ В КАПИТАЛИСТИЧЕСКОМ МИРОВОМ ХОЗЯЙСТВЕ

Д. АДАМ

В капиталистическом мировом хозяйстве происходят большие сдвиги: гигантские предприятия, располагающие крупными зарубежными филиалами, во все большой мере превращаются в «международные компании», то есть становятся фирмами, все меньше руководящимися в своей деятельности интересами национальной экономики.

В наши дни это проявляется, в частности, в создании за рубежом таких производственных предприятий, которые реализуют свою продукцию не только по месту нахождения и на рынках третьих стран, но занимаются также и ее реэкспортом в метрополию. Этот процесс получил название мобилизации ресурсов в мировых масштабах, под чем принято понимать, что сверхмонополии, — независимо от того, в какой стране возникли они и были первоначально зарегистрированы, — выпускают продукцию там, где это им наиболее выгодно, не брезгуя при этом производить за рубежом товары и для «отечественного» рынка.

В мировой мобилизации ресурсов лидируют американские «корпорации», которые, несмотря на европейскую волну в образовании гигантских предприятий, по-прежнему составляют преобладающее большинство международных монополий.

В течение последней пары лет этот процесс весьма ускорился: все больше международных компаний переводит за границу производство отдельных изделий, заводы и даже целые отрасли из США и из развитых западноевропейских стран, осуществляя таким образом также и экспорт рабочих мест. Американские профсоюзы говорят прямо о массовом бегстве производственных предприятий за границу.

США и развитые западноевропейские страны, например, ФРГ, перемещают часть (сравнительно небольшую) производственных предприятий в европейские страны с низким уровнем заработной платы (Греция, Испания, Португалия, отчасти Италия). Большие масштабы приняло переселение предприятий из США в страны Латинской Америки, в особенности в Мексику, где вдоль американомексиканской границы возник настоящий комплекс смежных предприятий, состоящий из нескольких сот заводов и фабрик: трудоемкие детали вырабатываются в Мексике и оттуда перевозятся в Соединенные Штаты, где происходит окончательная обработка или монтаж.

Но наибольшие размеры этот процесс принял в Азии. Международные компании предоставляют капитал, технические знания и организацию сбыта, а развивающиеся страны дают дешевую и легко поддающуюся обучению рабочую силу, выпуская такие трудоемкие изделия, в производстве которых нельзя достичь за счет увеличения масштабов производства значительной экономии, а таким путем можно получить солидную сверхприбыль. Такие изделия, например, фруктовые и овощные консервы, текстиль, кожевенные изделия, мебель и другие изделия деревообрабатывающей промышленности, автомобильные, электротехнические и электронные детали, малые моторы, простые станки и т. д. Южная Корея, Гонгконг, Тайвань, Сингапур, Япония — вот страны, где все больше обосновываются крупные американские и западноевропейские предприятия.

Эти страны стремятся привлечь капитал международных компаний и наладить снабжение международных рынков из Азии путем создания т. н. зон промышленного производства на экспорт, пользующихся различными льготами в отношении пошлин и налогов, при условии, чтобы преобладающая часть или вся продукция поступала на экспорт. Южная Корея, Филиппины, Тайвань, Малайзия, остров Маврикия, создают такие зоны одну за другой, превращая их в своеобразную модель для приманки зарубежных инвеститоров.

Примеру американских корпораций следуют западноевропейские (в первую очередь, западногерманские, но также и голландские, английские, швейцарские, шведские), а в Юго-восточной Азии также и японские фирмы. Параллельно с этим берет начало процесс «денационализации» (интернационализации) крупных предприятий: перемещение места пребывания их административных центров в районы их крупнейших рынков.

Имеются признаки, что подобно тому, как создание в пятидесятые годы зарубежной производственной базы превратилось в органическую часть монополистической конкуренции, так и мобилизация ресурсов в мировых масштабах тоже станет неотъемлемым элементом стратегии международных компаний при современной структуре капиталистического сектора мирового хозяйства.

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F. GROSSMANN — A. SIPOS

NEUE EIGENHEITEN DER KONZENTRATION IN DER LANDWIRTSCHAFT DER ENTWICKELTEN KAPITALISTISCHEN LÄNDER

In den letzten zwei-drei Jahrzehnten gingen in der Landwirtschaft der entwickelten Industrieländer tiefgehende Änderungen vor sich. Das Eindringen und die umfassende Verbreitung der industriemässigen Technik verursachten eine rasch vor sich gehende Umgestaltung der landwirtschaftlichen technischen Basis und als Folge dieser befindet sich die ganze innere Struktur der Landwirtschaft in einem Stadium der Umwandlung. Die vorliegende Studie untersucht eine der augenfälligsten Erscheinungen dieser Strukturänderungen — die Beschleunigung, neue Erscheinungen und das Problem des Konzetrationsprozesses.

In den letzten Jahrzehnten hat sich die für die Entwicklung der Landwirtschaft früher charakteristische Lage grundlegend verändert. Die entscheidenden Änderungen begannen in Nordamerika in der zweiten Hälfte der 30-er Jahre, in Westeuropa nach dem zweiten Weltkrieg. Seitdem entfaltete sich in der Landwirtschaft ein vielseitiger und komplizierter Umgestaltungsprozess, im Laufe dessen *sich die Konzentration in einem noch nie gesehenen Masse beschleunigte und neue Formen annahm.* Die Ergebnisse der wissenschaftlich–technischen Revolution und das zunehmende wirtschaftliche Potential der ganzen Gesellschaft ermöglichten es, die Bedürfnisse des Monopolkapitals, die sich der Landwirtschaft gegenüber ändernden Anforderungen machten es für die Landwirtschaft zu einer Notwendigkeit, auf die industriemässige Produktion zu übergehen. Auf Wirkung der sich ändernden technisch–wirtschaftlichen Bedingungen begann die revolutionäre Umgestaltung der technischen Basis der Landwirtschaft, im Laufe deren sich die Landwirtschaft aus einem arbeitsintensiven Zweig in einen immer mehr kapitalintensiven Zweig verwandelt und ihre jahrhundertlange manufakturelle Entwicklung durch die Epoche der industriemässigen Landwirtschaft abgelöst wird. Die sich Jahrhunderte lang isoliert, abgeschlossen entwickelnde Landwirtschaft schaltet sich in die verzweigte Marktzirkulation ein und absorbiert die — auch in der Landwirtschaft anwendbaren — Ergebnisse der technischen Entwicklung ausserhalb der Landwirtschaft in einem raschen Tempo.

Die Beschleunigung und die neue Erscheinungen der landwirtschaftlichen Konzentration können grundlegend auf zwei Umstände zurückgeführt werden: 1. auf die sich immer mehr erweiternde Verwendung der Maschinen, auf die

radikale Umgestaltung der in der Landwirtschaft angewandten Technik; 2. auf Änderung der Zweigverbindungen der Landwirtschaft und — im Zusammenhang damit — auf die rasch vor sich gehende Konzentration in den mit der Landwirtschaft verbundenen Zweigen. Der erste Umstand spornt hauptsächlich zur Betriebskonzentration an, der letztere stimuliert eher zur zwischenbetrieblichen Kooperation.

Das Tempo, die konkreten Erscheinungen des Konzentrationsprozesses, die Schärfe der Tendenzen sind — infolge der Verschiedenheiten des Tempos der Umgestaltung der technischen Basis, sowie der Agrarstruktur und anderer Bedingungen — in den einzelnen Ländern selbstverständlich verschieden, die grundlegenden Zielsetzungen, die hauptsächlichsten Eigenheiten stimmen aber überein.

Die neuen Erscheinungen der landwirtschaftlichen Konzentration können kurz in folgenden zusammengefasst werden: die Beschleunigung der Bodenzentralisation und der Aufgebung von Betrieben: die Zunahme der Rolle der Kapitalkonzentration; die Verstärkung der Zweigkonzentration infolge der steigenden Spezialisierung; das Eindringen des ausserhalb der Landwirtschaft befindlichen Kapitals, die Angebotskonzentration der landwirtschaftlichen Produkte durch die vertikale Integration; die Zunahme der zwischenbetrieblichen Konzentration durch die verschiedenen Formen der kollektiven Wirtschaft; die steigende Rolle des monopolkapitalistischen Staates bei der Beschleunigung der Konzentration.

Die Bodenzentralisation

Der Fortschritt der Bodenzentralisation war — wie wir erwähnten — im Laufe der Entwicklung des Kapitalismus als Resultante von gegensätzlichen Bewegungen lange Jahrzehnte hindurch langsam. Heutzutage verwandeln sich die Jahrzehnte lang langsam bewegenden Agrarstrukturen auf Einwirkung der technischen Entwicklung in einem raschen Tempo und versuchen, sich den sich rasch ändernden technischen Anforderungen anzupassen. Die Zahl der landwirtschaftlichen Betriebe verminderte sich in allen entwickelten kapitalistischen Ländern in einem raschen Tempo und auch die Zunahme der durchschnittlichen Bodenfläche der landwirtschaftlichen Betriebe beschleunigte sich im Vergleich zu den früheren (siehe Tabelle Nr. 1).

Die gesteigerte Kapitalakkumalation, die massenhafte Verwendung der Maschinen bringen den Widerspruch der zur Verfügung stehenden Technik und der zersplitterten Agrarstruktur immer mehr an die Oberfläche und üben einen immer grösseren Druck in Richtung der Bodenzentralisation aus. *Die Beschleunigung des Prozesses der Bodenzentralisation ist also eine neue Erscheinung.*

Die Verminderung der Zahl der landwirtschaftlichen Betriebe beschleunigte sich in den 60-er Jahren weiter. In den Ländern des Gemeinsamen

Tabelle 1

Änderung der Zahl und des Ausmasses der landwirtschaftlichen Betriebe in den entwickelten kapitalistischen Ländern

Land	Periode	Änderung der Betriebszahl (%)	Änderung der durchschnittlichen Betriebsgrösse (%)	Änderung der durchschnittlichen Betriebsgrösse (ha)
Österreich	1951–1960	– 7	+10	+ 1.8
Belgien	1950–1959	–21	+21	+ 1.4
Dänemark	1946–1961	– 6	+ 4	+ 0.6
BRD	1949–1962	–19	+19	+ 1.3
Luxemburg	1950–1962	–26	+31	+ 3.8
Holland	1950–1959	–12	+11	+ 1.2
Norwegen	1949–1959	– 8	+ 6	+ 0.4
Schweden	1951–1961	–17	+12	+ 1.6
Schweiz	1939–1955	–14	+10	+ 0.5
Vereinigtes Königreich	1950–1960	–16	keine Daten	keine Daten
USA	1950–1959	–31	+41	+35.6
Kanada	1951–1961	–23	+28	+32.0

Quelle: Interrelationship between income and supply problems. OECD Paris 1965. Seite 153.

Marktes verminderte sich die Zahl der Bauernwirtschaften z. B. zwischen 1960–1968 um rund 1 Million, von 6,5 Millionen auf 5,5 Millionen, d. h. um mehr als 15%. In Frankreich waren 1955 noch 2,3 Millionen, 1967 nur mehr 1,7 Millionen, d. h. um 26% weniger Betriebe tätig, als vor 12 Jahren, d. h. jährlich wurden durchschnittlich 50 000 Betriebe aufgelöst. In Schweden verminderte sich die Zahl der landwirtschaftlichen Betriebseigentümer zwischen 1950 und 1965 von 318 000 auf 164 000. In der BRD wurden zwischen 1949 und 1968 562 000 landwirtschaftliche Betriebe, 29% der Betriebszahl in 1949, aufgelöst. Die Verminderung berührte entscheidend die Wirtschaften unter 10 ha, obwohl in den letzten Jahren auch die Zahl der Betriebe von 10–20 ha immer mehr abnahm.

Und dass die Bodenzentralisation während des Fortschritts der technischen Entwicklung nicht stehen bleibt, sondern im Gegenteil sich beschleunigt, wird durch die Daten der Vereinigten Staaten bewiesen, wo sich die Zahl der landwirtschaflichen Betriebe zwischen 1930 und 1964 von 6,3 Millionen auf 3,15 Millionen, d.h. rund auf die Hälfte verminderte. Inzwischen erhöhte sich auch die im Vergleich zu der europäischen sehr hohe, 157 acre (71,2 ha) betragende durchschnittliche Betriebsgrösse auf mehr als das Doppelte, auf 352 acre (161,9 ha). Die Beschleunigung der Bodenzentralisation wird auch

durch die sich auf die künftige Agrarstruktur der europäischen Länder beziehenden Prognosen bestätigt.

Für den grössten Teil der Kleinbauernwirtschaften bedeutet die Anwendung der modernen Technik im allgemeinen eine unlösbare Aufgabe, sie können nämlich — von einigen Ausnahmen abgesehen — die riesigen Kosten der Umgestaltung der technischen Basis nicht aufbringen, oder wenn einige durch grosse Kraftanstrengungen bei der Anwendung von zeitgemässen Ausrüstungen Schritt halten, werden sie durch die unbefriedigenden Ausmasse ihrer Wirt-

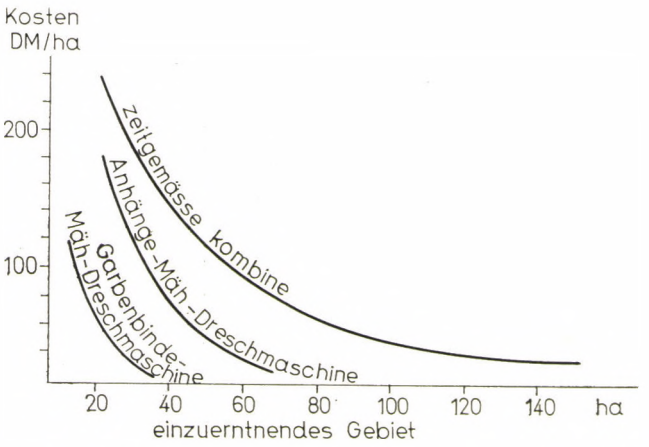

Abb. 1. Gestaltung der fixen Kosten der Getreideeinbringung in der Funktion des Betriebsgebietes, bei Verwendung von Maschinen verschiedenen technischen Niveaus in der BRD

schaften am Genuss der Vorteile der kostspieligen Investitionen gehindert. Ihr Schicksal ist es, dass sie nach kürzeren oder längeren Versuchen ihr Anwesen aufgeben, ihren Boden verkaufen oder verpachten, eventuell — im Interesse der Sicherung einer Ergänzungseinnahmenquelle — als Nebenbeschäftigung denselben Boden bebauen. Trotz der raschen Verdrängung der Kleinbetriebe erweist sich aber die Zunahme der Bodenfläche der Betriebe als zu langsam, um mit den Anforderungen der technischen Entwicklung Schritt halten zu können. Die rasch nacheinander folgenden, immer zeitgemässeren Verfahren, Einrichtungen haben eine immer grössere Leistungsfähigkeit, ihre fixen Kosten wachsen immerfort an, ihre effektive Ausnutzung erfordert deshalb ein immer grösseres Produktionsvolumen. Dies kann durch die unterschiedlichen Mechanisierungslösungen der Getreideeinbringung gut veranschaulicht werden.

Wie aus der Abbildung ersichtlich, erhöhte sich die optimale Betriebsgrösse in nicht ganz zwei Jahrzehnten um 100 ha, während die durchschnittliche Betriebsgrösse durch Verdrängung von mehr als 500 000 westdeutschen

Bauernwirtschaften um kaum mehr als 2 ha zunahm. Es ist eine allgemeine Erscheinung in fast allen Zweigen, dass die Kapazität der nacheinander folgenden Maschinengenerationen um mehr als 10 ha, die durchschnittliche Betriebsgrösse aber nur um 1—2 ha zunimmt. *Die wirkliche Betriebsgrösse bleibt in allen entwickelten kapitalistischen Ländern immer mehr hinter der durch die technische Entwicklung bestimmten optimalen Betriebsgrösse zurück; ja sogar nicht nur hinter der optimalen Betriebsgrösse, sondern auch hinter jenem Minimum, welches die Benutzung der neuen Produktionseinrichtungen ökonomisch überhaupt zulässt.*

Nach dem westdeutschen bürgerlichen Volkswirt Dobert waren z. B. in Westdeutschland 1966 folgende Betriebsgrössen in den einzelnen Betriebszweigen zur rentablen Einführung der zur Verfügung stehenden modernsten Produktionsmittel notwendig:

— zur selbstfahrenden Kombine wenigstens 50 ha,
— zum Ähren-Tankmelksystem wenigstens 40 Kühe,
— zur vollständig automatisierten Schweinefütterung 400 Mastschweine,
— zum vollständig automatisierten und klimatisierten Geflügelstall 4000 Legehennen oder 40 000 Fleischhühnchen [1].

Diese Daten zeigen jene Schwellenwerte an, die die Verwendung der zur Verfügung stehenden modernen Produktionseinrichtungen überhaupt rentabel machen. Das die optimale Ausnutzung sichernde Betriebsareal, bzw. die Bestandstärke übersteigen die obigen Dimensionen weitgehend. In Zusammenhang damit schreibt der westdeutsche Staatssekretär für Ernährung Hüttebräuher: »Die Zunahme der durchschnittlichen Betriebsgrösse von 7 ha auf 10 ha während der vergangenen 15 Jahre ist ein armseliges Ergebnis, dieser Prozess muss in Hinkunft beschleunigt werden« [2].

Durch den Fortschritt der technischen Entwicklung berührt die Aufgebung des Betriebs immer höhere Betriebsgrössen-Kategorien. In England z. B., wo die Konzentration weit fortgeschrittener ist als in den Ländern Kontinentaleuropas, verminderte sich in der letzten Zeit nur die Zahl der Betriebe mit mehreren hundert ha nicht.

Den Vorgang der Bodenzentralisation beeinflussen — ausser den erwähnten — noch zahlreiche Umstände, einige verlangsamen, andere beschleunigen ihren Verlauf. Hemmend wirken vor allem das Festhalten der älteren Generation am Boden, und die bäuerliche Lebensform, bzw. der Mangel an einer anderweitigen Bildung. Zugleich beschleunigen derzeit die günstigen Arbeitsmöglichkeiten ausserhalb der Landwirtschaft, die Disparität der landwirtschaftlichen und industriellen Einkommen, die hohen Bodenpreise, die Anziehung der städtischen Lebensführung, die Aufgebung der landwirtschaftlichen Betriebe, die Abwanderung der Bauernschaft.

Die Bodenzentralisation zeigt heutzutage einige interessante Eigenheiten. Es ist eine allgemeine Erscheinung, dass die durch die Aufgebung der Betriebe

frei gewordene Bodenfläche die Bodenfläche der fortbestehenden landwirtschaftlichen Betriebe nur teilweise erhöht, die nichtlandwirtschaftliche (Urbanisations-, Verkehrs-, militärische, industrielle usw.) Bodenbenutzung nimmt nämlich in einem raschen Tempo zu, und dies vermindert das landwirtschaftlich nutzbare Bodengebiet. Diese Verminderung ist in einigen Ländern — z. B. in Belgien, in der BRD — bedeutend, und übersteigt jährlich 1% der bebauten Bodenfläche.

Eine weitere Eigenheit ist, dass die Zentralisation der *Betriebsfläche* rascher vor sich geht, als die Zentralisation des *Grundeigentums*. Ein Teil der die Bewirtschaftung einstellenden Gutsbesitzer verkauft nämlich oft den Boden der aufgegebenen Betriebe oder einen Teil desselben trotz der hohen Bodenpreise nicht, sondern verpachtet ihn. Dies hat grundlegend zwei Ursachen: 1. ein bedeutender Teil der ihr Anwesen aufgebenden Bauern kommt meistens in konjukturempfindlichen Industriezweigen unter, sie betrachten ihren Grundbesitz als eine Rückzugsmöglichkeit, Sicherheitsreserve für den Fall, wenn sie infolge einer Konjukturabflauung arbeitslos werden; 2. der Grundbesitz ist eine der sichersten Formen der Vermögensbewahrung, weil er neben den rasch steigenden Bodenpreisen einen Schutz gegen die Inflation bietet. Zugleich wird die Pacht solcher Böden — besonders wenn dadurch zersplitterte Parzellen vereinigt werden können — auch von der Nachfrageseite her bevorzugt, weil das "Dazupachten" — die Ergänzung des eigenen Betriebsgebietes — die Anpassung an die Anforderungen der technischen Entwicklung ermöglicht, ohne dass durch den hohen Kaufpreis den technischen Investitionen bedeutende Beträge entzogen würden. Es kann beobachtet werden, dass während sich — infolge der relativ ungünstigen landwirtschaftlichen Verwertungsbedingungen des Kapitals — die Pachtung von vollständigen Betrieben vermindert, die Bedeutung der Ergänzungspachtungen im allgemeinen zunimmt.

Eine interessante Erscheinung der Bodenzentralisation ist, dass in jenen Ländern, wo die technische Umgestaltung der Landwirschaft auf Wirkung der wirtschaftlich-technischen Bedingungen in einem ausserordentlich raschen Tempo erfolgt, auch die Bodenfläche der sich in der höchsten Betriebsgrössenkategorie — also über 100 ha — befindlichen Betriebe vermindert (z. B. BRD). Die Hauptursache dessen ist, dass der Kapitalbedarf der hochgradigen Mechanisierung teilweise aus dem Bodenverkauf aufgebracht und — da dies eine rentablere Lösung ist — auf einem kleineren Gebiet eine intensivere Bewirtschaftung betrieben wird.

Bei der Beschleunigung der Bodenzentralisation spielt in allen entwickelten westeuropäischen kapitalistischen Ländern der monopolkapitalistische Staat eine bedeutende Rolle, der durch Gesetze, staatliche Anordnungen, Sicherung des Vorkaufrechtes, Gewährung von Krediten unter günstigen Bedingungen und durch andere Unterstützungsformen zur Ausgestaltung

von Betrieben grösseren Ausmasses anspornt. Diese Bestrebungen nahmen, besonders in den letzteren Jahren, eine sehr entschiedene Form an.

Die Kapitalkonzentration

Die Charakterisierung des Konzentrationsprozesses ist von der Seite der Bodenzentralisation aus am leichtesten und am meisten gebräuchlich. Diese ist nämlich statistisch messbar und deshalb wird diese Messzahl von der Agrarstatistik auch weitgehend benutzt. Je entwickelter aber die in der Landwirtschaft angewendete Technik ist, desto eher wird die herstellbare Produktenmenge unabhängig von der Grösse der Betriebsfläche. Demzufolge wird die Verteilung des gesellschaftlichen Bodenfonds im Masse des Fortschrittes der technischen Entwicklung zu einem immer ungenaueren Messwert der tatsächlichen Konzentration.

Lenin machte vor mehr als fünfzig Jahren darauf aufmerksam, dass es nicht genügt, die Betriebsgrösse nach der Grösse der Bodenfläche zu messen, zu klassifizieren, da ja auf einer gleich grossen Bodenfläche eine Bewirtschaftung von ganz abweichender Intensität betrieben werden kann. Dies ist bei dem heutigen Stand der Technik in erhöhtem Grade gültig; die Betriebsvergrösserung wird immer mehr — in erster Reihe in den sogenannten vom Gebiet unabhängigen Tierzuchtszweigen — unabhängig von der Zunahme der Betriebsflächen. Das Ausmass der Produktion wird eher durch die Höhe der Aufwendungen bestimmt.

Welch ein relativer Betriebsgrössenmassstab in der heutigen Landwirtschaft die Bodenfläche ist, wird durch die Durschschnittsgrössen der auf je eine Produktenart spezialisierten Betriebe in den USA gut charakterisiert:

— Geflügelfarm (New Jersey) 2,5 ha,
— Warengetreideproduktionsfarm (Maiszone) 62 ha,
— Rinderzucht (nördliche Wüste) 1095 ha,
— Schafzucht (Südwest) 2334,2 ha [3].

Während aber in den 1910er Jahren — in der Zeit der Forschungen Lenins — die Aufwendungen überwiegend Aufwendungen an lebendiger Arbeit waren, die Grundfläche und die Zahl der angestellten Arbeitskräfte, zusammen also die Betriebsgrösse, die gemeinsame gesellschaftliche Verteilung derselben aber das Konzentrationsmass annähernd befriedigend ausdrückten, *erscheint heute der grösste Teil der Aufwendungen als Kapitalaufwendung, und so ist die Grösse, bzw. Verteilung derselben das entsprechendste Kennzeichen der Betriebsgrösse, bzw. Konzentration von der Seite der Aufwendungen.* Bezüglich der Konzentration, der Verteilung nach den Betriebsgrössekategorien publizieren die Agrarstatistiken im allgemeinen keine Daten, haben also darüber keine breite Übersicht. Die zur Verfügung stehenden Daten über die Verteilung des in der Landwirtschaft tätigen Kapitals und

jene Produktivitätskennzahlen, aus denen auf die Verteilung der Kapitalakkumulation gemäss Betriebsgrössenkategorien gefolgert werden kann, *weisen aber auf eine Konzentration hin, die die Bodenzentralisation in hohem Masse übersteigt.*

Tabelle 2

Das auf einen Betrieb entfallende Kapital 1963–1964, in der BRD

	Nordwestdeutschland	Süddeutschland
unter 20 ha	48 625 DM	40 174 DM
20–50 ha	181 495 DM	162 468 DM
über 50 ha	447 747 DM	427 998 DM

Quelle: E. Rechtziegler: Konzentration unter dem Druck der Monopole. S. 66; in: Die Bauern im Bonner Bundesstaat. Staatsverlag der DDR. Berlin 1968.

Diese Daten widerspiegeln die Kapitalkraft der den einzelnen Betriebsgrössenkategorien angehörenden Betriebe.

Die ausserordentlich rasche Kapitalakkumulation hat zwei wichtige Folgen. Die eine ist, dass — da die Kapitalinanspruchnahme teilweise Arbeitskraft ersetzt — *die Zahl der in der Landwirtschaft arbeitenden Arbeitskräfte* in allen entwickelten kapitalistischen Ländern *sich rasch vermindert, rascher, als die Zahl der Betriebe.* Die Bodenzentralisation und im allgemeinen das Wachstum der Produktionskapazität des Betriebes halten nämlich nicht Schritt mit der arbeitskräftebefreienden Wirkung der Mechanisierung. Demzufolge vermindert sich der auf einen Betrieb entfallende durchschnittliche Arbeitskräftestand. Dieser Prozess geht in Westeuropa mit seiner zersplitterten Agrarstruktur ziemlich rasch vor sich, kann aber auch in den Vereinigten Staaten beobachtet werden. (In den USA betrug die Zahl der landwirtschaftlichen Arbeiter 1930 12,5 Millionen, 1964 6,1 Millionen. Die Abnahme ist etwas rascher als die Verminderung der Zahl der Betriebe, so nahm die auf einen Betrieb entfallende durchschnittliche Arbeiterzahl von 2,0 auf 1,9 ab.) Da in den höheren Betriebsgrössenkategorien die Kapitalkonzentration, und so die Ersetzung der lebendigen Arbeit durch das Kapital schneller vor sich geht als in den kleineren Betrieben, ferner keine ähnlichen Hindernisse für die Verminderung des Arbeitskräftestandes vorhanden sind wie in den Kleinbetrieben, verminderte sich die Beschäftigung in den höheren Betriebsgrössenkategorien rascher und der Anteil der keine Lohnarbeit verwendenden sogenannten Familienbetriebe nahm zu. In den entwickelten westeuropäischen Ländern vermindert sich das Ausmass der Lohnarbeit rasch und heute spielt bereits die Arbeitskraft der Familienmitglieder — mit Ausnahme von England und

Dänemark (wo mehr als die Hälfte, bzw. ein Drittel der Arbeiter Lohnarbeiter sind) — eine entscheidende Rolle. Neben der raschen Verminderung der Zahl und des Verhältnisses der Lohnarbeiter kann auch hier die Konzentrationstendenz erkannt werden, indem sich *ein immer mehr zunehmender Anteil der verbliebenen Lohnarbeit in einem kleinen Anteil der Betriebe konzentriert.* In Westdeutschland z. B. verminderten sich die Zahl und das Verhältnis der Lohnarbeiter in einem ausserordentlich raschen Tempo (1950/51 2 216 000, bzw. 18%, 1965/66 378 000, bzw. 10%), ein immer grösserer Anteil der Lohnarbeit konzentrierte sich aber in den höheren Betriebsgrössekategorien. 1950—51 konzentrierten sich nur 19,6%, 1965—66 30,3% in den Betrieben über 50 ha.

Eine andere wichtige Folge der raschen Kapitalkonzentration ist, dass *der Produktionsniveauunterschied zwischen den Klein- und Grossbetrieben rasch zunimmt,* woraus sich die steigende Differenzierung der Betriebe, die weitere Beschleunigung der Konzentration ergibt.

Tabelle 3

Die Produktivitätsindexe der Farmen verschiedener Grösse in den Vereinigten Staaten 1965

	Warenverwertung					
	unter 2500 Dollar	2—5000 Dollar	5—10 000 Dollar	10 – 20 000 Dollar	20 – 40 000 Dollar	über 40 000 Dollar
Der auf 1 Arbeitsstunde entfallende Ertrag	1.0	2.0	3.4	5.4	7.5	11.1

Quelle: Implication of changes on farm management and marketing research. Conference in Chicago. 1967. S. 115.

Die Konzentration der Produktion

Die Konzentration in der Landwirtschaft kommt vor allem darin zum Ausdruck, dass ein immer grösserer Teil der Produktion aus einem kleineren Prozentsatz der Betriebe stammt. Die Konzentration der Produktion nimmt aufgrund der gemeinsamen Wirkung der Bodenzentralisation und der Kapitalkonzentration zu. In den meisten kapitalistischen Ländern, wo infolge der Zersplitterung der Agrarstruktur die Bodenzentralisation auf einer relativ niedrigen Stufe steht, und auch die Kapitalkonzentration sich erst jetzt zu entfalten beginnt, ist die Produktionskonzentration relativ niedrig. Die Kleinwirtschaften mit grosser Arbeitskräftedichte können ihren — aus der kleineren Betriebsfläche und Kapitalkraft stammenden — Nachteil beim Zustandebringen des Produktenwertes durch gesteigerte Arbeitsaufwendung teilweise ausgleichen. So *spielen die Kleinwirtschaften eine relativ bedeutende Rolle bei der Versorgung des Marktes.* Der Anteil der Kleinwirtschaften an

der Warenproduktion ist in erster Reihe bei den — ein grosses Mass von lebendiger Arbeit beanspruchenden, schwer mechanisierbaren — Spezialkulturen hoch. Nach Daten von Padberg und Scholz [4], stammten z. B. zu Beginn der 60-er Jahre in der Deutschen Bundesrepublik bei Obst beinahe 70% des auf den Markt gebrachten Produktenwertes aus Betrieben mit einer Fläche unter 10 ha, bei Gemüse mehr als 70% aus Betrieben mit einer Fläche unter 5 ha. Zugleich haben aber die Grossbetriebe in Zweigen, wo die Mechanisierung bedeutend fortgeschritten ist und sich demzufolge die relative Rentabilität der Zweige günstig gestaltet (z. B. Getreideproduktion), eine entscheidende Rolle. Infolge des oben Gesagten ist die Konzentration der landwirtschaftlichen Gesamtproduktion — obwohl sie hinter der Konzentration anderer Zweige weit zurücksteht — besonders in England und den Vereinigten Staaten bedeutend.

Tabelle 4

Die Verteilung der Zahl, der Fläche, der Bargeldeinnahmen der Farmen nach Betriebsgrössenkategorien in den Vereinigten Staaten, 1965

Betriebsgrösse nach Warenwert	Zahl der Farmen 1000	Fläche der Farmen		Bargeldeinnahme	
		zusammen Mill. acre	Ein Farm acre	zusammen Mill. Dollar	Ein Farm Dollar
Über 40 000 Dollar	170	385	2265	17 369	102 171
20–40 000 Dollar	300	209	697	9 000	30 000
sämtliche Farmen über 10 000 Dollar*	990	798	806	34 169	34 514
5–10 000 Dollar	1360	245	180	6 252	4 597
sonstige**	1025	108	150	1 218	1 188
Zusammen	3375	1 151	341	41 639	12 337

Quelle: Implication of changes on farm management and marketing research. Conference in Chicago 1967. S. 112.

* die Farmen bis 20–40 000 und über 40 000 mitinbegriffen
** als Nebenbeschäftigung bewirtschaftete und teils aufgegebene Farmen

Wie aus den Daten der Tabelle Nr. 4 zu entnehmen ist, verfügten in den Vereinigten Staaten in 1965 kaum mehr als 5% sämtlicher Farmen über 33% der landwirtschaftlichen Anbaufläche und stellten mehr als 40% der gesamten Warenproduktion her, zugleich haben 31% sämtlicher Farmen, die über 9% Bodenfäche verfügen, an der Warenproduktion einen Anteil von nicht ganz 3%.

Ein sehr wichtiges Kennzeichen der Konzentration der landwirtschaftlichen Produktion ist, dass infolge der raschen Spezialisierung *die Konzentration der Produktion nach Betriebszweigen viel rascher vor sich geht, als die Konzentrierung der landwirtschaftlichen Gesamtproduktion.*

Infolge der Entwicklung der Technik lockern sich die organischen Verbindungen zwischen den Zweigen in der Landwirtschaft, die Vorteile der Vielseitigkeit (Arbeit-, Risiko-, Futterausgleich, Erhaltung der Bodenfruchtbarkeit, allgemeine Selbstversorgung) werden in den Hintergrund gedrängt, und die Vorteile der Spezialisierung (bessere Kapazitätsausnutzung der speziellen Produktionseinrichtungen, speziale Fachbildung usw.) treten in den Vordergrund. Infolge der technischen Entwicklung stimulieren und zwingen die immer leistungsfähigeren und spezielleren Maschinen und der Zwang der Spezialisierung der Fachkenntnisse zur Spezialisierung der Produktion. So erhält die Spezialisierung eine wichtige Rolle bei der Milderung des Widerspruchs zwischen der zersplitterten Agrarstruktur und der Verwendung von modernen Produktionsmitteln, was eine Konzentration der Betriebszweige ergibt.

Durch Anwendung der Technologien industriellen Charakters wird die Kostenwirkung bei der Errichtung von Grossbetrieben *(economies of scale)* auch in der Landwirtschaft immer bedeutender. Bei der modernen Technik besteht ein sehr enger Zusammenhang zwischen der Betriebsfläche, bzw. der Bestandgrösse und den auf eine Produkteninheit entfallenden Kosten. Die neuen technischen Lösungen erfordern immer grössere Dimensionen, aber im Falle einer entsprechenden Zunahme der Betriebsfläche, bzw. des Bestandes, vermindern sich sowohl die spezifischen Investitionskosten, als auch die spezifischen Arbeitskosten rasch. In der Tierhaltung z.B. fand Kising in Westdeutschland folgende Zusammenhänge zwischen der Bestandgrösse und den Kosten:

Tabelle 5

Arbeitsbedarf und Investitionskosten bei verschiedenen Kuhbeständen

Stallform	Bestand	Arbeitsstunde Kuh/Jahr	Auf eine Kuh entfallende Investitionskosten DM
Mittellanger Stand	5	200	5000
Inundationsdüngausbringung	20	90	3000
Bewegliches System	40	50	2500

Quelle: W. Kising: Mit weniger Arbeit mehr verdienen. BLV. München 1967.

Barall berechnete, dass bei Kombinebenutzung die auf 1 q Getreide entfallenden Kombinekosten bei einer Getreidefläche von 9 ha, 5,60 DM, bei 70 ha insgesamt 1,50 DM betragen [5]. Nach Kising beträgt die Maschinen- und Gebäudekostenersparnis in einem Betrieb von 30 ha — gegenüber einem Betrieb von 10 ha — nach soliden Berechnungen pro ha 335 DM, abgesehen

von den sich aus der Produktionsstruktur ergebenden weiteren Unterschieden, die aber ebenfalls nicht vernachlässigt werden dürfen, ist es doch eine allgemeine Erfahrung, dass der Kleinbetrieb im Interesse der vollwertigen Ausnutzung seiner Arbeitskraft im allgemeinen eine vielseitigere Bewirtschaftung treibt als der grössere Betrieb.

All dies veranschaulicht einerseits, welche Betriebsdimensionen die zeitgemässe Technik erfordert, andererseits wird die Überlegenheit der Grossbetriebe gegenüber den Kleinbetrieben bewiesen. Infolge der technischen Entwicklung werden deshalb die radikale Vereinfachung der Betriebsstuktur, die je intensivere Spezialisierung eine immer gebieterischere Notwendigkeit. Die Folge dessen ist, dass heute in den Vereinigten Staaten und auch in Westeuropa einst für undenkbar gehaltene, nur einige Pflanzenprodukte produzierende, tierlose Betriebe zu Tausenden zu finden sind und in den Vereinigten Staaten die keine Pflanzenproduktion betreibenden, einen einzigen Tierschlag haltenden, spezialisierten fleischproduzierenden landwirtschaftlichen Betriebe um sich greifen.

Die Betriebszweigkonzentration ging in erster Reihe in den sogenannten gebietsunabhängigen Tierzuchtszweigen und in jenen Zweigen der Pflanzenproduktion rasch vor sich, wo die wirksame Mechanisierung die relative Rentabilität des Zweiges verbesserte.

Vor allem in den vom Flächenausmass unabhängig entwickelbaren Viehzuchtszweigen *verschiebt sich die Verteilung des Viehbestandes in Richtung der grösseren Bestandgrössekategorien in einem raschen Tempo*, da hier die Betriebsdimension, unabhängig vom landwirtschaftlichen Hintergrund, beliebig erhöht werden kann.

Es ist zu betonen, dass das Anwachsen der Durchschnittswerte, und die Verschiebung der Produktionsproportionen nach den höheren Kategorien, das

Tabelle 6

Die Änderung der Zahl und Dimension der über einzelne Betriebszweige verfügenden Betriebe in England und Wales

	1954	1961	1963	1966
Schweine				
Zahl der Schweinehalter (1000)	182	110	103	83
Auf einen Schweinehalter entfallende Schweine	27	42	51	70
Weizen				
Zahl der Produzenten (1000)	91	74	64	56
Acres/Produzent	22	29	29	39

Quelle: Britton, D. K.: Future Pattern of Farming. OECD Argicultural Review 1968. Nr. 4. S. 120

Tabelle 7

Die Verteilung des Schweinebestandes nach Bestandgrösssenkategorien in Dänemark

	1955	1965	1966	1967
1— 49 Schweine	58,0	25,6	25,2	22,1
50— 99 Schweine	28,1	33,6	31,0	31,0
100—199 Schweine	13,9	27,3	28,0	29,9
über 200	—	13,5	15,8	17,0
Zusammen	100,0	100,0	100,0	100,0

Quelle: C. Thomsen: Landbruget i 1968. Tidsskrift for landokonomi, 1969. Nr. 1. S. 28.

Ausmass der Konzentration nicht entsprechend ausdrücken. Infolge der Beschleunigung des technischen Fortschrittes *nimmt* nämlich *das Mass der Streuung nach den Durchschnitten zu.* So decken die Durchschnitte in der höchsten Kategorie solche Betriebsdimensionen, die im wesentlichen eine ganz alleinstehende Kategorie bilden. Solche, eine industriemässige Produktion treibenden Betriebe entwickeln sich in einem ausserordentlich raschen Tempo. In Norwegen gab es z.B. 1959 nur einen einzigen Schweinezuchtbetrieb, wo der Mastschweinbestand 1000 St. überstieg, 1965 funktionierten bereits sechs solche Betriebe [6].

Eine interessante Erscheinung der Produktionskonzentration ist der Zusammenhang zwischen der Betriebszweigkonzentration und der Betriebsgrösse. Im allgemeinen *sind die Spezialisierung und demzufolge die Betriebszweigkonzentration in den grösseren Betrieben viel kraftvoller, als in den kleineren Betrieben.* Die grössere Dimension ermöglicht nämlich die Anwendung einer spezialen, nur zur Herstellung von einem Produkt oder einigen Produkten verwendbaren Produktionseinrichtung. Demgegenüber lassen in den kleineren Betrieben die kleinen Ausmasse der Betriebsfläche, bzw. der Bestandgrösse nur die Verwendung solcher Maschinen zu, die vielseitig angewendet und so amortisiert werden können. Darüber hinausgehend *kann bei der Betriebszweigkonzentration ein bestimmter Zusammenhang auch zwischen der Grösse der Betriebsdimension und der Richtung der Spezialisierung beobachtet werden. Die kapitalstarken, oder über eine grosse Betriebsfläche verfügenden Betriebe konzentrieren sich auf die, eine hohe Arbeitsproduktivität aufweisenden, relativ vorteilhaft rentablen Zweige, während die an Kapital und Boden armen Betriebe sich auf die eine hohe Flächenproduktivität aufweisenden, aus dem Gesichtspunkt der relativen Rentabilität ungünstigeren Zweige konzentrieren.* Die Produktion der weiterbestehenden Kleinbetriebe verschiebt sich im Laufe der Konzentration immer mehr nach solchen Zweigen, die für die Grossbetriebe uninteressant werden.

Die Betriebskonzentration der landwirtschaftlichen Produktion schritt in den vergangenen zwei Jahrzehnten in den entwickelten kapitalistischen Ländern in einem noch nie gesehenen Tempo vorwärts. Trotzdem blieb ihre Entwicklung einerseits hinter den durch die technische Entwicklung gebotenen Möglichkeiten, andererseits hinter der Konzentration in den sich an die Landwirtschaft anschliessenden Zweigen, in der Lebensmittelindustrie und im Handel, sowie in der landwirtschaftlichen Produktionsmittelherstellung zurück. All dies erhöhte die Bedeutung der Sekundär-Konzentration der landwirtschaftlichen Produktion, der verschiedenen zwischenbetrieblichen, horizontalen und vertikalen Kooperationsformen, der vertikalen Integration und der verschiedenen Formen der kollektiven Bewirtschaftung in hohem Masse.

Die vertikale Integration

Von den 50-er Jahren an haben in erster Reihe in den Vereinigten Staaten, aber immer mehr auch in Westeurope *die zwischenzweiglichen vertikalen Verbindungen*, Integrationsformen eine immer grössere Rolle bei der Konzentration der Landwirtschaft inne. *Das Wesen des Prozesses besteht darin, dass die die Landwirtschaft mit Produktionsmitteln versorgenden und die Landwirtschaftsprodukte weiterverarbeitenden und verwertenden Monopole die Lenkung der landwirtschaftlichen Produktion wirtschaftlich und auch technologisch immer mehr unter ihre Kontrolle ziehen.*

Die vertikale Integration ist ein Produkt des Widerspruches zwischen den durch die wissenschaftlich–technische Revolution geschaffenen Möglichkeiten und Anforderungen und der zersplitterten kleinbäuerlichen Agrarstruktur; sie widerspiegelt und bedient die neuen Bedürfnisse der konzentrierten Lebensmittelindustrie- und Handelsgrossunternehmen. Nach dem zweiten Weltkrieg erweiterte sich der Wirkungskreis der Lebensmittelproduktion bedeutend, bei der Herstellung der Lebensmittelsendprodukte nahm die Länge der Umwege zu. Infolge der Umgestaltung der technischen Basis der Landwirtschaft kauft die Landwirtschaft immer mehr Mittel industriellen Ursprungs, zugleich führt die Veränderung der Verbraucheransprüche — infolge der Erhöhung des Lebensstandards, der Urbanisation, der gesteigerten Beschäftigung von Frauen, der Verbreitung von Kühlschränken, der Umwandlung der Käufergebräuche usw. — zur Erhöhung der Bedeutung der Lebensmittelverarbeitung und des Lebensmittelhandels. Der Anspruch auf die verarbeiteten Lebensmittel nimmt zu; der Konsument sucht immer mehr die gut vorbereiteten, küchenfertigen Waren. Auf Wirkung der veränderten Konsumentenansprüche verwandelte sich die Technik der Lebensmittelverarbeitung — als Ergebnis der raschen technischen Entwicklung — in hohem Masse. Mächtige spezialisierte Lebensmittelfabriken wurden mit einer komplizierten Grossbetriebstechnologie, einer grossen Kapazität, und einer strengen technologi-

schen Ordnung errichtet. Die Höhe des Anlagekapitals, die Empfindlichkeit der Technologien erhöhten die Ansprüche gegenüber dem Rohmaterial. Für die Lebensmittelfabriken neuen Typs ist die massenhafte Lieferung von Waren einheitlicher Qualität zu einer bestimmten Zeit eine entscheidende Frage geworden. Auch die Organisation und Technik des Lebensmittelhandels erfuhren eine tiefgehende Umgestaltung. Die Konzentration des Lebensmittelhandels, die Verbreitung der Selbstbedienung und anderer Verkaufsformen neuen Typs erhöhten die Anforderungen gegenüber den Produkten landwirtschaftlichen Ursprungs ebenfalls in hohem Masse.

In diesem Prozess wird die Landwirtschaft aus einem Urproduktionszweig immer mehr zu nur einem Kettenglied des sich aus vielen Teiltätigkeiten zusammensetzenden Vorganges der Lebensmittelherstellung, was zur Steigerung der landwirtschaftlichen Konzentration stimuliert und zur Ausgestaltung neuartiger Kooperationsformen führt. Die Vertiefung der Verbindungen zwischen der Landwirtschaft und den der Landwirtschaft vorhergehenden und folgenden Zweigen erhöht die Notwendigkeit einer gesteigerten Harmonisierung der Tätigkeiten der verschiedenen Vertiken der Lebensmittelproduktion. *Die Koordination der sich kettenartig aneinanderschliessenden Tätigkeiten der Endproduktherstellung, die Konzentration der verschiedenen Phasen der Lebensmittelherstellung, der landwirtschaftlichen Produktionsmittelversorgung, der landwirtschaftlichen Produktion und Produktionverarbeitung, sowie der Verteilung unter eine einheitliche Entscheidungsmacht, benannte H. J. Davis — der Schöpfer des Begriffes — vertikale Integration* [7]. Das Wesen der vertikalen Integration ist also die Zentralisierung der sich auf verschiedene Abschnitte beziehenden Entscheidungen in eine Hand. Die — zwischen den einzelnen Vertiken zustandekommenden technologischen Zusammenhänge machen die über die gebräuchliche Markt-, und Verwertungskoordination hinausgehende Harmonisierung, die produktionstechnische Koordination notwendig.

Förmlich handelt es sich also darum, dass im Prozess der Lebensmittelherstellung der eine Teilnehmer — der Integrator — die Entscheidungen bezüglich der übrigen Phasen in seiner eigenen Hand konzentriert. Inhaltlich ist die vertikale Integration nichts anderes, als die Integrierung der Landwirtschaft durch die grossen Industrie- und Handelsmonopole. Gegenüber der Produktionskooperation in den anderen Zweigen hat nämlich die vertikale Integration der Landwirtschaft die Eigenheit, dass sie die Tätigkeiten der Einheiten, die in hohem Masse von verschiedener Wirtschaftskraft sind, koordiniert. Atomisierte Landwirtschaftsbetriebe von kleiner Wirtschaftskraft stehen stark zentralisierten Industrie- und Handelsunternehmen gegenüber. Daraus folgt, dass *der, der die Bedingungen diktiert, der die Entscheidungen koordinierende Integrator, nie die Farm ist. Wenn man die Kräfteverhältnisse der Teilnehmer an der vertikalen Integration berücksichtigt, wird es offenbar, dass der Gegenstand der Integration die Landwirtschaft selbst ist.*

In den der Landwirtschaft vorhergehenden und folgenden Zweigen ist die technische Entwicklung ausserordentlich rasch, und demzufolge fand nach dem zweiten Weltkrieg eine kraftvolle Konzentration statt. In der Produktionsmittelversorgung zeigt sich das Mass der Konzentration darin, dass in den Vereinigten Staaten schon in 1957 die vier grössten Firmen 98% der von der Landwirtschaft gekauften Autos und 77% der Traktoren produzierte [8]. In Westdeutschland brachten in 1965 sechs Firmen 80% der zum Verkauf gelangenden Traktoren in den Verkehr, 2/3 der Kombinen wurden aber von einer einzigen Firma — Claas — verkauft. Noch enger ist die Konzentration in der Kunstdüngerfabrikation. In Westdeutschland geniesst die Verkaufsgemeinschaft Deutsche Kali-Werke GmbH eine Monopollage. Davon steht die Konzentration der landwirtschaftlichen Produktionsmittelversorgung auch in den anderen entwickelten kapitalistischen Ländern nicht weit zurück.

Sehr stark ist die Konzentration auch *im Handel der Agrarprodukte und in der Lebensmittelverarbeitungsindustrie.* In Westdeutschland z.B. beherrschen die Grosshandelsketten »EDEKE«, »REWE«, »SPAR«, »AQO« 70% des Lebensmittelmarktes [9]. Aber auch in Frankreich, wo die Konzentration des Lebensmittelhandels viel niedriger ist als in den übrigen Ländern, sind Firmen am Markt, wie die Guichard- und die Familisters-Gruppe, deren Jahresumsatz 700—800 Millionen Franken beträgt [10]. In der Lebensmittelindustrie spielen — neben den inländischen Grossunternehmen — fast in allen europäischen Ländern internationale grosse Lebensmitteltrusts, wie der Unilever- oder der Nestlé-Konzern, eine wichtige Rolle, aber auch das Eindringen der amerikanischen Lebensmitteltrusts in Europa erfolgt in einem immer grösseren Masse.

Das Wesen der vertikalen Integration ist, — wie wir sahen, — die Zentralisierung der sich auf den Gesamtprozess beziehenden Entscheidungen unter die Kompetenz des Integrators. Diese Entscheidungszentralisation hat aber sehr viele Stufen, von jener Form angefangen, wo die traditionelle Marktharmonisierung einen Liefervertrag (z.B. zwischen dem Zuckerrübenproduzenten und der Zuckerfabrik) kaum übersteigt, bis dahin, wenn sich die nacheinander folgenden Phasen der Produktion in der Hand eines einzigen Eigentümers konzentrieren und auf solche Weise sämtliche Entscheidungen zur Gänze in eine einzige Hand gelangen.

Die vertikale Integration entwickelte sich eigentlich aus den traditionellen Vertragsverbindungen der Produzenten und der Verarbeiter. Die Vertragsbindung zwischen der Landwirtschaft und der Lebensmittelindustrie ist keine neue Erscheinung. Bei den zur Weiterverarbeitung gelangenden Produkten reicht der Beginn dieser Verträge in die Zeiten vor dem zweiten Weltkrieg zurück. *Neu in der vertikalen Integration sind die engen Verbindungen und demzufolge das hochgradige Anwachsen der Abhängigkeit. Die Verträge reichen nämlich weit über die gebräuchlichen Kauf-Verkaufsverbindungen hinaus, sie erstrecken sich auf die wichtigsten Momente des Produktionsprozesses, auf die*

Harmonisierung der Kapazitäten, Produktionsprogramme, Technologien. In vielen Fällen erreicht die Zentralisation der Entscheidungen ein solches Mass, dass der Farmer praktisch nur mit dem Boden und seiner Arbeitskraft zur Produktion beiträgt, die übrigen Produktionsmittel gibt der Integrator und dementsprechend bestimmt er auch die Realisierungsart des Produktionsvorganges, nicht selten bis zu den winzigsten Details. In diesem Prozess *wird der Farmer aus einem selbständigen Landwirt allmählich de facto zu einem Lohnarbeiter, einem Vollstrecker der Anweisungen des Integrators, während er de jure ein selbständiger Eigentümer bleibt.* Die durch die vertikale Integration zustandekommenden Verbindungen sind also nicht Verhältnisse einer gleichrangigen Partnerschaft, sondern dem Wesen nach ein Kapitalisten-Lohnarbeiter-Verhältnis, eine eigenartige manipulierte Form desselben.

Die Vertragsbindungen erweitern sich der technologischen Umgestaltung der Lebensmittelproduktion und der Veränderung der Marktansprüche entsprechend, und erstrecken sich allmählich auf die Technik der landwirtschaftlichen Produktion. Dies erfolgt auf eine solche Weise, dass der Integrator immer mehr Verbindlichkeiten übernimmt, Kredite gewährt, die entsprechende Produktonstechnik ausarbeitet, verschiedene Dienstleistungen bietet, in erster Reihe durch Verrichtung spezialer Arbeiten, und nach dem Verhältnis dieser die mit der landwirtschaftlichen Tätigkeit zusammenhängenden Entscheidungen an sich reisst.

Die Vielfältigkeit, die sich je Produkt und Integrator ändernde Art der vertikalen Verbindungen erschwert die Klassifizierung der Verbindungen. In der Fachliteratur *werden im allgemeinen zwei grundlegende Formen der vertikalen Integration unterschieden: 1. die vollständige (direkte) Eigentumsintegration; 2. die auf Verträgen basierende (indirekte) Integration.* Im ersten Fall handelt es sich darum, dass das integrierende Industrie- oder Handelsgrossunternehmen einen landwirtschaftlichen Betrieb errichtet, ankauft, also ein vollwertiger Eigentümer wird. Bei der zweiten Form — und diese ist heute die allgemeine — wird das Recht zum Treffen der notwendigen Entscheidungen dem Integrator durch Verträge zugesichert. Dies bedeutet aber nicht, dass keinerlei Eigentumsänderung erfolgt, in welchem Masse nämlich der Integrator dem Farmer Produktionsmittel zur Verfügung stellt, in solchem Masse wird er dort auch Eigentümer. *Das Wesen der Vertragsform besteht eben darin, dass sie dem Integrator den Bedürfnissen entsprechend die Konzentration der Entscheidungen, d.h. die Aneignung des landwirtschaftlichen Betriebes sichert.*

Die Erfahrungen zeigen, dass die Integratoren im allgemeinen der Vertragsform gegenüber der vollständigen Eigentumsintegration den Vorzug geben. Von wenigen Ausnahmen abgesehen (eine solche ist vielleicht die Brathühnchenproduktion), wird die vollständige Besitzergreifung nicht bezweckt. In diesem Fall ist nämlich der Integrator zu Kapitalaufwendungen gezwungen, die bei der Vertragsform vom Farmer geleistet werden. Der Ankauf

des Bodens — besonders in den ein grosses Flächenausmass beanspruchenden, an das Flächenausmass gebundenen Zweigen — würde ein mächtiges Kapital beanspruchen, gleichzeitig sichert die Vertragsform mit einem kleineren Kapitalanspruch dem Integrator dieselben Vorteile. Die Vertragsform ermöglicht dem Integrator die Benutzung der bäuerlichen Produktionsmittel — vor allem des Bodens —, ohne dass er dafür Kapital aufwenden müsste. Der Umstand, dass das Eigentumsrecht dem Bauer verbleibt, bedeutet keinerlei Nachteil für den Integrator, er benutzt ja die Produktionsmittel des Bauern ebenso, als ob diese sein Eigentum bilden würden. Gegen die vollständige Integration spricht auch, dass die Farmen — im Vergleich zur Kapazität des Betriebes des Integrators — zu klein sind, und deshalb der Integrator viele Landwirtschaftsbetriebe ankaufen und lenken müsste. Dabei kann die landwirtschaftliche Produktion — mindestens in den an den Boden gebundenen Zweigen — nicht gänzlich spezialisiert werden, gewisse biologische Gesetzmässigkeiten und Zusammenhänge machen die Weiterführung der übrigen Zweige notwendig. Dies würde aber für die stark spezialisierten Verarbeitungsbetriebe Organisationsschwierigkeiten bedeuten.

Die vertikale Integration sichert dem Integrator mächtige Vorteile. Er kann die landwirtschaftliche Produktion — in Funktion mit der Marktnachfrage — fast willkürlich gestalten, daneben seine Monopollage auch durch Festsetzung der Austauschbedingungen ausnutzen. Gleichzeitig bringt die vertikale Integration auch für den Farmer Vorteile mit sich. Die Vertragsbindung bedeutet einen sicheren Markt — wenn auch unter ungünstigen Bedingungen — und dies ist für den Farmer von grosser Bedeutung. Einen weiteren Vorteil bedeutet, und dies ist ein entscheidender Beweggrund zur Verbreitung der vertikalen Integration, dass die Landwirtschaft dadurch zu Kapital kommt, mit Hilfe dessen sie ihre Produktion modernisieren kann. Einen Vorteil bedeutet die vertikale Integration für den Farmer auch deshalb, weil sie die Spezialisierung der Produktion fördert.

Demgegenüber verliert der früher selbständige Farmer seine Selbständigkeit, er wird zu einem formellen Eigentümer, im wesentlichen zu einem Lohnarbeiter. *Die Betriebsführung entgleitet immer mehr seinen Händen und er wird ein Heimarbeiter, Vertragsarbeiter des Integrators.* Der Farmer wird dabei ständig von der Gefahr bedroht, dass der Integrator den mit ihm abgeschlossenen Vertrag auflöst, wenn er nicht den Vorschriften entsprechend arbeitet. Formell hat selbstverständlich auch der Farmer das Recht, den Vertrag aufzulösen, praktisch ist es aber für ihn, wenn er schon einen Vertrag eingegangen ist, unmöglich, sich aus der zustandegekommenen Bindung zu lösen, er ist — ebenso, wie sein ehemaliger Vorgänger, der industrielle Manufakturarbeiter — an seinen Arbeitsgeber gebunden. In der vertikalen Integration wälzen sich alle ungünstigen Wirkungen der Konjunktur auf das schwächste Kettenglied: auf die Landwirtschaft. Einen Nachteil für den Bauer bedeutet auch, dass er

infolge der hochgradigen Spezialisierung der Verarbeitung und Verwertung an mehreren Integrationsketten teilzunehmen hat, was seine Arbeit vom Organisationsgesichtspunkt aus kompliziert.

Das Verhältnis der vertikal integrierten Produktion ist nach Produkten und Ländern sehr verschieden. Bei einigen Produkten regulieren die Verträge einen relativ engen Kreis der Produktionsentscheidungen, bei anderen die überwiegende Mehrheit derselben. Es ist eine allgemeine Erscheinung, dass die Geflügelzucht — die ein klassisches Gebiet der vertikalen Integration ist — sowie die Saatgutproduktion und die Produktion einiger Gemüsearten stark integriert sind. Die vertikale Integration ist am meisten in den Vereinigten Staaten verbreitet. Nach Daten von Rasinski [7] wurden schon in 1958 ca. 90% des die Bedürfnisse der Konserven- und Kühlindustrie deckenden Gemüses aufgrund von Verträgen produziert. Davon stammten beinahe 100% der von der Konservenindustrie verarbeiteten grünen Bohnen, grünen Erbsen und Delikatessenmais aus der Vertragsproduktion. Die Integratoren sind hier ausschliesslich die Verarbeiter, die Vertragsbedingungen sind aber verschiedenartig, sie ändern sich je nach Produkten und Firmen. Die Saatgutproduktion von Gemüsearten ist in den USA in vollem Masse integriert, den grössten Teil produzieren die Samenzuchtfirmen auf ihren eigenen Anbauflächen. 95% der Broilerhühnchenproduktion sind integriert; hier ist die in vollständiger Eigentumsintegration produzierte Menge ebenfalls bedeutend. Die Integratoren sind die Futtermittelbetriebe oder die Verarbeitungsbetriebe, eventuell deren Vereinigungen.

Die vertikale Integration verbreitet sich seit Ende der 50er Jahre auch in den entwickelten europäischen kapitalistischen Ländern in einem raschen Tempo, besonders in England und in der BRD. Nach Schätzungen von Ilgner und Maiwald war in 1964/65 das Verhältnis der integrierten Produktion in der BRD folgendes: Saatgutproduktion 100%, Industriegemüse (nach Arten) 5—90%, davon Erbsen ca. 90%, Industriekartoffel 50%, Zuckerrüben 100%, Geflügelzucht 100%, Eier ca. 3%, Schweinemast ca. 1%, Milch 100% [11]. In einigen Zweigen ist das Verhältnis der vertikal integrierten Produktion auch in den skandinavischen Ländern und Holland sehr bedeutend. In Frankreich, wo sich die Vertragsform weniger verbreitete, erfolgten in 1964 — nach Schätzungen — 80—90% der Geflügelfleischproduktion, 2—5% der Mastviehherstellung, 5% der Schweinezucht aufgrund von Verträgen [10].

Wie ersichtlich, hatte die vertikale Integration bei der Viehzucht — mit Ausnahme der Geflügelzucht — bisher eine relativ kleine Rolle inne, obwohl aus produktionstechnischem und wirtschaftlichem Gesichtspunkt die Viehzucht für die integrierte Produktion sehr geeignet ist. Die Fachleute erwarten, dass die Entfaltung der technischen Revolution in der Viehzucht eine rasche Integration bei allen Zweigen der Fleischproduktion auslösen wird.

Die vertikale Integration ist eine solche Organisierung des Reproduktionsprozesses, die die Herrschaft der Monopole in der Landwirtschaft sichert, eine solche Struktur der Lebensmittelproduktion, die für die grossen Verarbeitungs- und Verkaufsmonopole die Konzentration der landwirtschaftlichen Produktion ermöglicht, ohne das Bauerneigentum zu liquidieren. Sie macht die Massen der Farmer — den tatsächlichen Inhalt der Verbindungen manipulierend, ohne formelle Enteignung, das Vorgehen als eine durch die technisch–wirtschaftlichen Zusammenhänge des Reproduktionsprozesses hervorgerufene Notwendigkeit hinstellend — auf eine vom Bauer »gewählte« Weise zu Lohnarbeitern.

Die horizontale Konzentration

Der technische Fortschritt und die in den verbundenen Zweigen stattgefundene hochgradige Konzentration stimulieren und zwingen die landwirtschaftlichen Betriebe zu einer gesteigerten zwischenbetrieblichen Kooperation. Die Selbstverteidigung gegen die Zunahme der Macht der Monopole, gegen den ungleichen Austausch und die Ausbeutung erhöhten die Bedeutung der Angebotskonzentration in der landwirtschaftlichen Produktion, das Zusammenhalten der Bauern in der Umsatzsphäre im Interesse der Erhöhung der Marktkraft. Dabei stellte der in der landwirtschaftlichen Produktionsmittelfabrikation stattfindende rasche technische Fortschritt auch die Produktionskooperation in den Vordergrund. *Eine neue Erscheinung in der Konzentration der kapitalistischen Landwirtschaft ist, dass die über die traditionellen Genossenschaftsfunktionen hinausgehenden, sich auch auf das Produktionsgebiet erstreckenden Kooperationsformen, Bauernvereinigungen erscheinen.* Neben den traditionellen Kredit-, Konsum- und Verkaufsgenossenschaften *verbreiten sich auch die verschiedenen neuen Formen der Kollektivwirtschaft, die Produktionsgemeinschaften, Vereinigungen zur Benutzung von Maschinen und andere Vereinigungen gemischten Zweckes rasch.*

Obwohl bei den Bauernvereinigungen auch heute die auf dem Umsatzgebiet tätigen Formen dominieren, brachte die technische Entwicklung eine breite Skala der Produktionskooperationen zustande. Die sich auf das Kreditleben und das Umsatzgebiet beschränkende Kooperation wird immer mehr auf die Produktion, auf die verschiedenen Momente dieser erweitert. Die Kollektivwirtschaft verspricht hauptsächlich in jenen Zweigen grosse Vorteile und verbreitet sich dort rasch, wo das Verhältnis der Spezialkosten gross ist.

Die Produktionskooperationen erstrecken sich im allgemeinen nicht auf die ganze Wirtschaft, sondern nur auf 1—2, für die Kooperation besonders geeignete Zweige oder Produktionsfunktion. Solche Zweigvereinigungen fördern die Spezialisierung der Produktion und demzufolge die Zweigkonzentration und können Ausgangspunkte des Zustandekommens eines auf der Kollektivwirtschaft basierenden, die ganze Tätigkeit umfassenden Grossbetriebes sein.

Die Vorteile der Produktionskooperation liegen auf der Hand. Durch die Vereinigungen, durch Ausgestaltung von Wirtschaftseinheiten optimaler Dimension vermindern sich sowohl die spezifischen Investitionskosten, als auch die kontinuierlichen Produktionsaufwendungen, daneben nimmt auch die Marktkraft infolge der Angebotskonzentration zu. (Die Praxis zeigt, dass die Bauernvereinigungen durch die sich mit der Landwirtschaft verflechtenden Monopole ebenso, ja sogar — infolge der Produktionskonzentration — noch eher integriert werden als die Individualwirtschaften. Trotzdem sichert das konzentrierte Angebot auch der Bauernschaft vorteilhaftere Positionen gegenüber den Monopolen.)

Die Kollektivwirtschaft hat je Zweig verschiedene Möglichkeiten, abhängig davon, wie weit die gegebene Tätigkeit an den Individualbetrieb gebunden ist. Diese Gebundenheiten sind in der auf Industriefutter und speziell ausgebildeten Arbeitskraft beruhenden Schweinemast, sowie in der — auf dem gekauften Zuchtmaterial und Futter basierenden — Geflügelfleischproduktion am schwächsten. Da in der Geflügelproduktion die optimalen Dimensionen auch in je einem Familienbetrieb angenähert werden können, besitzt die Kooperation in erster Reihe in der Schweinemast eine ernste Möglichkeit und Rolle. Dabei sind — wenn einstweilen auch selten — auch in der Kuhhaltung kollektive Unternehmungen zu finden, die in erster Reihe im Interesse einer Senkung der hohen Stallkosten zustandekommen. Eine solche ist z.B. in Westdeutschland in der Nähe von Essen die für grossbetriebliche Milchproduktion errichtete KUTEL AG, die mit der Teilnahme von etwa 100 Bauernwirtschaften entstand. Das Hauptproblem derartiger Vereinigungen ist das Aufbringen des für die gemeinsamen Investitionen notwendigen Kapitals. Deshalb ist dies für die kapitalarmen Kleinwirtschaften im allgemeinen kein gangbarer Weg, solche Wirtschaftsformen werden eher durch grössere, kapitalstärkere Familienwirtschaften ins Leben gerufen.

In der Pflanzenproduktion beschränken sich die Kooperationen im allgemeinen eher nur auf gewisse Arbeitsvorgänge (Bodenbearbeitung, Einertung). Vereinigungen, die sich auf den ganzen Zweig beziehen, sind derzeit noch selten.

Neben den für einzelne Wirtschaftsfunktionen, Produktarten zustandegekommenen Vereinigungen *gibt es auch solche Gemeinschaften, die sich auf die ganze Bewirtschaftung, die Agrikultur und Viehzucht gleich erstrecken.* In diesen sind die Arbeit und die Benutzung der Produktionsmittel gemeinsam, und das Einkommen wird in Form von Arbeitslohn nach der verrichteten Arbeit und in Form von Zinsen nach den eingebrachten Produktionsmitteln und Boden verteilt. Diese Gemeinschaften haben ausser den erwähnten noch den Vorteil, dass sie infolge der grösseren Bodenfläche nicht zu einer ausserordentlichen Spezialisierung gezwungen sind, was ein kleineres Risiko bedeutet, ferner sichert die vielseitige Bewirtschaftung eine gleichmässigere Arbeitsausnutzung.

In Ländern, wo die Agrarstruktur sehr zersplittert ist, haben die verschiedenartig organisierten *gemeinsamen Maschinenbenutzungsformen, Maschinengemeinschaften* eine grosse Bedeutung und vermehren sich rasch. In Westdeutschland z.B. betätigten sich 1965 15 000 Maschinengemeinschaften und 4000 Maschinengenossenschaften. Die Effektivität der Maschinengemeinschaften wird dadurch gekennzeichnet, dass, während 1965 im Durchschnitt der BRD die auf 1 ha entfallenden Maschinenkosten 2000 DM betrugen, dieser Betrag in den Maschinengemeinschaften aber nur 900 DM war [12]. Eine neue Erscheinung der zwischenbetrieblichen Konzentration ist, dass sich auch die Genossenschaften selbst in einem raschen Tempo vereinigen und immer umfassendere Einheiten zustandebringen. Neben der in den verbundenen Zweigen stattfindenden hochgradigen Konzentration, den raschen Veränderungen der Marktverhältnisse, erweisen sich die traditionellen Genossenschaften als immer weniger schlagkräftig, die Vereinigung der kleinen Konsum- und Verkaufsgenossenschaften in grossen Regional- und Landeszentralen wird immer mehr notwendig. In fast allen Ländern schreitet das Zustandebringen der — das ganze Land umfassenden — Genossenschaftsorganisationen mit raschen Schritten fort.

Die verschiedenen Formen der Kollektivwirtschaft erfüllen, über die aus der Kooperation stammenden direkten wirtschaftlichen Vorteile hinaus, eine sehr wichtige Rolle bei der Wegsuche der Bauernschaft. Sie bedeuten im Laufe der technischen Umgestaltung der Landwirtschaft die demokratische Alternative. Ihr Schicksal hängt in hohem Masse davon ab, *wie weit sie das zur Kollektivwirtschaft notwendige Kapital aufbringen können, eine wie grosse technische und finanzielle Hilfe sie vom Staat erhalten*, andererseits *in welchem Masse es gelingt, ihre demokratische Struktur in der monopolistischen Umgebung zu bewahren.*

Die zu erwartende Wirkung der Strukturpolitik des monopolkapitalistischen Staates auf die Konzentration

Eine neue Erscheinung in der landwirtschaftlichen Konzentration ist, dass der monopolkapitalistische Staat den spontanen Konzentrationsprozess immer mehr regelt, und den Prozess den Bedürfnissen des Monopolkapitals und den Bedingungen des Klassenkampfes entsprechend manipuliert.

Nach dem zweiten Weltkrieg spielte der monopolkapitalistische Staat in allen kapitalistischen Ländern Westeuropas von Beginn an eine Rolle bei der Beschleunigung des Konzentrationsprozesses. Während sich aber die staatliche Intervention in den ersten Zeiten grösstenteils nur indirekt und versteckt auf die Beschleunigung der Konzentration richtete, stellen neuestens immer mehr Regierungen — dem Druck der monopolkapitalistischen Gruppen nachgebend — die Strukturpolitik offen in den Mittelpunkt ihrer Agrarpolitik.

Statt der zur Umgestaltung der Struktur des Agrarsektors berufenen Vorstellungen, Nationalplänen der einzelnen Länder, die in ihren Teillösungen verschieden, im wesentlichen aber ähnlich sind, soll hier z.B. zur Veranschaulichung der für den ganzen Gemeinsamen Markt ausgearbeitete neueste, sogenannte Mansholt-Plan besprochen werden. (Um so mehr, weil ja in den letzten zehn Jahren die ganze westeuropäische landwirtschaftliche Produktion in grossen Zügen durch die Regeln des Gemeinsamen Marktes gelenkt wurde. Dieselben Regeln sind also auch bezüglich der Zukunft, über den Rahmen des Gemeinsamen Marktes weit hinausgehend, von besonderer Bedeutung.)

Der Mansholt-Plan setzt sich die radikale Umgestaltung der Betriebsstruktur zum Ziel. Der Preis derselben ist eine wahrhaftige Dezimierung der Bauernschaft. Bis 1980 müssen in der Gemeinschaft 5 Millionen Bauern ausserhalb der Landwirtschaft Arbeit suchen. Die von Manholt für 1980 bezeichneten technischen Minima der landwirtschaftlichen Betriebe sind:

in der Pflanzenproduktion	80—120 ha,
in der Milchproduktion	40— 60 Kühe,
in der Schweinemast	450—600 Mastschweine,
in der Eierproduktion	10 000 Legehennen.

Bezüglich des zu erwartenden Tempos der Konzentration soll hier — als Kontrapunkt zu obigen Ausführungen — eine einzige Angabe erwähnt werden: in 1968 waren 2/3 der landwirtschaftlichen Betriebe des Gemeinsamen Marktes kleiner als 10 ha!

Der Mansholt-Plan löste verständlicherweise in den Bauernkreisen in ganz Europa eine riesige Entrüstung aus. Die Bauernorganisationen protestierten gegen das Mansholt-Programm des Errichtens von kapitalistischen Grossbetrieben, gegen die das Schicksal von Millionen Bauern gleichmütig erledigende »kalte Sozialisierung«.

Unter solchen Umständen waren sogar auch die kompetenten Regierungen gezwungen, ihre Stimme gegen den Mansholt-Plan zu erheben, nicht als wenn sie damit nicht einverstanden wären, die Freimütigkeit von Mansholt ist aber unangenehm für sie, und aus dem Protest kann ein politisches Kapital geschmiedet werden. Bezüglich des Wesens der Sache, der Liquidierung der Bauernmassen, ist das Einverständnis zwischen Mansholt und den Regierungen der berührten Länder weitgehend. Auf diese Identität der Ziele weist die Frankfurter Rundschau hin, als sie — in Verbindung mit dem pharisäischen Protest Bonns — in ihrer Nummer vom 18. Dezember 1968 frappant bemerkt: »Der Unterschied ist nur soviel, dass der Brüsseler Agrarkommissär — der keinem skrupulösen Parlament verantwortlich ist — sich offen ausdrückt.«

Die Errichtung von Grossbetrieben gehört selbstverständlich auch in der Landwirtschaft der entwickelten westeuropäischen kapitalistischen Länder notwendigerweise zur Entwicklung. Die Umgestaltung der Landwirtschaft kann kein anderes Ziel haben als die Ausgestaltung einer zeitgemässen grossbetrieblichen Landwirtschaft. Zum Erreichen dieses Zieles können aber zwei Wege führen. Der eine ». . . ist jener, der gegenwärtig benutzt wird und der zur Beschleunigung der Konzentration den wirtschaftlichen Zwang, den offenen Eingriff der Staatsmacht ins Spiel der wirtschaftlichen Gesetze anwendet, um in einer kurzen Geschichtsperiode zu einer charakteristisch kapitalistischen Landwirtschaft zu gelangen . . . *Der andere mögliche Weg ist die Verstärkung der Familienwirtschaften, was allmählich zur kollektiven Wirtschaftsweise, zum Zustandebringen verschiedener Formen der Genossenschaften führen, und der Ausgangspunkt einer zeitgemässen Landwirtschaft von einer nichtkapitalistischen Form sein könnte*«. [13] Um diese demokratische Alternative kämpfen die westeuropäischen kommunistischen Parteien und stellen dies in den Mittelpunkt ihrer Agrarbestrebungen.

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НОВЫЕ ЧЕРТЫ КОНЦЕНТРАЦИИ В СЕЛЬСКОМ ХОЗЯЙСТВЕ РАЗВИТЫХ КАПИТАЛИСТИЧЕСКИХ СТРАН

Ф. ГРОССМАН–А. ШИПОШ

За последние два-три десятилетия в сельском хозяйстве развитых капиталистических стран произошли глубокие перемены. По мере внедрения и распространения индустриальной техники происходит быстрое по темпу преобразование технической базы сельского хозяйства, которое влечет за собой изменение всей внутренней структуры сель-

ского хозяйства. Авторы рассматривают одно из наиболее наглядных проявлений этих структурных изменений, а именно ускорение, новые свойства и проблематику процесса концентрации.

1) Ускорение процесса централизации земельных угодий. Усиленное накопление капитала, массовое применение машин приводят к обострению противоречия между имеющейся техникой и размельченной аграрной структурой и оказывают все возрастающее давление в направлении централизации земли. Фактические размеры сельскохозяйственных предприятий в большинстве капиталистических стран все более отстают от определяемых техническим уровнем оптимальных размеров, более того, даже от минимальных размеров, которые вообще позволяют с экономической точки зрения использовать новое оборудование. В очерке приводятся особенности централизации земельных угодий, происходящей в наши дни.

2) Концентрация затрат. В настоящее время бóльшая часть затрат состоит из затрат капитала, поэтому их величина лучше выражает концентрацию, чем распределение общественного земельного фонда. В статье рассматриваются последствия быстрого накопления капитала.

3) Концентрация производства растет в результате совместного эффекта централизации земли и концентрации затрат. В преобладающем большинстве европейских капиталистических стран, где в результате размельченности аграрной структуры степень централизации земельных угодий является сравнительно низкой и концентрация затрат начинает развертываться только в настоящее время, концентрация производства сравнительно низка. Доля мелких хозяйств в товарной продукции высока главным образом у трудоемких, менее пригодных для механизации особых культур. Авторы исследуют характерные черты концентрации производства. Так, например, показывают, что в результате быстрой специализации концентрация производства в отдельных отраслях происходит значительно быстрее, чем в сельском хозяйстве в целом и т. д.

4) Авторы показывают, что концентрация сельскохозяйственного производства в настоящее время происходит гораздо более быстрым темпом, чем ранее, но несмотря на это ее уровень значительно отстает, с одной стороны, от предоставляемых современной техникой возможностей и, с другой стороны, от степени концентрации в смежных с сельским хозяйством отраслях: в пищевой промышленности и торговле, а также в производстве средств производства для сельского хозяйства. Все это в значительной мере повысило значение вторичной концентрации сельскохозяйственного производства, а именно различных форм горизонтального и вертикального сотрудничества между предприятиями. В этой связи авторы исследуют распространение и эффективность различных форм вертикальной интеграции и объединений.

5) Наконец, авторы указывают, что новым явлением в концентрации сельскохозяйственного производства является возрастание роли государственного регулирования процесса концентрации.

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REVIEWS

T. FÖLDI

THE FIRST DUTCH–HUNGARIAN ROUND TABLE CONFERENCE

At the initiative of the John F. Kennedy Institute, at the University of Tilburg, a Dutch–Hungarian Round Table Conference was organized by the Hungarian Institute of Cultural Relations in Budapest on 22 and 23 June, 1971.

The participants of the round table conference were Dutch and Hungarian scholars in social sciences, politicians, government officials, businessmen and journalists.*

A Dutch position paper served as a starting point of the conference and the discussions followed in three sessions. The agenda directed attention to problems of European security, the European Security Conference and to the evolution of bilateral economic, commercial, industrial, technical, scientific and cultural relations of the two countries. This broad field of topics opened the door for debating many questions of common interest and for exchanging the views of both partners in many spheres of human activities.

The main interest at the first session – when Prof. *Bognár* and Prof. *von Geusau* were in the chair – was focussed on the problems of the European political scene, with special regard to the problems of *European security*, and more precisely to these related to convening the *European Security Conference.* Both delegations underlined the desirability of this conference, or rather a series of conferences on these complex problems, or the creation of

* The *Dutch delegation* was headed by Professor Dr. F. A. M. Alting von GEUSAU, director of the John F. Kennedy Institute, its members were as follows: Dr. L. BARTALITS of the John F. Kennedy Institute, secretary of the delegation, Prof. Dr. H. W. J. BOSMAN, president, Catholic University, Tilburg, member of the Netherlands Social and Economic Council, Mr. J. L. HELDRING, chief editor, N. R. C. Handelsblad, Dr. L. G. M. JAQUET, director, The Netherlands Institute of International Affairs, Dr. R. Th. JURRJENS, secretary, Foundation for the Promotion of East–West Trade Contacts, L. KRALAND, member of the East–West Trade Commission of the Netherlands Wholesale Association, Mr. M. van der STOEL, M. P. of the Labour Party.

The *Hungarian delegation's* chairman was Prof. Dr. J. BOGNÁR, M. P., chairman of the Hungarian Scientific Council for World Economy, its members were Mr. T. ANTALPÉTER, section head, Ministry of Foreign Trade, Dr. T. BÁCSKAI, director, National Bank of Hungary, Mr. J. BARTHA, director general, Ministry of Foreign Affairs, Prof. Dr. I. T. BEREND, Karl Marx University of Economic Science, Mr. E. GÖMÖRI, editor of the weekly "Magyarország", Mr. Ö. KALLÓS, president of the Hungarian Chamber of Commerce, Dr. I. MARTOS, deputy-general manager of the "MEDICOR" Works, Mr. M. NAGY, M. P., vice-president of the Institute of Cultural Relations, Prof. Dr. M. SIMAI, vice-president of the Hungarian Economic Association, secretary of the delegation.

a permanent negotiating machinery. The Dutch delegates, Mr. *van der Stoel*, Dr. *Jaquet*, and Mr. *Heldring* were inclined to emphasize rather the necessity of careful preparation than the immediate start of the multilateral dialogue. They laid stress on *preliminary guarantees* of the efficiency of such a conference. According to their opinion, nuclear balance [1], reduction of armed forces [2], nuclear disarmament [3], establishment of checking points in the countries of both military treaty organizations in order to eliminate unexpected attacks from any side [4] and economic security of Europe and problems of East-West trade [5] should be involved as main topics in the discussions of the European Security Conference. The Dutch delegation also raised the question of the participation of the United States in such a conference. Hungarian participants Dr. *Bácskai* and Mr. *Bartha*, on the other hand, laid stress on the dangers of a delay in starting the negotiations. They underlined that the present political scene is marked by a favourable climate for such talks and it would be a mistake not to make use of the present advantageous tendency in European reconciliation, which could be strengthened and maintained by the possible achievements of a European dialogue.

An interesting debate was initiated by Dr. *Bácskai*'s intervention who emphasized the close links between the internal policy developments in individual countries and the international situation. Professors *Bosman* and *Geusau*, as well as other Dutch participants shared this view and admitted that there are potential dangers involved in internal political tendencies of certain countries. Professor *Bognár* stressed that a reverse interplay may be also observed and the international situation has a large impact on internal developments on a national scale.

The second session was characterized by the fact that economic problems came into the foreground of interest. Mr. *Nagy* and Dr. *Jaquet* were in the chair when Mr. *Kallós*' short survey on the main aspects of the new system of economic management and control opened a series of interventions on economic topics. He quoted the favourable developments in Dutch—Hungarian trade contacts during the last year when Netherlands' exports to Hungary doubled, but he emphasized that both partners are still far from using most of the potentialities for bilateral commercial relations. The causes of this were searched by Mr. *Antalpéter* who thought to find the reasons in the unfavourable standpoint of some big Dutch companies, as far as trade with socialist countries is concerned, in the false belief of some smaller companies who assume that Hungarian foreign trading companies are disinterested in dealing with them, in the similarly mistaken opinion of some great merchant houses, who believe that they are in a disadvantageous bargaining position as compared to industrial producers, and in the effect of American interests in Holland, to slow down the rate of growth of East–West trade. This latter statement was sharply rejected by Prof. *Bosman* and other Dutch delegates who denied the decisive role of U. S. interests in this respect. Mr. *Antalpéter* advocated government action in order to develop East–West contacts of the Netherlands, but the Dutch delegates emphasized that the Dutch government is not in a position to do this, as its task is rather to create possibilities for a greater trade turnover than to fill the frames created, which belongs to the scope of business. Dutch delegates such as Mr. *Kraland* were inclined to be more satisfied with the results achieved in bilateral trade than the Hungarians. Nevertheless, they tried also to reveal the main reasons underlying the present

moderate intensity of commercial relations and especially of industrial co-operation. Mr. Kraland remarked in this respect that Holland is traditionally more trade-oriented than industry-oriented which may be a cause of minor interest in industrial ventures. Professor *Bosman* expressed the view that different trade structures and consumption patterns are limiting factors in this respect. It was also remarked that on some markets (agricultural products, electrical goods) the two countries are rather competitors than partners. Mr. *Kraland* added that a lack of appropriate Hungarian public relations activities may also put some limits to a desired development of commercial contacts. Business interest must be still won by socialist countries. In Dutch commercial practice it is less familiar to deal with government officials and this may also hamper trade contacts.

Professor *Berend* surveyed the history of economic contacts between the two countries. He stated that the traditional links are more of a fragmentary character and the lack of traditions in overall trade relations may also hamper the favourable development of commercial relations. It must be added that this statement was challenged in the later discussions by Mr. *Kallós* who referred to a series of traditional links between the two countries. Dr. *Bácskai* brought a new aspect into the debate by saying that Dutch credit policy was too conservative when it hindered the way of importing capital goods from the Netherlands. This criticism was *grosso modo* accepted by Prof. *Bosman*, too. Nevertheless, Mr. *Kraland* remarked that credit facilities are better than presumed by Dr. *Bácskai*.

In a further phase of this debate on East–West trade, problems were discussed in a broader context, namely as a part of problems arising from integration processes in both East and West. Mr. *Antalpéter* opened this phase of the debate stressing that Common Market regulations seriously limit the potential growth of East–West trade. He underlined the adverse consequences of the envisaged external economic policy-making of the EEC for the socialist countries. However, he expressed the hope that it was possible to find the ways and means to overcome these detrimental effects on intra-European trade if a will existed to eliminate them. He expressed his view that the maintenance of traditional bilateral talks is one of the most important means in this respect. The obstacles created by EEC developments were emphasized by Prof. *Simai* too, who regarded this topic as a main item of the negotiations on European security which comprises also the *economic* security as well of European nations. This view was shared by all participants. From Dutch side especially Prof. *von Geusau* seconded the intention to overcome the difficulties caused by regional integrations. He emphasized, however, that this must be done in the course of the integration process and not by slowing it down. Prof. *Bognár* argued against the overestimation of the possibilities of regional integrations. No doubt, regional integrations may have favourable effects on the economy of the participating countries, but their limitations should not be overlooked. External competitors, for instance Japan, cannot be disregarded, and the internal market of the integrating group may not be infinitely flexible either. Therefore, it would be a mistake even for an extended EEC, and especially for the smaller countries within the Common Market, to underestimate the links with Eastern Europe. Both delegations were optimistic as far as the possibility of overcoming the obstacles and intricate problems arising from an expanded EEC and its common commercial policy were concerned. Prof. *von*

Geusau argued for new rules or a code of conduct to be agreed upon in the framework of the Economic Commission for Europe in order to reduce the danger for smaller external partners; the EFTA countries' entry into the Common Market was also regarded as a factor which may limit the rigidity of external policy of an expanded EEC. Both delegations were of the opinion that the Economic Commission for Europe may have a rather great importance in eliminating these obstacles of intra-European trade. Mr. *Kallós* regarded the multinational companies as factors which may have also positive effect in this respect.

The third session, when Mr. *Kallós* was in the chair, served the discussion of bilateral cultural and scientific relations. Similarly to the statement made on bilateral economic contacts, Mr. *Nagy* expressed the view that potentialities are in this respect also much broader than the actual degree of utilization. He emphasized the necessity of exploring possibilities, especially as far as scientific cooperation is concerned. The Hungarian participants stressed that though Hungary is a small country, a wide variety of possibilities is provided for scientific and cultural cooperation. Both Hungarian and Dutch delegates focussed their interest to revealing the main causes of the unsatisfactory intensity of contacts. One of the obstacles is – as Prof. *Bognár* emphasized – that especially some smaller Western countries fail to realize that for cultural cooperation with socialist countries an adequate government policy and government institutions are needed. This was accepted by Prof. *von Geusau*, but he added — and this was advocated by Prof. *Bosman* too – that for the time being, the socialist countries are not in the spotlight of interest in the West-European countries. Prof. *Bognár* remarked that the neglect of scientific ties may have adverse effect on political and commercial links too. Although both delegations saw a range of difficulties to overcome, they expressed their readiness to promote cultural and scientific cooperation between the two countries.

At the three sessions of the round table conference a wide range of common problems and of specific interest were discussed in an atomosphere of friendship and frankness. The participants agreed that conferences of this kind could play an important role in the emerging East—West dialogue and should be continued at regular intervals. The Dutch delegation invited the Hungarian participants to the Second Round Table Conference to be held in the Netherlands in 1972 and the Hungarian participants accepted the invitation with pleasure.

This round table conference was characterized by several special features distinguishing it from other dialogues of this kind. The fact that the participants represented a broad field of different but related activities and disciplines provided the possibility to a many-sided approach to the problems discussed. The wide variety of problems raised or tackled (which could not be fully reflected in this short review) was one of the main features of this conference. Frankness is evidently not an unusual feature of such talks, nevertheless, it must be pointed out that on both sides a serious endeavour existed to reveal all important factors affecting the solution of the problems discussed. The participants were not satisfied with the present level of the Dutch – Hungarian contacts; nevertheless they may view their own activities at this conference with a certain satisfaction; they did their best to promote the further development of these contacts, of which this conference was a short but significant episode.

G. Szabó

THE PROBLEMS OF THE ECONOMIC VALUATION OF LAND WITHDRAWN FROM AGRICULTURAL CULTIVATION IN THE WORKS OF HUNGARIAN ECONOMISTS

It was primarily beginning with the second half of the 1960's that in the European socialist countries, including Hungary, interest began to grow for the economic valuation of land (in money terms).

International experience proved that an economic management of the land area cannot be realized in some country through legal means alone.* As a result, particularly in the period of the preparation and implementation of the new system of economic management, many publications on this topic were written by Hungarian economists too.

The number and diversity of the publications and proposals have made it necessary to attempt to summarize the results of domestic experts in the topics I consider to be most important.

Domestic studies dealing with the economic valuation of land can be classified as follows:

1. Methodological experiments aiming at determining the price of land withdrawn from agricultural usage;
2. Accounting for land in agricultural price formation;
3. The problematics of the cadastral** valuation of agricultural lands;
4. Proposals and results in connection with the valuation of urban plots;
5. Valuation of agricultural and non-agricultural land in order to perform calculations regarding national wealth;
6. Studies discussing general questions of price and value theory.

Due to the extreme diversity and complexity of the problem, this study only intends to deal with an analysis of the topic included in the first point.***

By way of introduction I wish to mention that I have primarily completed a processing of studies published in periodicals and books.

Experiments at establishing the price of land withdrawn from agricultural use

Hungary's agriculturally cultivated area shows a continually decreasing trend. In the period from 1935 to 1969 the *agriculturally cultivated land area* of the country decreased by 0.7 million hectares, 53 per cent of which went to increase forest area and 47 per cent were withdrawn from cultivation and

* The author summarized the opinions and proposals of the economists in other socialist countries regarding the economic valuation of land (in money terms) in a study entitled "A föld gazdasági értékeléséről a szocializmusban." [1]

** Cadastral yoke is a traditional unit of measurement: 1 cad. yoke = 0,57 hectares or 1,42 acres. *(Ed. Note)*

*** I have attempted a monographic processing of the topics included in points 4 and 6 in an article. [2]

put to other uses (roads, industrial plants, housing contruction, etc.) Within the decrease in agricultural area it was primarily arable land that diminished. The amount of this drop was 550 thousand hectares in the period between 1935 and 1970, and it was partly used to increase vineyards, orchard and forestry area, but to a large extent, it served to augment the land withdrawn from cultivation.

With the completion of the socialist reorganization of agriculture, but particularly following the execution of the checking of records in accordance with the land protection act (Act VI : 1961.), the rate of the decrease was somewhat moderated, particularly in the case of agricultural area, but to a certain extent arable land diminished as well. However, data available from 1965 on prove that better than average land was withdrawn from cultivation, or transferred to other use.

Requirements of industry, transportation, housing development, public utilities etc. resulted in the fact that the *area withdrawn from cultivation* since 1935 grew by 52.6 per cent (317 thousand hectares). The rise in this category can be considered as continuous, although its rate has substantially slowed down in comparison with the period prior to 1962. (In the first seven-year period this area grew by 23.8 per cent, while in the seven years following 1962 the rise was 4.3 per cent p. a. [3].)

I feel that the above data convincingly prove that the valuation of land is a highly important task from the point of view of agriculture as a branch of the national economy, and from that of compensation for the loss of productive agricultural units.

Several proposals have been made in this narrower sphere of topics, and let us now review them.

a) *Land valuation based on gross production value*

L. Németi and his colleagues [4, 5] attempt to determine the compensation price for the land area made use of, by relying on the production value attained on the agricultural territory lost. They also took the about per cent annual increase in Hungarian agricultural production into consideration.

According to László Németi and his colleagues, the value of the expropriated soil can be determined with the following equation:

EVL = $P \times 5.7 \times C + A$, where

EVL = the economic value of the land (forints)

P = the gross production value in plant growing on the land area made use of, the average of the previous five years (forints)

5.7 = quotient of the average value of one cadastral yoke of arable land (19.470 forints), according to the expropriation law and of the national average of gross production value on one cadastral yoke of arable land (3,080), which is modified to 5.7 by the income requirements of the live and embodied labour inputs applied in this field.

C = coefficient depending on expected production increase which regarding

soil qualities classified* as lst or 2nd grade is 2.5

* By quality classification we mean the land quality classes listed on the basis of the net income in terms of gold crown which served as a basis for the determination of land tax (see below).

soil qualities classified as 3rd or 4th grade is 2.0
soil qualities classified as 5th to 8th grade is 1.5

A = the value of fixed assets on the land expropriated.

The method reviewed endeavours to eliminate the subjective factors stemming from the application of the existing expropriation law. This stated that the price of expropriated agricultural land must be determined as a 300—3000 fold of the net income in gold crowns per 1 cadastral yoke of land. Within the value limits stipulated, the price of the expropriated land was determined individually in each case.

Considering that in Hungary there is no *agricultural land market* functioning, it was necessary to establish a transitional land valuation method.

However, the authors of the equation correctly point out the difficulties of applying the expropriation act, which primarily stem from the fact that the valuation of land by net agricultural income in terms of gold crown is considered obsolete.

The gold crown value of land, that is, its net income yield, was determined in Hungary between 1875 and 1909, in accordance with the natural yield capacities and the ruling economic conditions of the time. Since the determination of the gold crown value of the land, the changes were primarily in economic relations (the ceasing of the Vienna central market, the creation of new consumer centres, industrialization, developing transportation, changing demand, new price and cost relations).

As a result of all these factors, the gold crown value is less suitable for comparison of land quality on a nation-wide level. The system of multipliers ranging from 300 to 3000 can also be challenged from the economic point of view.

And since the expropriation proceedings are only instituted in the case of areas actually expropriated, the land price prescribed by the expropriation law does not function as an economic regulator, and does not prevent wasteful use of agricultural land.

In the monetary evaluation of the land to be expropriated, the authors do not rely on income but on production value data. Under present circumstances, land price determination based on income data would result in an unrealistically low land price. Obviously, the authors are looking for some sort of coefficient to "discount" the gross plant production value of the land unit they chose as a basis. The endeavour is also noteworthy to account for the perspective differences in rates of production growth on lands of different quality in establishing coefficient "C".

However, it is doubtful whether the method for calculating the quotient "5.7" may be regarded as appropriate. According to the method proposed, the nationally valid *average price* for 1 cadastral yoke of arable land would not change, despite the fact that the average gross production value of plant growing per unit of area will no doubt increase in the future.

I. Kőmives proposes the equation $A = Y \cdot m$ for general land price calculations. "Y" is the value of additional investments ensuring the average yields of the land areas withdrawn from agricultural use on other areas; "m" fluctuates between 1—2 in accordance with the quality classification of the soil, so that the coefficient of the best quality lands should be taken as two [6].

István Kőmives' proposal is that in determining the price of land withdrawn from agricultural use, the value of the capacities ensuring supplementary yields should be placed into the centre.

B. Csendes indicates, in connection with the capital intensity of agriculture, that without accounting for the engagement of land, economic calculations cannot provide an acceptable result [7].

He proposes the following equation in calculating agricultural land prices:

$$\frac{\frac{F_i + W_i}{P_i}}{P}$$

Where:
- F_i = the increment of *fixed assets* needed in the cooperative farms to attain the level of fixed assets in state farms;
- W_i = the increment of *working assets* needed by the cooperative farms in order to reach the level of working assets in the state farms;
- P_i = the increment in gross production value attainable in the cooperative farms with the fixed and working asset level of the state farms;
- P = the present gross production value of the cooperative farms per unit of agricultural area.

As a result of the calculations he obtained for the "value" of one cadastral yoke of agricultural area 21,232 forints. In other words, in case cooperative forms attain the technical-economic level of state farm, one cadastral yoke of agricultural area can be substituted theoretically by a growth of 21,232 forints in fixed and working assets.

This "land value" was differentiated by branches of cultivation, using the national gold crown data and thus uniform "land values" for the different branches of cultivation were received (that is, average values, not differentiated by quality within the individual branches of cultivation). This looks as follows: arable land 23,173, vineyard, orchard 42,895, garden 35,504, meadow 18,821, grazing land 6,626 forints.

The highly ingenious calculation, which aroused tremendous interest, quite naturally assumes, *on the one hand*, that attainment of the production level of the state farms by the agricultural cooperative will be realized on an identical level of capital intensity with the former and, *on the other hand*, that the price ratios among the individual branches of cultivation are identical with the differences in ratios among the gold crown values.

According to *I. Berend* it is necessary to take land into consideration among inputs in two ways. The one is the costs of replacing cultivated land withdrawn from production because of investment projects located in agricultural area, and the other is to account for the land engaged in production [8].

He treats the investments necessary because of the withdrawal of land as the replacement cost of dropped out means of production, of capacity. The author is of the opinion that the growth in fixed assets of 3,137 million forints between 1949 and 1965 in fact only served to replace land withdrawn from cultivation. He observes: "The replacement of cultivated land grows

increasingly costly from year to year, depending on the degree of intensity with which it is cultivated. Calculations in this respect have been rather underestimated, for in fact, I have taken into account not the costs of land replaecement but investment requirements needed for replacing production." [9]

Similarly to Béla Csendes, he established that in studying economic efficiency, the effects of investments should be studied only in relation to land, for the total of operating means of production can only be shown in this way.

Iván Berend is no doubt correct in that the increase in fixed assets calculated on the basis of investment demands to replace dropped-out production is only a part of the true costs for land replacement. However, the tremendous sum, running in the billions, is in itself a thought-provoking phenomenon, particularly in the interrelationship discussed by the author, when part of the means of production newly entering agriculture not only served to replace land but also to substitute for migrated labour capacity and to replace small-scale assets as well.

b) *Estimation of land price on the basis of net income*

The following methods were elaborated at the Research Institute of Agricultural Economics [10].

In these experiments land value was calculated by deducting an interest on the fixed and working assets from the net income (e. g. 5 per cent), and "land value" was made equal to the sum of money which would have resulted the remaining income assuming a 5 per cent rate of interest.

The difficulty in land evaluation on the basis of net income emerges when there is no net income in the farm, or rather, the net income is completely used up by the interest on fixed and working assets. In this case, the adherents of this method consider land evaluation based on the gold crown value of land to be the most expedient process.

The obsolescence of the land register based on the net income in gold crowns was already mentioned previously. However, it is a good method for distinguishing among land qualities in areas with comparatively identical natural conditions (in natural regions). Accordingly, experiments have been made within such areas in order to estimate land prices based on the gold crown value.

Land price is determined in the following manner on the basis of the gold crown value and the price of wheat:*

One gold crown = 60 old forints

One quintal wheat = 15—16 old forints, that is

One gold crown = about 4 q wheat in value.

If, e. g., the national purchase price of wheat is 298 forints on the average, then its gold crown value is 1184 forints. Therefore, the price of a land yielding 10 gold crowns is 11,840 forints per cadastral yoke.

* At the time of the introduction of the gold crown system the price of one cadastral yoke medium quality land (with a yield of 10 gold crowns) was about 600 old forints, while the price of 1 q wheat was about 15—16 old forints. Therefore, the price of 1 cadastral yoke of arable land was in the period prior to the turn of the century about equal to the price of 40 q of wheat. By old forint we mean the forint used prior to 1892.

Thus, the method makes a quick calculation of land prices possible in certain areas, if we accept the assumption that the same interrelationship between the price of land and the price of wheat exists today as in the base period.

J. Kristóf [11] experiments in his study with including land into agricultural resources, with reference to 1968. Total resources = "land value" + total stock of assets. The author determines the price of land in accordance with the method discussed above.

According to the calculations of the author the total of the resources per 1 cadastral yoke of cultivated area came to 36,419 forints in the state farms and to 21,952 forints in the cooperatives; within this amount the value of fixed and working assets came to 20,897 and to 7,342 forints, respectively. These data are significant indeed, since in this case the land comes to 43 per cent of total resources in the state farms and to 67 per cent in the cooperatives.

c) *Land price estimates based on the total gross income per unit of area*

Mrs. K. Burger started from the social net income per unit of area in determining the basic price of land, and proposed the following formula: [12]

$$A = S_t \cdot R + I$$

where A = the average price of a unit of land area;
S_t = the substitution value necessary to reproduce the average social net income per unit of land area;*
R = the rate of return;
I = the average value of investments per unit of land area.

In determinig the rate of return the author proposed that the average pay-off time for agricultural means of production should be taken into consideration (8—10 years).

Mrs. K. Burger considers the land price calculated on the basis of the above equation only as a certain type of basic price. E. g., regarding the withdrawal of agricultural area for non-agricultural purposes, she comments that "The expropriation price . . . *may be the basic price corrected by a coefficient for growth in income*". [13] Thus, in calculating land prices in the case of expropriating agricultural land, the author takes into account not the actually created, but the expected future gross income per unit of area, that is, she endeavours to turn the economic (monetary) valuation of land into a dynamic one.**

Unfortunately, the substance of the *substitution value* needed for the reproduction of the average gross farm income per unit of area has not been clearly defined. On my own part, I consider this substitution value as the price of those means of production which make possible the reproduction of the gross income earned on the area withdraw on the remaining area.

And the rate of return mentioned by the author, assuming an amortization rate of 10—12.5 per cent, transforms the lost land area, as it were, into the sphere of ordinary productive fixed assets.

* By average social net income the author means the gross farm income per unit of land area.

** See: L. Németi's proposal for the coefficient »C«.

This means that, in the final analysis, Mrs. K. Burger considers the basic price of agricultural land to be a capital value, the annual amortization at a rate of 10—12.5 per cent makes possible the reproduction of the gross income created on the land in question. Unfortunately, the author does not give a detailed explanation of why she sees an interrelationship between the agricultural land price and the pay-off time of the means of production.

However, it is noteworthy that Mrs. K. Burger clearly distinguishes between the basic price of agricultural land and its expropriation price.

Major conclusions to be drawn and proposals

How could the major lessons to be drawn from the proposed methodological processes be summarized?

I feel that the most characteristic common feature of the proposals might be summarized in that *the majority of the authors*, in the case agricultural land is withdrawn from production, *endeavour to price the land on the basis of data on production value and yields rather than on income data.*

Another common feature is that, with few exceptions, the authors *endeavour to determine agricultural land prices for withdrawn land on the basis of the additional capacities* ensuring the average yields produced earlier on these lands, or the reproduction of the earlier production value on the remaining lands.

The majority of Hungarian economists dealing with this topic are thus of the opinion in agreement with the majority of the economists from other socialist countries, that the price of land should be determined on the basis of the capital inputs capable of substituting for or replacing the land. This land price calculation method has been termed in international professional literature substitution or compensation cost system.

On my own part I feel that, under the present circumstance, the compensation (substitution) system is the most suitable for giving an economically sound, objective price for land withdrawn from agriculture for other economic purposes.

I see the advantages of the equation given below in that, on the one hand, it meets fundamental theoretical requirements and, on the other hand, it can be handled comparatively easily, so that it can be easily and directly applied in practice.

I propose the following formula for determining the price of *arable land withdrawn from agricultural use:*

$$P_l = p_f \cdot K + F_n$$

where P_l = the price of the land,

p_f = the price of the fertilizer ensuring compensation for the loss in wheat yields on the land,

K = pay-off period 20 years, because the interest on long term bank accounts is 5 per cent,

F_n = the net value of agricultural fixed assets of land capital nature*

* I list among the agricultural fixed assets of land capital nature those kinds of fixed assets, which are closely united with the agricultural land to be expropriated (buildings, drain-pipes, irrigation channels, etc.).

In the case of the expropriation of arable land, the above equation can be expected to give a good approach to the price of land. My arguments are as follows:

— Under the present agricultural price and income relations the land prices stemming from capitalization of gross or net income, or of the part of the latter which has a rent-like character would either be too low, or would be impossible to determine.

— It follows from the above that ensurance of the volume of products required by society is a much more reliable criterion as to the *social usefulness of land* than any income indicator.

— Many of the economists of the socialist countries—we might even say that the majority of the Hungarian ones—are in favour of determining land prices on the basis of compensation (substitution) costs.*

The first one to raise the question of the substitution of land by fertilizers was the Polish economist *J. Lewandowski* [15]. However, he simply took land prices to be equal to the price of the fertilizer quantity needed to compensate for the loss in annual yield. In my opinion this sum cannot be equal to the price of the land. The price of the land can be calculated by capitalizing this sum. We assume that if the sum calculated in this way (the price of the land) were to be deposited with the bank under long-term conditions, the farm which loses its land would obtain from the annual interest of the sum to buy the fertilizer to compensate for the land withdrawn.

On the basis of the data provided by *G. Bérci*, I calculated the substitution costs (or price) of one cadastral yoke of arable land using my formula [16].

Table 1

Calculation of the efficiency of using fertilizers in wheat production [17]

	Average for 1956—1960	1967
Sown area (cadastral yoke)	2,082,000	1,833,000
Average yield (quintal/cadastral yoke)	8.6	14.8
Total annual production, q	17,905,200	27,153,000
Mixed fertilizers used kg/cad. y.	100	250
Gross fertilizer costs, forints	200,000,000	460,000,000
Rise in yield, q	—	9,248,000
Value of increment, million forints	—	2,744
Yield increment due to fertilizers, million forints	—	1,387

For lack of space I am not going into the detailed train of thought of the calculations here. However, it can be determined from the logics of my formula and from the data in Table 1 that, according to my calculations, one cadastral yoke of arable land was substituted in the period under study by fertilizers of 582 forints in value.**

* I would observe that Western economic literature also uses the substitution cost method in order to determine the price of land being withdrawn from agriculture, or in drawing new, formerly uncultivated lands into agricultural production. See e. g. [14].

** For details of my theoretical and practical methodological concepts in connection with the formula, see [18].

Therefore, according to the method I propose, the replacement price of one cadastral yoke of arable land was—from the point of view of the agricultural farms—equal to 582 · 20 = 11,640 forints, or of one hectare of arable land was equal to 20,227 forints. (The net value of the agricultural fixed assets does, of course, not appear in this sum.)

I consider it necessary to observe that a higher than the above land price should be charged to other production branches of the national economy. This price must be augmented with, on the one hand, the net value of the agricultural land capital which is also indicated in the equation, and, on the other hand, with the capitalized value of the state subsidies to fertilizer production. Above and beyond this, sensitivity analyses must be completed to discover whether the national economic branches which make use of the land "feel" the land price to be charged to them.

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BOOK REVIEWS

L. LAVALLÉE: *Pour une prospective marxiste.* Paris, 1970. Editions Sociales. 190 p.

La prévision scientifique, la futurologie constituent la possibilité et l'exigence de nos jours. La révolution scientifique et technique élabore de plus en plus la technique, les méthodes de la prévision du développement, mais en même temps, elle exige aussi de plus en plus fortement la prévision scientifique. Du fait de la rapidité du développement, les conséquences des décisions influant sur l'évolution de la société, de l'économie, de la technique et de la science mûrissent avec une rapidité croissante et ce fait rend indispensable la planification, la prévision à des termes plus longs. L'absence de la prévision à long terme comporte, justement du fait de la rapidité du développement, plus de dangers qu'en n'importe quelle période précédente de l'histoire humaine. De nos jours, bien des choses peuvent dépendre de la façon dont nous prévoyons les conséquences positives et négatives des processus qui s'accumulent rapidement.

On comprend donc le grand intérêt que l'on porte dans les pays développés aux problèmes de la prévision. Bien sûr, la question n'est pas seulement de savoir dans quelle direction va le développement social, économique et technique, mais aussi: dans quelle direction il *doit* aller? Sur ce point, la prévision scientifique est inséparable des questions idéologiques fondamentales de notre époque. Il n'est pas du tout indifférent, sur quelle base, à partir de quelle conception se tracent les perspectives sociales du développement futur. Du fait de l'étroite connexion de la science de prévision avec la révolution scientifique et technique, ces recherches ont pris le départ à l'origine dans les pays capitalistes avancés. Cette circonstance a, sous de nombreux aspects, délimité dès l'abord les aspects idéologiques de cette recherche, même si la prévision se fonde pour l'essentiel sur des méthodes mathématiques exactes. Dans les pays socialistes et avant tout en Union Soviétique, en Pologne, en Tchécoslovaquie et en RDA, la prévision scientifique a fait des progrès incontestables au cours des dernières années. Nous estimons important le travail entrepris par un marxiste français, Léon Lavallée, dans le but de contribuer, pour sa part, à l'élaboration de la science marxiste de la prévision.

Il serait erroné de sous-estimer les liens de la science de la prévision avec les méthodes exactes et la cybernétique. Il serait cependant tout aussi erroné d'étendre à la science de la prévision les constatations qui valent pour ces dernières, à savoir que ces sciences constituent des instruments immanents de la pensée humaine, indépendants de tout contenu de classe. L'ouvrage de Lavallée souligne justement la nécessité de ce contenu idéologique, et se propose de démontrer que le marxisme—léninisme est capable, qui plus est, est seul capable d'assurer à la prévision moderne une base scientifique solide, un fondement idéologique progressiste.

L'auteur souligne avant tout le fait

évident que Marx et Engels ont été les premiers à établir une prévision scientifique du développement social, éprouvé depuis dans les faits. Un autre aspect par contre des rapports entre le marxisme et la science de la prévision, c'est que les classiques du marxisme se sont toujours abstenus, et ont invité d'autres aussi à le faire, de se lancer dans les prophéties à long terme, étant donné qu'ils voulaient se délimiter sans équivoque de l'utopisme en vogue encore de leur temps et parce qu'ils savaient parfaitement qu'ils ne possédaient pas les informations nécessaires à la prévision scientifique détaillée de l'avenir. Mais du fait qu'ils voyaient dans le développement des forces productives, l'élément le plus dynamique du développement social, ils permettaient implicitement de prévoir le rythme impétueux du développement technique de nos jours.

Ces pensées ouvrent l'étude de Lavallée qui, dans une *deuxième* partie, cherche à décrire l'objet et la méthode de la science de la prévision. Pour ce qui est de son *objet*, l'auteur compare la thématique des études poursuivies dans ce domaine en Union Soviétique avec les définitions courantes en usage en France, pour aboutir à la conclusion que: «la prospective a pour objet de *préparer l'action sur le présent et le devenir* plus ou moins éloigné, en fonction des éléments de connaissance de l'avenir qu'elle réunit . . . Mais *elle n'inclut pas l'action* elle-même qui relève d'autres sciences qui opèrent sur l'avenir immédiat (pré-planification, planification, programmation, etc.).» Il souligne les relations entre la science de la prévision et la scientiologie, la science de la science, qui rend possible, grâce à cette dernière, l'orientation du développement scientifique lui-même. Quant aux méthodes de la science de la prévision, il distingue la prévision relative au développement scientifique et technique, au développement de l'économie et celle touchant la superstructure.

Dans la *troisième* partie de son livre, Lavallée, qui est par ailleurs lui-même ingénieur actif, tente d'esquisser les lignes générales du développement à attendre jusqu'à la fin de ce siècle. Il analyse d'abord les voies possibles du *développement scientifique et technique*, puis la transformation de la *division sociale du travail*. Selon ses prévisions, en l'an 2 000, en France, seuls 5 à 10% de la population active seront encore sans qualification, tandis que la majeure partie du travail social global sera du domaine du travail intellectuel. Analysant les connexions de la *science de la prévision* et du *développement économique*, l'auteur estime que la prévision est elle-même en passe de devenir un des facteurs de la croissance économique. Il analyse l'interrelation entre la *planification* économique dans les pays socialistes et la *prévision scientifique*.

Lavallée analyse l'exemple historique du plan GOELRO, pour examiner ensuite le plan de 20 ans de la RDA. Il souligne que la science économique ne peut en elle-même fournir un fondement solide aux prévisions à long terme: seul l'ensemble des analyses relatives aux interconnexions importantes de la vie sociale en sont capables. A titre d'exemple négatif, il cite les prévisions de Staline et de Khrouchtchev qui se sont avérées erronées sur la compétition des deux systèmes et estime quant à lui que l'Union Soviétique pourrait rattraper les Etats Unis entre 1980 et 1990 quant aux indices touchant la production industrielle brute. La prédominance économique de l'ensemble du système mondial socialiste ne pourra cependant se réaliser que plus tard encore. De nombreux facteurs sont susceptibles de modifier l'analyse des perspectives de développement des deux systèmes (par exemple les guerres, la victoire du socialisme dans de nouveaux pays, des défaites possibles dans la lutte de classe internationale, le fait de prendre en considération, et dans quelle mesure, d'autres pays aussi, à côté des deux superpuissances etc.). Dans le chapitre final, l'auteur pose la question: quelles forces productives correspondront pour le communisme à l'analogie «machine à vapeur–capitalisme». Sa réponse: l'application mas-

sive de la chimie et de l'électronique, et finalement, la transformation de l'ensemble de la science en force productive. Enfin, l'auteur signale que dans les conditions du socialisme, les forces productives ne sont pas les seules à pouvoir se développer de façon illimitée: les rapports de production doivent eux aussi se développer.

L'ouvrage de Lavallée est une lecture intéressante et riche en idées, même si par endroits, ses conclusions semblent trop rapides. De toute façon, il nous rappelle qu'il reste beaucoup à faire dans les pays socialistes pour arriver à ne pas parler seulement de la science marxiste de la prospective, mais à la réaliser également dans les faits, chez nous, en Hongrie.

T. FÖLDI

KOVÁCS, G.: *A nagy távlatok és a tervezés.* (Long range perspective and planning.) Budapest, 1970. Közgazdasági és Jogi Könyvkiadó. 203 p.

Throughout the world, including Hungary, increasing attention is being devoted to trends expected over the long-range perspective, and particularly to the scientific, technical, economic and social situation expected to exist at the turn of the millennium, around the year 2000. Research into the future, and its branch which views to the more distant future, futurology, have completed studies whose results are published first of all in the developed capitalist countries, in the form of works, books and studies sketching out the more distant future. Géza Kovács was the first to raise the extremely interesting and exciting problem of Hungary's distant future, with scientific pretensions, and in a comprehensive way. This is his 200-odd page book, "Long range perspective and planning".

The first chapter of the book clears up the concept of *long-range perspectives* — denoting a period longer than 15—20 years, and exposes the interrelationship between the long-range perspectives and the operation of socio-economic laws. The second chapter, entitled "The treble unity of the future", deals, on the one hand, with technical progress, economic rationality and humanization as the relationship of three fundamental factors and, on the other hand, with the "three cultures", that is, natural science, literature, and as third party, economics and politics, emphasizing the need for complexity in dealing with long-range perspectives. The third chapter of the book endeavours to define and distinguish *national economic planning, forecasting and futurology*. In this he treats forecasting within the framework of the planned economy, primarily as a planning exercise based on extrapolation, and futurological studies as future research activities completed in the so-called external sphere of planning. According to his statement, forecasting studies future development based on the past and present situation, while futurology moves backwards from the situation or description of a system of conditions outlined for a period in the distant future. He believes, the most successful use of futurological studies is that futurology studies the targets of long-term perspective planning from the point of view of the requirements and expectations of an even longer period. In the same chapter the author analyses the different categories emerging in the course of planning, such as the conception and plan variant, state and process (stock and flow) planning and their relationship, and deals with the expansion of the scope of planning, the different types of planning decisions, and the democratization of planning and decision making equally necessary from the social and scientific points of view.

The fourth chapter studies the *international conditions* which will, to a great extent, determine or influence development expected to take place in the long range, that is, until the turn of the century. He assumes that the divided world will remain in the coming 30 years, but that the Soviet Union will come much closer to the development and output level of the United

States than it is today. He also assumes that in the period in question a "Far East cooperation" among the Soviet Union, China and Japan may acquire increasingly great importance. The chapter also deals with the future of the United States, and more intensively with that of Europe. On this basis he draws the conclusion that from the aspect of international power relations, Hungary's long-range perspective conditions are favourable.

The most extensive, most interesting—and most daring—part of the book is the fifth chapter which outlines *Hungary's expected development level and pattern for 2000*. Reckoning with an annual 5—6 per cent rise in the per capita national income against the 600 dollar per capita national income of 1965, he envisages a 4000 dollar per capita development level by 2000. Setting out from this, and assuming this level, the author then goes on to study the role of science and the production pattern, emphasizing that research to prepare the production pattern for the period of the turn of the century should be organized on an international basis already today. The author deals in detail with the employment and job patterns and assumes that a fourth sector will develop out of the tertiary one. It will consist of the scientific apparatus, the computer technology personnel belonging to it, and teachers. He considers the "ability" pattern to be particularly important as opposed to the pattern by jobs, and points out that an increasing ratio of the national income must be turned to vocational training. In the period until the turn of the century, the degree of the complexity of labour will increase to a great extent, almost doubling, and the technical standards of the turn of the century will be characterized by automated installations with self-operating optimization. Increased improvement in quality will be one of the important factors of technical progress and of the rise in living standards at the same time. The author deals in great detail with the questions of leisure and the way of life, counting on the fact that the people of the turn of the century will have a different scale of values than the people in the present-day developed capitalist countries and today's socialist countries. He emphatically points out the need for coordinating natural and technical environment. By way of summary he draws the conclusion that completion of the stage of building up socialist society will take place about the turn of the century, and the higher stage of communism will begin then. This provides the author with a basis for outlining the characteristic features of the transition to communism.

A realistic picture of the future cannot be a castle in the air, and for this reason the author examines *the road leading to the year 2000* in the sixth chapter. He deals with the relationship between long-range perspective and long-term demand, with the effects of the capitalist environment, and with judgement of the Hungarian reform in economic management introduced in 1968 from the perspective point of view. Finally, in a similar manner to the previous chapter, and as a transitional stage, he outlines the expected characteristic features of the developed socialist society in Hungary. Included in the road leading to the future is *preparation for the future* and the related questions are discussed by the author in the seventh and final chapter of the book. He believes the central problem of preparation is suitable training, and in this context hee mphasizes the importance of the joint and coordinated application of research in the universities, the development of abilities, and means to provide incentives to development. He considers the high and stable growth rate to be of extreme importance from the political points of view too.

As can be seen from the brief outline of the contents of the book given above, the author has made a study of an extremely topical and interesting problem. As a true futurologist, the author presents a picture of turn of the century Hungary, using suitable scientific methods, but allowing scope for creative fantasy, basing himself

on reality and a complex approach, drawn on a well founded basis, taking many factors into consideration and with many types of calculations. He successfully avoids the very frequent technico-economic one-sidedness appearing in the works of certain futurologists, and concentrates his attention on social problems. And while many of the western futurologists expect the destruction of culture, the depravement of humanity, and the end of the world from the future, the author looks with comforting optimism to the period running to the end of the millennium. He conscientiously points out the necessary limits to futurology, but his starting from the basis of reality, his careful consideration for the major factors and their effects, the study imbedded in the broad framework of the future destiny of Hungary gives the reader the feeling of a realistic picture of the future. Therefore the book may be expected to arouse interest both in Hungary and abroad—in socialist and capitalist countries alike.

Á. SCHMIDT

BÁLINT, J. (ed.): *A népgazdaság irányítási rendszere.* (The national economic control system.) Budapest, 1970. Közgazdasági és Jogi Könyvkiadó. 433 p.

The volume edited by experts of Hungarian economic policy working in various practical fields has undertaken a special task. It endeavours to paint a faithful picture of the reform in the Hungarian system of economic control and management introduced in January 1968. This gives the reader an opportunity to become acquainted, in its 12 chapters, with just about all essential elements and organizational solutions comprising the reform in the mechanism.

The book is of a descriptive nature. The editors and authors did not want to qualify the positive and negative effects of the new mechanism, and endeavoured merely to review the system which had been introduced.

The book does not replace the theoretical materials, nor the detailed review and study of legal regulations needed by professionals but it does provide a comprehensive picture of how the regulation of the economy operates, and, in a certain sense, it provides a survey of the system of economic control and management. The volume also deserves attention because the main modifications introduced since 1968 are dealt with too.

Since the reform in the system of economic management took place in the period of the 3rd Five Year Plan (1966—1970) the first chapter provides a brief review of the *major goals of the 3rd Five Year Plan.* Then it goes on to introduce the new order of national economic planning. It deals with the purpose of national economic plans covering different periods (long-term, medium-term, annual) and with the connection between national economic and enterprise planning.

The reform was realized together with a price reform. Its most essential feature is that it wished to approach the circumstances of a regulated market mechanism. One of the most important means of regulating economic relations among the enterprises is price, and for this reason introduction of the *price system* was the first to the regulatory means to be shown. The chapter reviews the course of executing the price reform, the fundamental principles of the price system and price policy, the types, patterns of prices, the features of the consumer price system and the relationship between producer and consumer prices.

The book devotes a separate part to the price mechanism and price forms, and to the organizational and operational questions of price authorities dealing with price issues.

The Hungarian reform of economic control and management distinguishes between two types of *enterprise interest.* It applies profit interest to enterprises in state

ownership, and gross income interest to those in cooperative ownership. It deals —regarding both types—with the formation of enterprise funds (shares, development fund), and with the correction of income regulation valid from 1971.

The reform of the mechanism considers *regulation of personal incomes* in the enterprises and, within this, *wage economy* to be of great importance. In the centre of personal income regulation is determination of the wage level. The book deals with the means for determining the basic wage level, the role of the different wage systems and tariffs, and with the possibilities for using the share fund. Creation of a system of interest for executives is treated as a separate topic.

Another field of regulation is influencing labour management. The labour code aspects of the two types of regulation are also mentioned.

The open nature of the Hungarian economy lends an important role to regulating the joining in the *international division of labour*. An essential element of the regulation mentioned is the central control of *foreign trade*.

In the case of a regulated market economy the exchange rate (the foreign trade price multiplier) plays a tremendous role in approximating to each other the internal and international market effects, together with the export and import regulations relying on these (state reimbursement and tariff systems, the import turnover tax and price supplement systems). Administrative regulators are a special field in this type of regulation: quotas, the export and import permit system.

Another great field in the regulation of the international division of labour, the organizational and operational description of foreign exchange economy is discussed in Chapter 5.

Organizational connection of domestic and foreign realization of production is a very important trend. The book also contains a review of the results of the reform in this field.

Efforts to create market relations increase the importance of *credit and finance relations*.

The reform would give credit to the role of contributing to the solution of the allocation tasks of national economic planning. The book deals with the contents and organization of developing credit policy guidelines, and with a review of the credit system, and the relationship between the banks and enterprises.

Introduction of the construction aimed at financing the circulating assets of the enterprises is included in a separate part of the work.

The book also touches on the guidelines for organizing money circulation and the most important changes which took place in the regulation of money circulation as a result of the reform.

Renunciation to the plan directive mechanism introduced new elements into the organization and contents of the order of *commodity turnover*. All this justifies that questions such as the administrative means of regulating commodity turnover, its system of relations, protection of the quality of commodities, and relations among the enterprises should also be dealt with.

The regulation of accumulation also forms a part of credit policy. Delimitation of *investment decisions* (between state and enterprise), review of the investment process, and that of financial sources of investment are left to Chapter 8.

A separate part presents the solution to the management of fixed assets.

The former economic system already attempted to solve the *technological development problems* of the enterprises through creating a separate fund, a technological development fund. This was inherited by the new management system, with certain modifications. These changes, together with financing the operation of research institutes and innovations, as well as the review of new regulations can be found by the reader in Chapter 9.

The *economic activities of the councils* on various levels, the council planning system,

the means available to the councils for development (council development fund), the council budget system, and administrative activities are reviewed in Chapter 10.

Regulation of the book keeping system, uniform in the national economy, and the balance-sheet system linked to the regular reports are also reviewed. In the course of discussing control (checking), major attention is directed towards the organizational problems.

Chapter 11 also touches on the major features of economic information.

The reform requires substantial changes in the structure of *organizations*. Certain organizational modifications have already taken place. We can find a summary of the modifications in economic bodies (enterprises, cooperatives, trusts, associations, joint enterprises), in economic management bodies, in the organizational solutions to organs representing cooperative interest, which have been implemented since the introduction of the reform.

Aside from the chapters reviewed, the book contains an appendix in which the information prepared by the president of the National Planning Office for enterprises is published. The second appendix contains legal regulations.

The reform in economic management is a many-sided, complicated process, and therefore, reviewing it is also highly problematic. The authors and editors of the book endeavoured primarily to show the constructional elements of the reform in economic management, as I mentioned, without qualification. The book under review can provide useful information to those who seek a reply to concrete constructional and organizational questions of the reform in economic management.

M. MANDEL

SZILÁGYI, GY.: *Árstatisztika a makroökonómiában*. (Price statistics in macroeconomy.) Budapest, 1970. Akadémiai Kiadó. 190 p.

Statistical analysis of prices is one of the most general and oldest fields of economic analysis. While this purpose was served for a long time merely by the traditional price index numbers, today, when the problems subject to analysis have become more and more complex and complicated, also the methods become richer and differentiated.

One of the starting points of price-statistical investigations is: *what should be meant by price changes?* What should be considered as a change in price and what not from among the phenomena accompanying price changes and frequently inseparable from them? If the quality of a commodity changes, or a modification occurs in the circumstances of purchase and sale it would not be correct to renounce the measurement of the change in price but the qualitative and other changes must be expressed in some way. This task may be solved on the basis of various points of view. It seems best to follow the principle which centers on the user, the consumer. Thus, if the quality of some product deteriorates, that is, it is less suited to satisfy the needs of the consumer than earlier, there is a case of a rise in price, even if the nominal price of the product remains unchanged.

Another fundamental problem of the notion of price changes is *the change in average prices*. Average prices develop in several dimensions (time, quality, space) and the economic interpretation of average prices formed in various dimensions may be highly different. An averaging of prices of products of different quality will (apart from certain exceptions) generally disturb the picture of price changes and is allowed only in special cases. A difficult problem is caused by the averaging of prices asserting themselves on different markets. Such average prices yield a different picture of the price changes for the seller and a different one for the buyer.

The price statistics on national economic (macroeconomic) level is eften faced with the notion of the *general price level*, with its measurement. For this purpose such price index numbers are best suited which are capable of characterizing in a

complex manner the price changes occurring in the entire process of reproduction. These index numbers are related to aggregate national economic value data (national income, gross domestic product) and may be derived from changes in these calculated at different prices (implicit price index numbers).

But establishing the extent of the change in prices is only a starting point for describing the development of prices. The picture will become complete if the manner and character of price changes is shown. In the dimension of *time* this means to establish whether the rise in prices was concentrated, slow or explosion-like. The *causes* of a general change in prices may be approached from two aspects: from that of demand and that of costs. The extent of *demand* has no direct measure and we must thus rely on conclusions to be derived in a roundabout way. Such an indirect measure may be derived from the dispersion of the price index numbers. The smaller the variance of individual price index numbers in comparison to the general change in the price level, the more the rise in prices can be traced back to a general rise in demand related to a change in the purchasing power of money.

To examine the change in prices from the *cost* aspect is a problem of different character. Here, the possibility exists to create a system of indicators which signalizes what change in price is induced by a change in some cost element itself, as well as how the total change in prices is divided among the changes in individual cost items as causes.

The so-called *price scissors* are very handy tools for analysing price changes. The book offers a systematic description of the methodology of this tool. It presents the problems of forming price scissors, the particular features of analysing time series formed from price scissors (seasonal fluctuations, trends, time lags) and a systematization of the price scissors from the point of view of economics. The most important step in this systematization is the fitting of the price index numbers and price scissors into the system of input-output tables. In this way special new kinds of price scissors, the so-called input and the so-called output price scissors may be derived. By inverting the input-output tables, so-called *cumulated* price scissors and cumulated price index numbers may be arrived at. These price index numbers express not only the change in prices indicating how much more expensively (or cheaper) some branch buys from another branch in comparison to the base period, but also the reverberating, indirect effect of the price changes.

Though the main direction of everyday work in price statistics points in the direction of analyses over time, also the investigation of prices from other aspects may claim attention. From among them the *international comparisons* are outstanding in importance. An international comparison of prices may yield answers to many kinds of questions and the answers to these questions demand the choice of different methodological approaches. The basic problem is a comparison of other realistic purchasing power proportions of various currencies but an inter-country comparison of relative prices is no less important, to establish what products can be considered in individual countries cheap or expensive in relation to others. A generalization of this problem leads to the investigation of similarities and differences to be found among the price systems of different countries; this may be approached with the aid of the variance of spatial price index numbers (among currencies).

KISS, T.: *International division of labour in open economies, with special regard to the CMEA*. Budapest, 1971. Akadémiai Kiadó. 322 p.

This book is in essence a revised translation of "International division of labour and Hungary's economic development"

(Budapest, 1969. Kossuth Könyvkiadó; in Hungarian) reviewed in *Acta Oeconomica* (Vol. 4, No. 3) by the late Professor *I. Vajda.*

Since the essence of Dr. Kiss' book has not changed by the alterations, it is not the task of the reviewer to repeat what Professor Vajda has already described so lucidly. Still, a short review on the changes seems necessary for those who know the original version or its review. The book had been shortened a bit by omitting some references to Hungary and to different problems of international economic relations on a sectoral level, e.g. energy-supply. On the other hand, *theoretical aspects* are broader in the new edition which Dr. Kiss supplemented with a more detailed treatment of growth models, and an introduction of problems of foreign trade multiplier. Three new subdivisions were also added: one dealing with small and large countries in economic integration, another on fluctuations in the economic growth of the CMEA countries and a third one on some aspects of East–West economic relations. Tables, references were brushed up and partly supplemented with new ones.

T. Kiss' book may be an evidence for those who do not read in Hungarian, showing how intensively Hungarian economists endeavour to clarify the intricate problems of economic integration processes.

T. F.

SZENTES, T.: *The political economy of underdevelopment.* Budapest, 1971. Akadémiai Kiadó. 328 p.

Tamás Szentes has been studying the problem of economic underdevelopment for over a decade and a half. He has lectured on this subject, first in the Budapest Karl Marx University of Economics, and in recent years, at Dar-es-Salaam University in Tanzania. He has many publications on the theories of the phenomena of underdevelopment, with a comprehensive monography among them entitled "Economic underdevelopment". The years in Dar-es-Salaam were not only spent in educating on-the-spot, but also in gaining direct experience, and field research. This resulted in his new work, a summary of his oeuvre, "The political economy of underdevelopment" recently released by the Publishing House of the Hungarian Academy of Sciences in English.

Bourgeois economists have published a library of works explaining underdevelopment, in interpretations ranging from progressive views to extreme reaction, and praise of colonialism; Marxist authors joined in research into this topic at a later date, and elaboration of a comprehensive Marxist theory of underdevelopment is still on the list of unsolved tasks. Tamás Szentes's book has taken on itself a substantial part of this great scientific responsibility of Marxist economists.

The first part lists and critically analyses the more important theories of underdevelopment. In the second part the author expresses his own views on the essence of economic underdevelopment, and in the final chapter of this section he outlines possibilities for its elimination.

All theories must define what they consider the fundamental criterion (criteria) of underdevelopment, and must explain the reasons why it came into existence. The most customary criterion—since it is comprehensive, easily measurable, and illustrative—is the per capita national income. Tamás Szentes' objection is valid against this and other solely quantitative indices (ratio of agricultural population, employment pattern, etc.) used as foundations for theories: " . . . they do not point out qualitative sameness and differences." (p. 25). Underdevelopment is a far too complex phenomenon to be able to cover its content with a quantitative description. The second chapter of Part One, entitled "Underdevelopment as the aggregate of certain criteria and limiting factors", discusses those more complex theories which complete the description, but are, as we will see, nevertheless, at fault with the final reply. Leibenstein himself

collected 35 characteristic features. But careful scrutiny will show that even those accepted by the majority of the authors are no more than partial phenomena, effects. The final cause of underdevelopment cannot be either the demographic explosion, or economic geography, climatic conditions, or the shortage of capital, low productivity, the quality of the labour force, or the combination of these and similar factors.

If theories considering as responsible the individual static factors or combinations of these, did not provide satisfactory explanations, the question is whether dynamic theories studying the movement of these phenomena and their effects on one another can bring us closer to an understanding of underdevelopment. The latter are discussed in the following chapter. An entire series of "vicious circles" characterizing underdevelopment are known; Gill formulates the common basic concept of all: "Because it is poor, the country does not develop; because it does not develop, it remains poor".* Szentes gives us convincing reasoning against this apparently logical argument: a change might occur on any point in the vicious circle—he says, without changing factors affecting the previous "segment of the circle". In reality, there is no perfectly identical repetition, and only metaphysical thinking can conceive of the orbit of socio-economic movement as impenetrable, in reality it can be penetrated. Both past and present history has on many occasions shown the possible ways of this in Africa, Asia and Latin America.

The author is justified in concluding that the dynamic theories do not provide satisfactory replies either, for without a social and historical approach every theory is doomed to sterility. Szentes equally argues with those depicting underdeveloped society as being homogenously rigid, stagnating in its traditions, and with those discussing its duality or its diversified heterogeneous nature in a narrow-minded way. While he does not deny the influential role of sociological factors, he rejects the lack of enterpreneural spirit, the endeavour for innovation and the reasoning by countless theoreticians who place these and similar phenomena in the forefront, re-establishing the order of cause and effect: the fundamental factor is not socio-psychological behaviour but production and distribution relations. This causes the adequate social behaviour; therefore, first this must change, so that, as a consequence a modification of social customs, behaviour and individual attitude should come about in the direction favourable for progress. He emphasizes that neither those thinkers who recognized the dualism of society, nor those who distinguished several divisions, nor Rostov, in his analysis of the stages of economic development are capable of understanding the true nature of underdevelopment. Their common weakness is that they set out from the relations of present-day capitalism, are searching for these in the present underdeveloped countries, and believe to have discovered the reasons for their poverty in the obvious differences.

Theories which also pay attention to external factors see more of reality. In discussing the period prior to colonialization it would still be sufficient to discuss internal factors. But since the meeting of the two worlds, that is, since the beginning of colonialization, internal factors were not the only ones determining the course of development, the nature of the international relations also began to have an effect, and as is known, the differences in development which had existed in the period of colonialization expanded since into a deep gap.

The second part of the book, containing three chapters, bases itself on this very premisses.

The deep condemnation of colonialization, and its effects, completed with scientific consistency, a merciless tracing of the

* GILL, R. T.: Economic development, past and present. New York, 1963. Prentice-Hall. (p. 30). See Szentes, p. 52.

process to the present and even the future, is the guiding principle in Szentes' train of thought; he puts them on the pillory from both the moral and the economic-historical viewpoints, as the fundamental reasons behind the underdevelopment of today. Yet, he determines responsibility in a differentiated manner. "But even when passing this judgement we must not forget that the responsibility rests not with nations or peoples but with *social classes*, the leading strata of certain *societies*." (p. 133).

Two aspects of colonialization are responsible for underdevelopment: ". . . there are two aspects, two sides of 'underdevelopment': the basically external, international aspect, which, from the historical point of view of the emergence of the present state, is the primary aspect; and the internal aspect, which from the point of view of future development, is increasingly important." (p. 163) These are historical factors, which reach out into the present: and elimination of underdevelopment requires that both shall be overcome.

The chapter discussing the external factors of underdevelopment deals in detail with the manifestations of economic dependence and with the means of income transfer. "Direct" economic dependence exists if the key positions of the economy are in the hands of foreign monopoly capital. This is one of the direct forms of appearance of neo-colonialism in our own era: it stems partly from the colonical past and is partly a new feature penetrating the economy. Also commercial dependence has its roots in the production patterns of the underdeveloped countries. Financial dependence puts these countries to the mercy of others in foreign trade and investment policy. Finally, "technical" dependence, which equally means dependence on experts and imported products produced with developed technology, is also an organic part of economic dependence on the developed capitalist countries.

The result of the dependency: income transfers, losses. Szentes discusses both the methods of direct income transfers, and the indirect, more concealed methods. He shows that the direct income transfer: profits, interest, which regularly flow from the underdeveloped regions into the western industrial countries, stem, in the final analysis, from exploitation of the local labour. Nevertheless, the most typical forms of neo-colonial exploitation are the indirect ones. "*The imminent inequality of exchange* . . . . . asserts itself *even* in the case of formal equality of exchange . . ." (p. 200) Comparative advantage cannot assert itself because of underdevelopment. Monopoly prices, the world market mechanism, the operation of the international money market and, in general, the national and international institutions under the influence of capitalist spheres provide advantages for the rich, and cause losses to the poor. This is a special form of exploitation, according to Szentes's definition: "a redistribution among the different societies, i.e. 'nations', in the course of which the value created in one group of countries is appropriated by another group of countries." (p. 205)

The author has elaborated the internal factors of underdevelopment in a separate chapter. "Such a factor is above all the *lack of economic and social integration, the dual, distorted socio-economic structure*", (p. 229) The major barrier to the internal division of labour is the tremendous weight of the traditional sector; for the most part the effects of the modern sector are incapable of permeating in the economy because of the existence and nature of the traditional one. Self-sufficient agriculture, exports of a monocultural structure, the narrow industrial sector, the few modern mines or large-scale factories in isolation, the undevelopment of the domestic market, constitute together a distorted economic pattern, where coordination and healthy communication between the traditional and modern elements are lacking. This reacts on the ability of the national economy to accumulate, on the demographic process, on the utilization of the labour force, etc.

As a result of the distorted economic pattern, and due to the short past of independence as states, the development of classes in Africa and Asia is taking place before our very eyes, and they carry the features of primitiveness and indecision. Szentes discusses in turn the proletariat, the peasantry, the bourgeoisie, the feudal land owners, the leading strata of the traditional society, and provides a separate analysis of the class positions of the public administration, enterprise manager, intelligentsia, military etc. élite. His standpoint on the dual nature of this stratum and of the bourgeoisie bears witness to his understanding of the social processes of the third world. There are two roads open to them: neocolonialism, serving capitalist development, and another one: protection of national interests against foreign influence, and the most consistent accomplishing of this, the socialist road.

Regarding the future of the public administration, military, etc. élite, no matter how important their political role may be (particularly today when the fundamental classes have not yet developed) they cannot become an independent class: "The élite, as it exists today, will either merge with the bourgeoisie of an unfolding capitalist society, or will dissolve, losing its élite character in the process of socialist development." (p. 276)

In his analysis of the classes we would have willingly heard more of the peasantry, which, as he writes: "cannot by any means be compared with its equivalent in West European countries." (p. 277) Perhaps the tribal relations, starting off from the production relations of the peasantry, might be analyzed precisely with a Marxist method. We feel that this subject would have deserved a separate chapter.

The closing chapter discusses the possibilities and outlooks for eliminating underdevelopment. The goal is the elimination of the reproduction of underdevelopment. The time required for closing the gap is a whole historical era extending to several generations. And since underdevelopment is, on the one hand, the result of external international factors, and on the other, of internal ones, their elimination must take place on two fronts. International factors will make their effects felt, as long as the system of world capitalism exists. Although international actions can influence the effects of external factors on the third world, today the topical task is to eliminate underdevelopment within an economy. This means breaking the power of foreign capital, the gradual reformation of the distorted economic and social pattern, the liquidation of dualism and the creation of an integrated economy, and this through the conscious, planned and active policy of the state. This train of thought logically leads to the conclusion: "The economic intervention of the state assumes the form of state capitalism." (p. 311) The economic and political features of the road leading here are shown primarily through the implementation of the treble motto of Tanzania: "Rural development—Self-reliance—Socialism in Tanzania" on the basis of experience by the author.

This brief review has attempted to show how logically Tamás Szentes builds up his train of thought on the causes of underdevelopment, from a Marxist analysis, to a Marxist road for its elimination. Arguing with bourgeois views he unfolds his own concept; this debate is unavoidable since bourgeois theoreticians believe that the elimination of underdevelopment can be attained within the scope of world capitalism, through increasingly servile adjustment to capitalist development, through copying it, while Szentes finds the true solution in progress towards socialism. No matter on which side a person may be, if he wants to continue to think about the problematics of underdevelopment right down to its bases, he cannot do without a study of the views expressed in this work.

P. MÁNDI

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** To be reviewed in Acta Oeconomica.

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