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CONTENTS

R. NYERS: Our Road, Our Objectives and Principles — as Reflected in the Events of 25 Years 3

И. Фришш: Некоторые соображения о планировании на 15 лет венгерского народного хозяйства 19

Zs. ÚJLAKI: Application of an Aggregate Programing Model in Preparing the Fourth Five-year Plan 55

I. GÖNCZI—J. TÓTH: Ein Versuch zur Annäherung wirtschaftlicher Konsequenzen der technischen Entwicklung im Modell der LPG 73

I. VAJDA: New Trends in World Economy and World Trade 91

А. Рац.: Сравнение некоторых важнейших показателей венгерского и болгарского народных хозяйств 107

REVIEWS

A. DEÁK: An International Conference on the Problems of Socialist Economy 127

J. WILCSEK: On the Institute of Financial Research 130

OBITUARY

Gyula Hevesi (1890—1970) 133

BOOK REVIEWS

I. VAJDA: Internationale Arbeitsteilung und Wirtschaftsreform (T. KISS) 135

I. MEZNERICS: Banking Business in Socialist Economy with Special Regard to East–West Trade (T. BÁCSKAI) 138

K. IHRIG u.a.: Wirtschaftliche Folgen der Mitgliederdichte der Produktionsgenossenschaften (K. FORGÁCS) 140

A. BURGER-GIMES: The Role of Agriculture in Economic Growth (B. FAZEKAS) 142

ACTA OECONOMICA

Tomus 5

CONTENTS

R. Nyers: Our Road, Our Objectives and Principles — as Reflected in the Events of a Quarter-Century 3
И. Фришш: Некоторые соображения о перспективном планировании венгерского хозяйства 19
Zs. Ujlaki: Application of an Aggregate Programming Model in Preparing the 4th Five-year Plan 55
I. Gönczi—J. Tóth: Ein Versuch zur Annäherung wirtschaftlicher Konsequenzen der technischen Entwicklung im Modell der LPG 73
I. Vajda: New Trends in World Economy and World Trade 91
A. Рац: Сравнение некоторых важнейших показателей венгерского и болгарского народных хозяйств 107
И. Фришш: Ленинские принципы планирования 147
B. Csikós-Nagy: Major Problems of Improving the Hungarian Economic Mechanism 159
J. Drecin—I. Hetényi: Growth Rate and Major Proportions of the Fourth Hungarian Five-year Plan (1971—1975) 173
J. Hont: Major Tendencies in the Development of Hungarian Agriculture and Food Industry 193
T. Kiss: Integration of CMEA Countries' National Markets 209
K. Szabó: Twenty-five Years of Economic Science in Hungary 253
I. T. Berend: Some Main Tendencies of Industrial Development in Postwar Hungary 271
A. Hegedüs: Economic Reforms, and the Fundamental Types of Control Systems Established in Socialist Societies 289
T. Nagy: On the Expedient Forms of Reallocating Capital in the Hungarian Economy 305
F. Perroux: Le théorème Heckscher—Ohlin—Samuelson et la théorie du commerce international 325
A. Nagy: Approximation of the Foreign Trade Optimum 339
Gy. Varga: Long-term Planning at the Hungarian Enterprises 355
T. Erdős: Surplus Value and its Rate in Contemporary Capitalism 371

REVIEWS

A. Deák: An International Conference on the Problems of Socialist Economy 127
J. Wilcsek: On the Institute of Financial Research 130
M. Sági: Institute of Economics of the Hungarian Academy of Sciences 225
J. Bognár: On the British-—Hungarian Economic Colloquium 232
Z. Román: International Conference on Industrial Economics 389
B. Csikós-Nagy: Colloque d'économistes franco—hongrois 394
J. Timár: A Conference on the Technical Personnel Supply 398
State Prize Winner Economists 401
The New Editorial Board of Acta Oeconomica 403

OBITUARIES

Gyula Hevesi (1890—1970) 133
Károly Ihrig (1892—1970) 249

BOOK REVIEWS

I. VAJDA: Internationale Arbeitsteilung und Wirtschaftsreform (T. KISS) 135
I. MEZNERICS: Banking Business in Socialist Economy with Special Regard to East–West Trade (T. BÁCSKAI) 138
K. IHRIG u.a.: Wirtschaftliche Folgen der Mitgliederdichte der Produktionsgenossenschaften (K. FORGÁCS) 140
A. BURGER-GIMES:The Role of Agriculture in Economic Growth (B. FAZEKAS) . 142
M. DOBB: Welfare Economics and the Economics of Socialism (A. GELEI) 237
Mrs. K. FALUS-SZIKRA: Employment, Productivity and Economic Growth (É. EHRLICH) 240
T. I. BEREND—GY. RÁNKI: Economic development in Central East Europe in the XIXth and XXth centuries (GY. ENYEDI) 243
Economic problems of agricultural development (L. BETHLENDI) 245
L. FEHÉR: Unsere Agrar- und Genossenschaftspolitik 1965—1969. (E. CSIZMADIA) 405
A. HEGEDÜS: Changing World (P. HALÁSZ) 410
J. BIRÓ: Hungarian Foreign Trade Policy (I. FÖLDES) 412
F. KOZMA: Economic Relations between the two Europes and Socialist International Cooperation (M. SIMAI) 414
GY. ÁDÁM: America in Europe. Business Empires in the World Economy (GY. BECSKY) 416

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R. NYERS

OUR ROAD, OUR OBJECTIVES AND PRINCIPLES — AS REFLECTED IN THE EVENTS OF 25 YEARS

On the occasion of the 25th anniversary of Hungary's Liberation, the author surveys political and economic development over this period. He analyses the situation immediately following the war, the vital issues, the struggle for power, the sometimes uneven road of building socialism, the achievements and the shortcomings. In conclusion, he draws the lesson to be observed in future development.

The past

Twenty-five years ago the nobler part of mankind gained a victory in a long and difficult war. This victory brought to an end a period that may be called the era of the spreading, ascendance and fall of fascism. Mankind had to pay a high price for the ravages of fascism over a quarter of a century, since it has destructed almost everything that constituted a value; it poisoned human relations, tried to lead astray the development of big and small nations and even the fate of the world.

The war against fascism demanded the lives of many million people. But victory justified the sacrifice: it was worth while to fight, the sacrifices were not in vain. What would have happened to the world — and what would have become of Europe — if fascism had been able to establish its power lastingly? In all certainty, the number of victims and the magnitude of losses would have been many times greater. Therefore, it is only with reverence that we are thinking of every nation that stood up and fought against fascism. By far the greatest reverence and gratitude are due to the *Soviet people* for their taking the lion's share in the fight. The Hungarian people and nation have a special cause for gratitude since this country was liberated by the Soviet fighters and Soviet arms. The latest chapter in Hungarian history opened in 1944—45 with the victorious advance of the tanks of the Red Army.

The Liberation was a genuine turning of fate for Hungary. It meant the grave of an era which was bad in every respect, the fall of which had been long overdue, and the cradle of a new Hungary. Liberated, we could break with a "national" past of 25 years and start our national history on en entirely different, new road. On reflection, this new beginning will not seem a break, since it historically follows the path of the Hungarian people in 1848—49 and in 1918—19. The 25 years of the Horthy era had not signified a natural or normal development, a continuity in the destinies of the nation, but a period of restoration, an historical distortion. It had meant 25 years of bad fortune

for the Hungarian people. It had been a miserable period for those who lived in it and a burdensome heritage to those who inherited its consequences. This is why it was natural in 1945 — and proves to be historically true and justified today — that we did not mourn over the defeat of the country as if it constituted a tragedy, but considered it as a source of *our re-birth*. We all, the adherents of socialism and those who confessed themselves to be true democrat and honest patriots, thought in this way.

In the Horthy era Hungary counted among the economically *underdeveloped* countries in Europe, both in respect of per capita national income and as regards the structure of the economy. Annual per capita national income was below 200 dollars. Industrialization was lagging far behind the Western European countries, even behind neighbouring Austria. The main basis of the economy was agriculture. Almost half of the national income was derived from agriculture, and about half of the population, 4.5 million people, lived on the land. The economic weight of agriculture was thus as great as that of industry, trade and transport combined. But it would, of course, be schematical and false to depict the past era as one characterized by backwardness in every respect and in all fields. It is a characteristic contradiction that while industry was on the whole underdeveloped, some of its branches were quite up-to-date. Agriculture had to carry the burden of a feudal heritage, but there were also modern large estates and there existed a part of the middle peasantry which was carrying out farming of a high standard. In those 25 years, the country's economic backwardness did not diminish, the resources serving economic development were scarce. With a rather low rate of accumulation, national income increased only by 1—2 per cent on annual average. In addition, there was a large-scale penetration of foreign capital: 30 per cent of the country's total capital stock was in the hands of foreign capitalists.

Social structure was characterized by rigid class division with sharp and ever sharpening contradictions. It was a particular feature that, beside the antagonism between capitalists and workers, also the semi-feudal class of landlords played a role in the arena of class warfare. Only a small fraction of the peasantry rose to a middle-class standard of life. The most unified, *homogeneous* class was the *working class*, uniformly oppressed, exploited and destitute. Its income relations and cultural conditions reflected a rather small range of differentiation. In 1938—39 the proletariat amounted to 43 per cent of the population but obtained only 24 per cent of personal incomes. 28 per cent of the population were peasants with dwarf, small and medium holdings. The share of this class in all personal incomes was 15 per cent. The manufacturers and big landowners were only 9 per cent of the population but they disposed of 33 per cent of all incomes. The bourgeoisie, the land-owning class and the peasantry were strongly differentiated, so that the living level of a part of the small bourgeoisie (artisans and small tradesmen) hardly rose above that of

the workers; and the lowest stratum of the peasantry, the poor peasantry was at a rather substantial distance from the highest stratum, the "fat peasantry". But the real difference and antagonism was not within the individual classes but among the classes. The 25-year history of the era was throughout characterized by strained class relations, and by economic and social tensions.

Politics were dominated by reaction and anti-progressive outlook through twenty-five years. Though Horthy and his entourage wanted to operate their system in a parliamentary form, this was in reality only pseudo-parliamentarism. Under a genuine parliamentary system, the ruling classes should have granted and even legally secured the workers and the peasantry the possibility of representing their interests — with the aim, of course, to integrate the oppressed classes in their own system and thus tame them. But the Horthy regime was unable to do so. Throughout its existence, it failed to secure the basic democratic liberties and a parliament reflecting actual power relations did never come into being. The anti-democratic spirit diffused into every institution of the Horthy regime, weighed upon central and local (county) administration, and upon economic and cultural life. It was a reactionary system rotten right to the bone. It made the country into a backward "reservation" of Europe.

Horthy and the Horthy-ist governments tried throughout 25 years to "divert" the internal tensions in an outward direction by means of a revanchist foreign policy. True, the governments of the Little Entente countries were — with the exception of Czechoslovakia — no better than Horthy, they were petty and a sort of "lumpen-bourgeois". The political tensions of the Danube Basin caused, in the final analysis, harm to every nation and country concerned, and prepared the ground for the influence and spreading of German fascism. Therefore, it was not by mere coincidence but a natural course of events that the downfall of German—Italian fascism ruined not only the systems of the Hungarian Szálasi, the Romanian Antonescu and the Croat Ante Pavelich but pulled with itself through the trap-door of history also those who had prepared the ground for them: Horthy, King Mihail of Romania and King Peter of Yugoslavia.

There were few who shed a tear for the Horthy regime in this country. Even part of the ruling class wanted to prolong the life of Hungarian capitalism in a version better than Horthy's, according to a Western pattern. But they had no longer the opportunity to do so because the democratic conditions that came about in the wake of the Liberation, and the whole atmosphere, made towards opening the eyes of the masses and holding out to them the prospect of a new way of life. And the people did not want to live in the old way any longer.

Political alternatives

When the army of the Soviet Union drove out the occupying Hitler-fascists from the country, when the Horthy-regime collapsed, Hungary became free and the possibility of social progress and development opened up to the Hungarian people. Materialization of this possibility depended on the direction that historical development would take in our country. This required a clear answer — with a definite social and political program — and it was in this arena that the fight between classes and parties did unfold. The question of questions was, how should we use our liberty?

For three years we were at "cross-roads"; from April 1945 to June 1948. In the meantime, the possibilities were clarified, confrontation of ideas, classes and parties took place, the opposing forces clashed in several battles. Land reform and reconstruction, the organization of food supplies, the creation of a stable currency, nationalization of the banks, the elimination of fascists and Horthy-ists from public life were each an important step in establishing the power of the working classes. The final, decisive step was the creation of a united workers' party in June 1948. The working class and with it the people made their choice and decided the way which they would go in the future.

Why did it take three years for this final decision to come about? Because the people had to choose itself and the contents of the political programs could be only gradually clarified. The masses became only gradually aware of the alternatives between which they had to choose.

In those years, the political alternatives of "bourgeois democracy" and "people's democracy" were confronted with each other. The debate was initiated by the re-born Communist Party which, after having overcome a considerable lack of comprehension, finally succeeded in making clear to the working classes that this was the real issue. In three years it became obvious that the alternative of the Horthy regime "dictatorship or democracy", the spell of which long survived in the petty bourgeoisie but also in some social-democrats, was out of date. In the new Hungary, the fundamental problem was, what should be the *class content* of democracy and how far should the rights of the people reach. Should they be confined to parliamentary representation or cover also economic life and the cultural institutions. The people's democracy gained victory because it was the "democracy of the times" in this country.

Up to 1948, the alternatives of "Western" or "Eastern" orientation were also opposed to each other. The problem was essentially one of foreign policy, but its effects were wider since it had to be decided whether the development of the country should be based in the future on an alliance with the Western great powers or on one with the Soviet Union. Now, the former involved a bourgeois ideology and the latter a socialist ideology. Obviously, the alternative meant not only differences in foreign policy but was related,

if indirectly, to the choice between the social systems as well. The Soviet orientation had to win in accordance not only with the socialist interests but also with the properly conceived national interests.

Two conceptions clashed on the question whether reconstruction should be carried out with the help of "foreign loans" or of "own resources". The first battle was fought on the issues of inflation and stabilization. This was won by the faith in our own forces which found a firm ground in the creation of an organized economy. The second battle evolved around the problem of accepting or rejecting "Marshall-aid". At that stage, the subject of discussion was already long-term development: was a Western loan necessary for the purpose or would improved social organization and cooperation with friendly countries provide sufficient resources? Hungary did not join in the Marshall-plan and developed nevertheless vigorously in a new way. In the conceptual confrontation of those years the subject of discussion was not only economic resources, but also, in an indirect way, the purpose for which to use the resources. Both the advocates and the opposers of the Marshall plan knew that accepting credits from that source would be equivalent to committing ourselves to maintain a capitalist economy. This is why we rejected the Marshall plan, and it was these considerations which prompted us, communists, to advocate at the stage reliance upon and the increasing of our own resources.

We did set against each other the alternatives of "planned economy" and "market economy", meaning, in substance, the difference between and the incompatibility of socialist and capitalist economies. It was in terms of these alternatives that the political battles were fought with the bourgeoisie, first on the problem of restricting capital in a state-capitalistic way, and later on the question of nationalization. It was on the basis of this alternative that we initiated the development of the cooperative movement and the cooperative sector in this country, to make the earlier small commodity producers create for themselves a new, socialist way of living.

It should be manifest that each of the political discussions of those times did lead to the fundamental problem: *should we go the socialist or the capitalist way?* Of course, in 1945, it had been less obvious, and only to a few, that the choice to be made was between these two, but by 1948 the fact became clear also to the broad working masses. As they were becoming conscious of the possibilities, the masses demanded gradually more and more of a people's democracy until they arrived at the final point of decision on the socialist perspective. It is right to call the year 1948 that of the turning-point, since in that year the socialist revolution of the workers' power gained victory in this country and with that the most important precondition was created for building up socialism.

Objectives and results

Our objectives of twenty-five years ago set high standards and embraced a far horizon: we went into battle to do away with the past and build up a new society. To this end, we needed above all a lasting and firm power of the people. Today, there cannot be any doubt that this power is firmly established even by historical standards. By the time of this 25th anniversary, the workers' and peasants' power already embraces a longer period than that of the Horthy regime. And its energies to develop are as great as ever; this system is looking into the future, building the future.

We, communists, believed in our own strength from the very beginning, our enemies doubted it for a long time. In 1945, the former ruling classes still hoped for a quick return to power and for a restoration of the old system; they even conspired against us. It turned out that they were building castles in the air. In 1948, the bourgeois politicians still emigrated in the belief that the power of workers would be only a brief intermezzo of a hundred days or so, similarly to 1919. But (fortunately) their emigration has become prolonged and its end is not foreseeable. In 1956, anti-communists, apostate communists and frightened small people migrated to the West, denying any future for our system. We have survived that period too; as a matter of fact, it was at that point that we began gathering strength. The survival of the people's power and its present stability is a great victory for Hungarian communists, and our allies have their fair share in it.

What was the basis on which our external and internal enemies had founded their hopes? Apart from blind faith and illusions — to be frequently found in the lines of those standing on the opposite side of class warfare — conscious anti-communism had two hopes, constituting, at the same time, two main sources of danger for us. One was that we would leave the *ground of reality* in politics and economics, setting unrealistic objectives that cannot be realized, arousing the appetite of the masses without being able to satisfy it. The other danger was that we would fail to build out a strong *system of allies* and to maintain it, would become isolated and thus lose our power. It cannot be denied that in the first phase of our revolution, up to 1956, these dangers strongly haunted us and the crisis of leadership in 1954—56 did not came about by coincidence but was inevitable. Thus, the past quarter of a century was not lacking in struggles, difficulties or mistakes — however, we gathered strength because we were able to learn also from our mistakes. So we were able to secure what was the most important: the continuity of the people's power.

The objectives of socialist construction required people, party and government to undertake a diversity of tasks. The whole structure of society had to be changed, the socialist relations of production to be brought to prevail,

the forces of production to be quickly developed, education and culture to be spread simultaneously and all that while improving the living conditions of the masses and raising their consumption standard. Surveying what has happened in this country in the course of these two and a half decades, the picture that emerges from the parts shows the revolution aimed at the abolition of the old order, at socialism, at evolution in the direction of socialism!

The social revolution was able to gain victory because it penetrated right to the roots, changing the *production relations*, the economic basis of society. Between 1948 and 1961, public ownership of the means of production became victoriously predominant. In industry, trade and transport the change came about at the beginning of the period already, in a radical manner (by nationalization), in agriculture by the end of the period, by the gradual introduction of cooperatives. The radical character of the changes is illustrated by the fact that capitalist ownership has been entirely abolished and at present 98 per cent of national income derives from the socialist sector while 2 per cent is contributed by small commodity producers.

Together with the production relations, also *class relations* have radically changed in the country. Exploitation has been done away with and the exploiting classes have ceased to exist. It has turned out that they are by far not indispensable as a factor in the reproduction process, nor in economic growth, and that the economy may develop more efficiently without them — as socialists did always claim. It has been also proved that the socialist transformation of the production relations was not an end in itself, that the elimination of class antagonism increases the productive forces of society and its capacity to grow.

A great step has been made forward to create social equality. The basic classes, workers and the peasantry, own the means of production on a collective basis and, in this respect, their position is identical. There is also a gradual approach in their living conditions, though in this field the differences are likely to persist a long time to come. The interests of workers and peasants meet today already on every important point. Profound changes have taken place also in the various strata of the intellectual class. Their majority is no longer attached to the bourgeois order, way of living and thinking; their decisive majority is already attached to socialism. The situation has also ceased to exist where the intelligentsia constituted a closed self-perpetuating caste. At present it is regularly rejuvenating itself from working-class and peasant sources. The socialist production and class relations are of great social use already at present, and they constitute highly promising investment in the future of our people.

In the long run, the global results of our economic development may be judged to be satisfactory — they could, of course, have been much better, had our system not succumbed at a time to the "infant disease" of communism.

Despite the set-backs after the war and in the counter-revolution, after overcoming the production problems accompanying socialization, we have attained an economic growth rate which is considerable even by world standards. Per capita national income has increased in this country more than threefold as compared to 1938, attaining now a level around 650 dollars.

Which were the *main sources* of economic growth in the past period? The key to the results may be found in the realization of social organization, in the evolution of national economic planning. With this, we partly succeeded in setting into motion and utilizing the potential forces of production and partly in developing and increasing them on the basis of the national points of view.

With the establishment of planned economy we could utilize the work of the most important of productive forces, the working people, more intensively than before. In twenty years, employment increased from 4 to 5 millions and at present 48 per cent of the population is gainfully employed. With this rate we are in the front line of the world. With the tools of planned economy we succeeded to expand the sources of accumulation and to realize an accumulation rate which ensures a satisfactory rate of economic growth. As against the 9 to 10 per cent accumulation rate before the Liberation, one of 24 to 26 per cent today may be termed most favourable. This rate of accumulation must be maintained by means of the reform of economic control and management; this corresponds to the present medium level of economic development attained as measured by world standards. At the same time, accumulation should be rendered more balanced, cyclical fluctuations greatly mitigated and investment efficiency increased.

The development of productive forces is manifest primarily in the industrialization of the country. In twenty years, the rate of industrial employment increased from 19 per cent to 33 per cent of the total. 67 per cent of national income comes from industry which supplies also nearly 80 per cent of the country's exports. All that testifies to the fact that in these 25 years industry has become the most important branch of the economy, and that Hungary has become an industrial country with a highly developed agriculture. Industrialization is substantial also by international standards. As regards the rate of industrial employment, Hungary belongs to the first ten countries in the world. From the point of view of per capita industrial output, however, the situation is considerably less favourable, a fact that indicates also the main task of the future, namely to accelerate the rate of increase in productivity.

Under the country's special conditions economic growth has necessarily led to a situation where the predomination of the socialist sector became realized in the form of a multi-sector economy. At present, 65 per cent of the workers are employed in the state-owned sector, 31 in the cooperative sector, and some 4 per cent of the population is working in the private sector. It would

be wrong to set, on the basis of abstract theories, the objective of changing these proportions; it is not certain that this would serve the interest of society. But it would be equally wrong to consider these proportions as final. As regards the internal proportions of the socialist sector, it is the optimal, quickest development of productive forces that must set the pace, and as regards the private sector, the maintenance of its present complementary role seems necessary for some longer time in the future.

In the past two decades a rapid development took place in this country in the cultural field. Education is quickly spreading and science is vigorously developing. In twenty years, the proportion of those completing the 8-form primary school has risen from 20 per cent to 59 per cent, that of those with completed secondary education from 4 per cent to 15 per cent and that of those with higher qualification from 1.6 to 4 per cent. As a major phenomenon characterizing technical progress, the number of engineers and technicians has doubled.

Considerable progress has been made towards transforming science into a force of production so that results could be reaped during the life-time of the present generation. In Hungary, science plays an important role in the development of productive forces. The number of research institutes has considerably grown, and so has the material and personal basis of research. In 1967, Hungary spent 3 thousand million forints, i.e. 1.5 per cent of national income, on research projects and investments. The number of research institutes now approaches 1000, and the staff engaged in research reaches 43 000. All that, however, is at present still rather a potential force. In the future, we have to raise the efficiency of scientific research by increasingly coupling production with research on the basis of common interest and an accelerated flow of mutual information.

Modern social policy and the housing problem

It was a fundamental effort of our economic policy in these two decades to secure full employment for the population of working age, thus bringing about a favourable change in the living conditions of the population. This objective has been attained, the ghost that has been looming over the working classes for many decades, namely unemployment, has been liquidated and security of existence established. Essentially, all men of working age are working. The number of women employed in the economy has substantially increased. Of all earners, in 1949 only 29 per cent were women, in 1960 already 40 per cent. The rate of female employment is substantially higher in this country than in most capitalist countries and is on a similar level with the socialist countries. With the intensive development of agriculture, the evolution of integration between industry and agriculture, and through the industri-

alization of the countryside, the earlier considerable latent unemployment in agriculture will gradually cease.

Now, with labour reserves nearing exhaustion, the *economic* considerations will have to be taken into account to a higher degree in employment policy beside the social ones. Raising productivity of labour and efficiency throughout the economy requires a flow of manpower different in character from that of the past years. The importance of migration from agriculture into industry will tend to diminish and the flow of labour within industry and into the service branches gain in importance. There is no interest in tying labour too much to their jobs, either from the point of view of technical progress or from that of their own welfare. It is, of course, of decisive importance to secure that the direction of the flow of labour should be in harmony with the interests of the economy as a whole.

In Hungary building up socialism, the *income* of the working people is growing at a quicker rate than at any time before. Per capita real income of workers and employees increased in the last two decades to 2.5-fold and real wages per earner to almost twofold. True, in the first five-year period it had not yet been possible to secure an even growth in living standards but in the second and third five-year periods living standards and living conditions improved in a balanced manner and this increased the confidence of the working people in the policy of the party.

The building up of socialism resulted in the establishment and development of *social policy* on a large scale by the state. This was one of the most important factors in the improvement of living conditions. It is, e.g., characteristic that in 1938 social insurance schemes covered only 31 per cent of the population, whereas the present coverage is of 97 per cent. Even in 1950 social insurance expenses amounted to only 4.7 per cent of national income; in the current year they will reach 12 per cent. All that is complemented with social services of a rather wide scope, medical care of a high standard, development of the hospital services, and the recently introduced allowance to young mothers.* Each of these is an important factor in the developing system of social institutions in a socialist society. Socialism can thus ensure a most up-to-date social policy and we must avail ourselves of this opportunity also in the future.

A characteristic trait of our national development has been the acceleration of *urbanization* ever since 1949. Whereas from 1870 to 1949, that is, in almost eight decades, the ratio of urban population increased from 26 per cent to 38, in the last two decades the proportion of town-dwellers has risen to 44.5 per cent. This process took place in spite of the fact that in reducing the differences between town and countryside perhaps an even greater progress

* Ft 600 monthly, over 30 months after birth — Ed. note.

has been made in these twenty years than in urbanization. Economic policy calls for rendering the planning of development more exact and realistic also from the demographic point of view, and it is equally important that we should be able to reduce the rate of demographic changes to a reasonable extent.

The war gravely affected the stock of dwellings in the country. In the years 1941—1958 residential construction had been at a complete standstill, and the consequences must be borne for some time yet, although the rate of residential construction has been gradually increasing and exceeds now considerably that of the Horthy-era.

The present stock of dwellings is by almost one third higher than prior to the Second World War. Since, in the meantime, population has increased by about 11 per cent, housing conditions are much better now than before the war. The number of inhabitants per 100 homes has decreased, e.g. in the last ten years by 10 per cent. According to the 1970 population census, the stock of dwellings in Hungary is 3 157 000, that is, 330 inhabitants per 100 dwelling units on the average. Still, the *housing problem* remains one of the *gravest* social problems, since both the demographic changes (migration to towns, the growing number of family fragments) and the material relations result in a lasting disequilibrium between the demand for and the supply of dwellings. To solve this problem is one of the most important political and economic tasks for the next decade.

In the era of building up socialism, a large-scale levelling of living conditions of the individual social classes and strata can be observed. Whereas before the Liberation the peasantry's income level was only about 50 per cent of that of the workers, now the income of the two social classes is already on the same level. A difference to the detriment of the peasantry is now only in the field of social benefits. Large-scale equalization has also taken place as regards both living conditions and incomes of white-collar and manual workers. Social and economic equality constitutes a pivotal point in the program of socialism and the results attained in this field constitute an important achievement of our society. But it is undeniable that in our society there can be also observed certain harmful features of "equality" which hinder development. Efforts at this practice must, therefore, be gradually suppressed and finally eliminated from our society.

Some conclusions

What are the conclusions to be drawn from twenty-five years of economic-political practice?

First, that the socialist revolution and the building of socialism too, have both their *general principles* from which there must be no deviation, and their *national particularities*, the neglection of which may also lead to political

breakdown. It would be difficult to tell, which is worse or more dangerous to make, the first or the second mistake. The first means breaking with concrete reality. Both mean deviation from the Marxist—Leninist heritage and there is now ample international evidence that they will only lead to crisis. One of the great lessons of the period 1948—1956 for Hungary consists partly in the correct adoption of Soviet experiences and their positive utilization in fundamental matters of socialism and in many concrete methods of socialist construction, and partly in the irresponsible, hasty and mechanical transplantation of Soviet practice and its application to Hungarian reality. Many things that had been good and accepted there, seemed to be queer, unintelligible and bad to the Hungarian workers. By "copying" the Soviet Union, Rákosi's leadership not only did not serve the interest of internationalism, but actually harmed it. Even today, we would only do harm if we were listing too many things among the *essential* principles of socialism and restricting the particular national features and endowments only to differences in taste or culture, if we failed to make efforts at applying the principles of Marxism—Leninism in a *creative manner* in this country.

Second, that the socialist revolution cannot result in *immediate and sudden* changes both in production forces and production relations. As regards the production relations, the "revolutionary leap" is possible and, as a matter of fact, this is the only possibility for supplanting the old (capitalist) system by the new (socialist) one. The socialist production relations enable utilization of the given, potential forces of production within a short time to a maximum extent. But in respect of the forces of production no similar leap is possible, in this field even fast development can be only gradual, observing the proportions. One cannot jump overnight from a lower level of development to a higher one. Similarly, we had to become aware of the fact that in the period of already consolidated socialist economy, great fluctuations are no longer admissible in the basic economic proportions, e.g. in the "accumulation and consumption" or the "industry and agriculture" ratios. This would involve deterioration in efficiency, which must be "exiled" from practice.

Third, that the socialist economy must not be considered as *static*, as regards either the system of institutions or the methods applied. A way must be found to open the doors to the technical-technological revolution. A system of control and incentives must be created that enables this under the concrete conditions. The production relations, state control and the system of management must all develop to reach an optimum of economic growth. Deliberate control of development is possible if the leading force (the party) and the implementing and coordinating force (the government machinery) are capable of recognizing the methods of development that should be applied or properly combined at a given time (gradual, natural development on the one hand and reform on the other).

Fourth, that there exist clearly distinguishable *phases* of development to which economic policy should be adapted. Since the socialist production relations were introduced in a period of low economic development level, for a time we had to follow the path of extensive economic development, with investment policy aimed at increasing jobs. That is, the main source of growth was the improvement in social organization by bringing into movement the given forces of production on a social scale. Owing to the exhaustion of the extensive sources of the economy and to changes in social demand, this economic policy must be now supplanted by intensive development, by development policy promoting increased productivity performance. This implies a qualitative change in the development of productive forces and also requires a qualitative change in the economic mechanism of society. Had we not made this change, or made it only with a historical lag, the objectives and the methods would have come into contradiction, which would have greatly weakened political stability. This is why we must be consistent in discarding the "old weapons" and in developing new methods. From now on, while preserving organization "above the plants", the main source of economic growth can be improved organization *within the plant*, and improved efficiency.

Fifth, that we cannot and must not go for long the way of autarky (or quasi-autarky) but must switch over to *large-scale cooperation*; and later on, also the problem of *international integration* will arise. In the initial period, planned economy and industrial development were of an autarkic character in Hungary, following as they did the concept of national self-support. In the case of a small country, this was basically wrong and had to be changed. Since 1957, economic policy has been based on growing foreign trade and an increased participation in the international division of labour. This means that we have passed from the principle of a "closed" economy to that of an "open" one, and present policy is invariably based on the same principle. However, the "international profitability control" of our production is still rather narrow in scope, a fact that constitutes a source of uneconomic production. This is what gave rise in the socialist world to the concept of a system of "*open national economies with an integrated market*" which can, of course, materialize only on the basis of fully common national interests. However, this problem will also have to be faced.

Sixth, that economic progress may change the requirements to be raised on the part of society against the *management of enterprises and the whole economy*. In the initial period, when the bases of socialism had to be laid, political requirements were necessarily predominant, and if the requirement of professional competence was raised at all against the political man at the head of the enterprise, it played only a secondary role in selection. Intensive development requires, however, a different type of executive. The type of "professional manager" also with a feeling for political responsibility, has

now gained importance. He must be an expert in economic organization and management methods, with a knowledge of the markets and social environment.

And, finally, we have also learned in the course of these twenty-five years that political stability, the *political well-being* of citizens must be also considered an economic factor. The confidence and hopes of the people constitute an economic resource of considerable importance, whereas social uncertainty and desperation are a source of economic loss. This is not only a problem of what they can earn in material terms but also of what they can obtain in terms of rights, social appreciation and opportunity. This raises the necessity to develop *socialist democracy* in our society. If the economic basis changes and develops, also the political superstructure must change and develop in accordance with the basic principles of Marxism. The direction of development is now in the direction of a wider and more profound democracy. Socialist democracy is growing together with the power of the working class. The democratic requirements of the age were different 25 years ago or a decade ago from what they are today. Socialist democracy is at the same time a system of decision and of control. Its aim is to draw all those interested into taking a decision on the problems where they are well oriented; but also of which they have an adequate knowledge to enable the masses to exercise control in every question where decision-making is of a personal or intellectual character, since the decision-makers and administrators may make a mistake and sometimes even may be misguided.

Unfortunately, it always was, and still is, easier to analyse the past than to foresee the future. We know and perhaps increasingly understand what has *happened*, why and how, in the past 25 years. But we can hardly know exactly beforehand what *will* happen in the economy in the next 25 years. Yet, we know what we want: *to complete* the building up of socialism. And we also see the main directions to be followed in our social and political actions:

1. Economic efficiency should be increased by raising the technical level of productive forces at a rate which amounts to "keeping pace" in respect of technology with the developed countries. This can be a realistic objective within the given framework of reproduction. It requires giving the efficient enterprises greater possibilities for quick growth and suppressing gradually the activities which bring a loss.

2. The spreading of new technologies should be increasingly *promoted* in all branches of the economy. The main guide-line in investment policy should be the technical and organizational modernization of the industrial basis. Rapid development should be secured for the industries which are the carriers of new technology, which can be best utilized for our purposes and for which there are sufficient resources in the economy.

3. The growth of the "tertiary sector", the infrastructure and the services should be *accelerated*. In this way, it will be possible to attain an increasing performance of the productive sphere and its better utilization, to create a better foundation for public welfare and also to open up a new market to help economic growth.

4. *Participation* in the international division of labour should be intensified and the still existing remnants of autarky gradually abolished. Without giving up national independence, we should promote the development of a common CMEA market and of a common monetary system, the efficiency of coordinating the national economic plans and the expansion of international industrial cooperation. The advantages to be derived from the international division of labour should be exploited also through economic relations with the countries of the non-socialist world.

5. While preserving the level attained in national economic organization, we should stimulate increased local *initiative* both in enterprises and local councils. What is needed is greater efficiency in management and increasingly democratic control in enterprises. In the life of councils, the requirement is democratic self-government in local matters and the securing of the unity of the state. A decisive part of economic reserves is to be found in the cells of the economy and can, therefore, be exploited only there.

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The source of the power of our people engaged in building up socialism is and will be also in the future the firm belief in the idea and the practical way of handling the problems of this building activity; the internationalist spirit in which we strengthen the links of international communism, and Soviet—Hungarian cooperation; and the fact that with the brotherly socialist countries we constitute a firm and unified world system.

НАШИ ПУТИ, ЦЕЛИ, ПРИНЦИПЫ В ЗЕРКАЛЕ ДВАДЦАТИ ПЯТИ ЛЕТ

Р. НЕРШ

Автор — секретарь Центрального Комитета ВСРП — в своей статье останавливается на основных чертах и уроках развития Венгрии после ее освобождения и на важнейших задачах предстоящих лет.

Довоенная Венгрия, хотя и располагала несколькими современными промышленными отраслями и предприятиями, все же в целом относилась к экономически слабо развитым странам, и основной ее экономической базой было сельское хозяйство. В жизни страны решающее изменение принесло освобождение от двадцатипятилетнего господства реакции и фашизма. Последующие три года прошли под знаком выбора: как во внутренней, так и во внешней политике надо было сделать выбор между социалистической или же капиталистической западной ориентацией. В экономической политике же представлялся следующий выбор; опираться ли на капиталистические займы или же на собственные силы. К середине 1948 года эти вопросы решились: страна безоговорочно ступила на путь социалистического строительства.

За прошедшие с тех пор более чем два десятилетия сложились новые производственные и классовые отношения. Национальный доход на душу населения значительно возрос и составляет сегодня около 650 долларов по сравнению с довоенными 200 долларами. Результаты могли бы быть еще больше, если бы нам удалось избежать те политические и экономические ошибки, которые в 1954—56-ых годах привели к кризису в руководстве.

Основной источник результатов — это осуществление общественной организованности и развитие народнохозяйственного планирования. Нам удалось мобилизовать ресурсы рабочей силы страны, значительно увеличить накопление, индустриализировать национальное хозяйство. Венгрия превратилась в промышленную страну с высокой долей занятых в промышленности. Неблагоприятное положение в области производительности труда указывает на одну из важнейших задач, предстоящих нам решить.

Одним из важнейших результатов нашей экономической политики является обеспечение полной занятости. Сегодня уже иссякают наши резервы рабочей силы, и поэтому наряду с аспектами социальной политики и в этой области необходимо в усиленной мере реализовать экономические соображения, усилить тенденцию передвижения рабочей силы в благоприятном направлении.

Рост реального дохода рабочих и служащих в два с половиной раза и широко развернувшееся государственное социальное обеспечение существенно повысили жизненный уровень населения при значительном сокращении различий в доходах.

Характерной чертой нашего развития является процесс урбанизации, от которого отстало развитие жилищного фонда, сильно пострадавшего во время войны. Жилищный вопрос — один из наиболее серьезных социальных проблем страны.

Важнейшие уроки прошедших 25 лет заключаются в следующем:

1. Отклонение от общих принципов социалистического строительства и недооценка национальной специфики в равной мере ведут к политическому краху.

2. Социалистическая революция не приводит сразу к скачкообразному развитию производительных сил.

3. Социалистическое хозяйство ни в отношении системы своих учреждений, ни по применяемым методам не является статичным.

4. Развитие социалистического хозяйства имеет разграниченные этапы, в соответствии с которыми следует определять (изменять) экономическую политику и ее средства.

5. Нельзя и невозможно долго следовать по пути автаркии, необходимо перейти к принципу открытого национального хозяйства.

6. В результате социалистического развития изменяются общественные требования, предъявляемые к руководству предприятиями. Это значит, что требуется новый тип профессионального хозяйственного руководителя, несущего политическую ответственность.

7. Политическая стабильность, благоприятная политическая атмосфера — это тоже экономические факторы, в силу чего требуется развивать социалистическую демократию.

Автор важнейшими экономическими задачами предстоящего периода считает повышение экономической эффективности, поощрение технического развития, развитие отраслей обслуживания, усиленное участие в международном разделении труда, а также усиление местной инициативы и самостоятельности.

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И. ФРИШШ

НЕКОТОРЫЕ СООБРАЖЕНИЯ О ПЛАНИРОВАНИИ НА 15 ЛЕТ ВЕНГЕРСКОГО НАРОДНОГО ХОЗЯЙСТВА

Можно ли составить реальный народнохозяйственный план на долгую перспективу? — Равнозначно ли признание того, что социально-экономическое развитие развитых капиталистических и развитых социалистических стран содержит много сходного, принятию теории конвергенции? — Каким поучением служит опыт экономической политики Венгрии за последние 25 лет для дальнейшего развития народного хозяйства? — Как быстро может расти благосостояние? — Каким уроком служит победа Советского Союза в Великой Отечественной войне как результат сосредоточенных усилий? — На каких исходных расчетах строится долгосрочный план? — Как продолжать работу по долгосрочному планированию? — От чего зависит успешное выполнение долгосрочного плана? — Автор в своей статье стремится дать ответ на эти вопросы.

Начнем с начала

Можно ли составить реальный народнохозяйственный план на долгую перспективу — то есть по меньшей мере на десять, но, скорее, на пятнадцать или двадцать лет? А если можно, нужен ли он, и для чего?

Не так уж просто ответить на эти вопросы, но я все же попытаюсь.

Возьмем первый вопрос. Можно ли? В настоящий момент мы работаем над составлением нашего 15-летнего народнохозяйственного плана на период 1971—1985 гг. Мы надеемся, что нам удастся довести это дело до конца, но многое нам еще неясно. Мы стараемся учиться на нашем прежнем опыте и отчасти на опыте других. К сожалению, этот опыт не так уж радужен.

Мы сами впервые пытались разработать долгосрочный план десять лет тому назад. Мы составили его на период 1961—1980 гг. Над ним работали Госплан ВНР, более дюжины комиссий и масса специалистов. И действительно, уже к 1961 году был составлен план в общем виде; в 1962 году его детализировали, а в 1963 году — установив, что были взяты слишком высокие темпы развития — в него внесли поправки. Затем эта работа, отчасти из-за появившихся со временем сомнений, была прервана.

С тех пор, однако, прошла почти половина периода 1961—1980 гг. Что показывает сопоставление наметок того плана с действительностью? Приведу несколько примеров. Согласно разработанному тогда плану, следовало еще в довольно большой мере повысить добычу угля. Было запланировано гораздо большее потребление энергии, чем это оказалось необходимым. Относительно оправдал себя план по металлургии, но совсем нет — по машиностроению. Развитие нашего сельского хозяйства далеко отстало от предполагаемого.

Это, конечно, не очень обнадеживающие итоги. Другие страны-члены СЭВ, предпринявшие одновременно с нами попытку перспективного плани-

рования, тоже не могут гордиться лучшими результатами. Не подтвердился по значительной части показателей на 1970 год и план СССР на период 1961—1980 гг., принятый в октябре 1961 года XXII-м съездом КПСС. (Согласно этому плану, например, к 1970 году Советский Союз должен превзойти по производству продукции на душу населения — в том числе сельскохозяйственной — США, материально все должны быть обильно обеспечены).

Первые наши усилия, таким образом, чего греха таить, увенчались довольно пестрыми и не совсем удовлетворительными результатами. По какой причине? Этого мы не проанализировали — по крайней мере, научно, нет. Зато, мне кажется, удалось выявить крупный недостаток нашего планирования, в первую очередь, наших пятилетних планов, в двух взаимосвязанных чертах применявшейся методики: в отраслевом подходе и в отсутствии концепции.* Но именно при помощи этого метода пытались мы построить и наш двадцатилетний план. Поэтому, очевидно, в этом следует искать хотя бы одну из причин нашей неудачи.

Очевидно и то, что, раз уже опознав свою ошибку, мы располагаем гораздо большими возможностями для избежания их повторения. Я говорю только о возможности, а не об уверенности в этом. Наш исторический опыт свидетельствует о том, что как отдельные лица, так и коллективы склонны повторять вновь даже уже раз осознанные ошибки. Когда сейчас при Госплане были снова организованы комиссии для подготовительных работ по долгосрочному планированию, — об этих комиссиях далее еще будет идти речь— было проявлено стремление к устранению отраслевого подхода. Этого не удалось достичь полностью. Не беда, это еще можно будет исправить. К разработке концепции мы еще не подошли, но готовимся к этому. Учета этих двух аспектов, вероятно, еще недостаточно для свободного преодоления препятствий в долгосрочном планировании, — о них еще мы будем говорить — однако, в нем все же содержится обнадеживающее обещание реального плана. Далее мы увидим, что эту надежду подтверждают и другие аргументы.

На первый наш вопрос, таким образом, можно ответить с некоторым оптимизмом, — а на сегодняшнем этапе развития человеческого общества мы не можем обойтись без него, — по всей вероятности нам удастся построить реальный 15-летний народнохозяйственный план. А теперь посмотрим второй вопрос: нужен ли он и для чего?

На этот вопрос уже многими были сформулированы более или менее совпадающие, убедительные ответы. Но если к ним внимательно прислушаться, то все же можно расслышать некоторую двойственность в трактовке. Полного соответствия все же нет. Например, *Г. Ковач* пишет: «Долгосрочный

* См.: [1]. Аналогичные проблемы в связи с практикой планирования рассматривались и в СССР еще во второй половине пятидесятых годов. Дискуссия между Сорокиным и Бором цитирована Тамашом Морвой в учебнике «Народнохозяйственное планирование и управление» [2].

план — это стратегическая программа политики и экономической политики партии и правительства. Цель его разработки — обеспечить прочную перспективу и соответствующую ориентацию к разработке среднесрочных планов" [3]. Согласно *Т. Морве:* «Цель пятнадцати-двадцатилетних планов заключается в разработке перспективных направлений развития, в выделении прочных краеугольных камней в развитии производства, решающим образом определяющих направление и характер развития» [4]. *И. Хетени* формулирует следующим образом: «Имеются процессы большого значения, и изучение некоторых из них, а также определение направления и очередности их развития возможно только на основе согласованных, долгосрочных перспективных тенденций (плана)» [5]. А согласно *Й. Дречину:* «Долгосрочный план — это всесторонние, согласованные (консистентные) соображения относительно перспективных тенденций общественного, политического и экономического развития, назначение которых состоит в ориентации сознательной общественной деятельности (решений), актуальной в ближайшем будущем, на удовлетворение объективных требований дальнего будущего и на достижение общественных целей относительно дальнего будущего» [6].

Здесь мною были сопоставлены не противоречащие друг другу соображения. Двойственность трактовки звучит подчас из той же самой формулировки, хотя и с различной интонацией. Политическая программа и ориентация, план и тенденция. За этими формулировками таятся два вопроса. Первый из них: при неопределенности большого числа факторов, влияющих на формирование развития, можно ли установить устойчивую перспективу? Второй вопрос: насколько в состоянии мы сознательно воздействовать на развитие, содержащее массу неопределенных моментов.

Это, по существу, вопросы одного корня. За обоими скрываются те же сомнения. Где можно провести границу между объективными факторами, общественными силами, не зависящими от нашей воли, на которые центральное высшее и внешнее руководство может воздействовать лишь в незначительной мере или совсем не может воздействовать, и влиянием сознательного центрального управления, формирующим экономическое развитие? Иными словами: в какой мере являемся мы активными преобразователями нашей экономической (и, конечно, не только экономической) судьбы, и в какой мере — лишь пассивными созерцателями ее формирования? Или еще иначе: где можно провести межу между общественным развитием, происходящим под влиянием стихийных сил и под воздействием плана? Это фундаментальный вопрос, широко отраженный и в международной литературе, главным образом, в экономической, философской и социологической.*

* Здесь нет ни места, ни необходимости обширнее представить эту литературу. Но о некоторых ее чертах, связанных с планированием, все же стоит упомянуть. Ввиду того, что в буржуазной экономической науке планирование играет меньшую и только в последнее время завоеванную или признанную роль, понятно, что там, по крайней мере до последнего

С учетом этого на первый вопрос ответ дают две специфические черты долгосрочного плана. Первая из них состоит в том, что пятнадцатилетний план не может быть настолько детальным и категоричным, как пятилетний. Это было нам известно уже и при подготовке нашего первого долгосрочного плана. Тогда я писал: «. . . в пятнадцатилетнем плане в гораздо большей мере, чем в пятилетнем, следует учесть не только данные достижения техники, но и *направления* развития науки и техники, и *ожидаемые* достижения их развития.

А так как очевидно и то, что развитие науки и техники, а также его темпы можно предвидеть, представить на пятнадцать лет вперед лишь приблизительно и в общих чертах, явным является и вывод, что пятнадцатилетние планы не могут иметь в такой мере директивный характер, как пятилетние или же годичные планы. Они должны сохранить гораздо большую свободу для последующих изменений, возможных перестановок; должны быть в большой мере гибкими» [11].

Вторая специфическая черта заключается в том, что пятнадцатилетний план предоставляет большую возможность для реализации концепции экономической политики, — если таковая имеется (к этому мы еще вернемся), — чем планы с более короткой перспективой. Исходные данные: то, что уже происходит, что уже начато или относительно чего уже хотя бы принято решение, связывает руководителям руки. Относительный вес этих исходных условий, естественно, со временем сокращается. Один из выдающихся советских предшественников научного планирования, *Г. А. Фельдман* уже свыше сорока лет тому назад писал: «чем длиннее сроки, на которые мы планируем народное хозяйство, тем мы свободнее от исходного положения» [12].

Второй вопрос — как я уже это отметил, и как это видно из только что сказанного, — тесно связан с первым. Наука давно ответила на него. На развитие мы можем сознательно воздействовать в такой мере, в какой мере

времени, более характерным был пассивный подход. В некоторых странах за планом, вообще, не признавалось право на существование, а только за предвидением, прогнозом. В социалистической же экономической науке прогноз признавался лишь как важное подсобное средство и дополнение к директивному планированию. «Прогноз отвечает на вопрос: чего можно ждать от будущего, что осуществится наверняка, независимо от воли лиц, принимающих решения? . . . Система показателей, не отвечающая требованию (адрессованности), не представляет собой плана, программы действий, а является только прогнозом.» (Я. Корнаи [7]). Или: «*Прогноз определяет то, что может произойти и при каких условиях, а план намечает, что должно произойти и кому и что для этого надо* сделать» (Н. Лебединский [8]). В последнее время, однако, по причинам, затрагиваемым мною позже, и в социалистической литературе начинает распространяться иная трактовка. Согласно советскому академику В. Трапезникову: «Предвидеть пути научно-технического прогресса не только интересно, но и необходимо . . . , план ГОЭЛРО, планы развития экономики страны, начиная с первой пятилетки — все это прогнозы развития важнейших отраслей народного хозяйства» [9]. Ю. Белик, И. Конник и другие резко нападали на такое толкование, встречающееся не только у Трапезникова. — В статье чешского экономиста Отокара Лачины [10], как и в статьях других чешских и словацких экономистов, долгосрочный план и долгосрочный прогноз фигурируют в более или менее тождественном смысле.

нам известны его внутренние взаимосвязи, законы, пружины движения, возможности, способы воздействия на него. Познать их — это задача науки, научное деяние. Осуществить это научное деяние, раскрыть внутренние взаимосвязи движения нашего общества и, опираясь на познанные законы, сознательно управлять движением — вот наша задача. «Главный недостаток всего предшествующего материализма . . . — писал Маркс в 1845 году — заключается в том, что предмет, действительность, чувственность берется только . . . в форме *созерцания*, а не как *человеческая . . . практика* . . . В практике должен доказать человек . . . действительность и мощь . . . своего мышления . . . Совпадение изменения обстоятельств и человеческой деятельности может рассматриваться и быть рационально понято только как *революционная практика*» [13].

Долгосрочный план и теория конвергенции

Как попал пест в ложку?

Долгосрочный план — это наше внутреннее дело, представляющее важный общественный интерес. Это — важный вопрос и для других социалистических стран. А теория конвергенции?

«Борьба против новых тенденций политики расшатывания — как, например, теорий конвергенции — и воззрений, направленных на сознательное разложение марксизма, — очень важная задача.» Так сказано в недавно изданных основных принципах научной политики ВСРП [14].

Почему же смешиваю я эти две столь отдаленные друг от друга вещи?

Потому, что один из основных вопросов долгосрочного планирования: могут ли служить нам примером наиболее развитые капиталистические страны? Можем ли мы в нашем перспективном плане поставить целью достижение состояния, уже осуществленного в той или иной из наиболее развитых капиталистических стран или, возможно, во всех них в какой-либо области, и, если да, в какой?

Однако я не хочу ввести читателя в заблуждение, — догадавшись об этом, он не простит мне этого, — представляя этот вопрос в таком свете, как будто бы у какого-либо — плановика или простого человека улицы — имеется сомнение в том, что, по крайней мере, в определенных областях мы хотим достигнуть именно того, что имеет место в наиболее развитых капиталистических странах. Как раз в этих областях нам хотелось бы достигнуть этого как можно скорее. Однако, не витая в облаках, а оставаясь на почве действительности, мы все же смиримся с тем, что, например, обеспеченность легковыми машинами, имеющаяся сегодня в Соединенных Штатах, — но мог бы я привести и более скромный пример, — будет достигнута нами лишь в рамках долгосрочного плана.

Но не продали ли мы этим свою душу дьяволу, то есть теории конвергенции? Ведь глашатаи теории конвергенции утверждают, что развитые капиталистические и развитые социалистические страны имеют родственную природу и прогрессируют в одном направлении. В чем различается наша позиция от их позиции, и которая из них правильна?

Рассмотрим этот вопрос поближе!

У. У. Ростоу, один из отцов теории конвергенции, открыватель стадий экономического развития, не скрывал цели своего изобретения: противопоставления не нравящемуся ему марксистскому объяснению истории в качестве альтернативы новой любезной ему теории [15]. Каждая страна, говорит он, должна пройти через пять, следующих последовательно друг за другом стадий экономического развития. Он не бахвалится этим, но его книга убедительно свидетельствует, что он не читал, не знаком с Марксом. Это очевидно и неважно для него. Для него важно доказать, что социалистическая революция не внесла какого-либо существенного нового момента в экономическое развитие России, что русский рывок («take-off» — у Ростоу начало современного экономического развития) произошел аналогично канадскому и одновременно с ним; пятилетки следует рассматривать как следующую стадию развития, и русский вопрос, руский случай точно так же умещается в широких рамках анализа стадий развития, как и американский [16]. Говоря проще: совершенно излишне было совершать такое дикое и кровавое дело, какой была социалистическая революция, ведь экономическое развитие происходит все равно одинаково — революционным путем или без революции — и прогрессирует в одном направлении в социалистических и капиталистических странах.

Совершенно излишне мне здесь критиковать теорию Ростоу, явно построенную на впечатлениях, аналогиях, а не на глубоких исследованиях, — это сделано уже авторитетными буржуазными экономистами, так, например, *Ф. Перру*, *М. Шинохарой*, *С. Кузнецом*.* Теория конвергенции такого типа довольно прозрачна, тут не трудно выявить ее ослиные уши. И если все же она пользуется успехом, и даже большим, причем не только в кругу заклятых врагов коммунизма, то это объясняется, по меньшей мере, тремя причинами. Во-первых, она представляла собой теорию, завораживающую своей простотой и даже научной непритязательностью, показывающей многое в новом свете, хотя и имеющем довольно-таки неопределенный спектр. Во-вторых: эта теория успокоительным для обывателей образом опровергала этого чертовского Маркса. В-третьих: теории можно было поверить и потому, что у нее имеются достоверные устои, подтверждаемые опытом наших дней. В ней говорится о ведущих секторах рывка и различаются первичные, основные секторы роста; дополнительные секторы роста и зависимые от них. Действитель-

* Об этой критике см. [17].

но, на определенных этапах развития отдельные экономические секторы играли выдающуюся роль в развитии отдельных стран. Затем Ростоу говорит: «Как рывок, так и перспективный рост требуют того, чтобы общество создавало не только большое количество капитала для покрытия износа и содержания имеющихся фондов, для жилищного строительства и уравновешенного удовлетворения потребностей, а также для покрытия других общих издержек, но и высокопроизводительные, быстро растущие, основывающиеся на новых производственных методах первичные секторы" [18]. Это действительно так. Достаточно вспомнить лишь внезапный скачок современной автомобильной промышленности, или химической, включая производство синтетических материалов и волокон, или же техники связи и электроники. Эти утверждения правильны и удачны, несмотря на то, что Ростоу всю свою теорию ставит на службу антикоммунизму и антисоветчины, холодной войны и гонки вооружений. И даже с точки зрения нашей темы стоит указать, что его правильные и удачные положения заслуживают внимания при долгосрочном планировании.

Дж. К. Гэлбрейт — один из наиболее талантливых представителей конвергенции. «Среди наименее привлекательных слов в словаре деловой жизни — говорит он — можно найти такие слова, как планирование, правительственный контроль, государственная поддержка и социализм. Однако начни изучать, какова их вероятность в будущем, и увидишь, в какой поразительной мере осуществились они уже до сих пор» [19]. Гэлбрейт, в отличие от Ростоу, не проповедует антисоветчины, холодной войны, роста вооружений. Он констатирует, что конвергенция двух систем проявляется в крупных масштабах современного производства, требующего большого капитала, сложных производственных технологий и организации. Из этого, по его мнению, следует, что в капиталистических странах также необходимы контроль над ценами, исключение рынка, планирование, полная самостоятельность крупных предприятий, государственное регулирование совокупной суммы спроса, государственная организация соответствующего обучения, подготовки рабочей силы и т. д. «Конвергенция, таким образом, проявляется — констатирует он — во всех существенных точках двух, на вид различных промышленных систем. Это — исключительно удачная вещь ... ибо она освобождает нас от того представления, что непримиримые различия неизбежно должны привести к столкновению» [20].

Политическая позиция Гэлбрейта гораздо прогрессивнее, чем Ростоу, однако его теория вопреки этому или именно поэтому может также служить политике расшатывания. Но прав ли он? Наверняка неправ, ставя знак тождества между социалистическими и развитыми капиталистическими странами. Но без сомнения прав, утверждая, что крупные капиталистические предприятия и капиталистические государства должны заниматься планированием. (Это, между прочим, уже более пятидесяти лет назад было установлено Лениным относительно крупнейших капиталистических монополий,

— о государственно-монополистическом капитализме еще нет, потому что он в то время делал лишь первые шаги). Прав он и тогда, когда находит много аналогичных черт в организационных формах, в ценообразовании, в организации спроса и предложения и в прочих вопросах.

Не принимая, таким образом, теории конвергенции, мы можем принять к сведению — что между прочим, явствует из данных и цифр общественно-экономического развития развитых капиталистических и развитых социалистических стран — между ними, действительно, имеется много сходного. А как могло бы это быть иначе? Для создания материального богатства в нашем распоряжении имеются те же, или более или менее сходные средства. «При наличии производительных сил приблизительно одного уровня развития материально-техническая сторона процесса экономического развития в силу необходимости имеет схожие черты даже при различии производственных отношений» — пишет *Рипп* [21]. Более того: и в производственных отношениях двух систем должны иметься схожие черты, даже если основные производственные отношения — отношения собственности — коренным образом отличаются друг от друга. В самой богатой и индустриально наиболее развитой в мире стране, в Соединенных Штатах Америки производительные силы не смогли бы достигнуть своего нынешнего исключительно высокого уровня, если бы вместе с ними не развились соответствующие методы и средства организации, управления, планирования, учета, сбыта, техники информации и т. п. Все это отчасти неразрывно связано с капиталистической собственностью и эксплуатацией, отчасти же независимо от них представляет собой наиболее подходящие из сложившихся до сих пор форм движения для развития в высокой степени обобществленных развитых производительных сил. Поэтому утверждение Маркса о том, что «страна, промышленно более развитая, показывает менее развитой стране лишь картину ее собственного будущего» [22] — справедливо, mutatis mutandum и в том случае, если более развитая страна — капиталистическая, а менее развитая — социалистическая. Соединенные Штаты — самая агрессивная в мире страна, союзник и опора наиболее реакционных и прогнивших режимов, организатор и финансовый источник контрреволюционных путчей во всем мире, разжигатель кровавых войн.* Все это, конечно, не случайно сочетается с тем, что США — самое богатое в мире государство — однако не исключает и того, что даже в ряде отношений оно может служить нам ориентиром при составлении наших долгосрочных планов.

* *Дж. М. Гиллмэн*, дающий в своих произведениях марксистский анализ американского капитализма, уже в своей книге, опубликованной в Нью-Йорке в 1964 году, указал на тесную связь между американским процветанием, ростом вооружений и войной: «. . . в годы после корейской войны . . . потребовались огромные и растущие суммы государственных расходов для поддержания производства и занятости . . . сегодня уже невозможно сократить эти расходы . . . даже возможность существования самого строя висит на нитке, протянутой над пропастью» [23].

Если уже более полувека назад огромные капиталистические монополии не могли обойтись без планирования, то с развитием государственно-монополистического капитализма оно должно было распространиться на экономику стран в целом.* Этим и деятельность сросшегося с монополиями государства распространяется на новые сферы: с одной стороны, на сферу планирования, а с другой стороны, на все то, что необходимо для осуществления плана.** Следует, однако, отметить, что капиталистические страны при нынешнем уровне организации не способны разрабатывать долгосрочных, общенациональных планов, и только некоторые из них (Великобритания, Франция, Норвегия, Голландия, Соединенные Штаты, Япония) составляют определенные прогнозы.*** Таким образом, при выборе целей развития, а также способов и средств их достижения в наших перспективных планах большую помощь может оказать нам изучение развитых капиталистических стран, однако в отношении секрета разработки долгосрочного плана из опыта этих стран можно почерпнуть весьма немного.

Прошлое и настоящее — тренд

В учебнике «*Народнохозяйственное планирование и управление*», содержащем работы 18 наших ведущих экономистов, можно прочесть следующее замечание *Г. Ковача:* «В области долгосрочного планирования мы еще не располагаем удовлетворительным опытом. Это уже само по себе мотивирует формулировку в дискуссиях весьма отличающихся друг от друга позиций»

* «Современные национальные общества — писал уже несколько лет назад Гэлбрейт — отличаются друг от друга не тем, имеют ли они план, а тем, в какой мере признают они существование плана, тем, в какой форме выражают они свои цели, и методами, применяемыми ими для достижения целей плана» [24].

** Две характерные иллюстрации, как ширится деятельность государства: 1) «В Соединенных Штатах уже не требуется искать научного обоснования очень обширному проявлению правительственной инициативы. Одним из мерил сферы влияния этой инициативы является доля валового национального продукта, контролируемая и используемая государством. В Соединенных Штатах она составляет приблизительно 20% валового продукта» [25]. 2) «Японский пятилетний план основывается на системе частных предприятий. Факт, однако, что способность добровольного приспособления частного предприятия имеет предел, и поэтому правительство вынуждено применять соответствующие меры в интересах выполнения плана. Так обстоит дело: (а) в сырьевых отраслях промышленности, (б) относительно объектов, строительство которых частными предприятиями затруднительно, как, например, дорог, железных дорог, портов, инженерных сооружений для промышленных центров и т. д., (в) в отношении улучшения оросительной системы, озеленения и прочих услуг по благоустройству, а также жилищного строительства для малоимущих, (г) в области обучения, в особенности высшего, а также для облегчения составления сложных экономических статистик». (Из издания Бюро экономического планирования японского правительства цитируется по книге югославского экономиста *Бичанича* [26].)

*** По мнению *П. де Вольфа*, директора голландского Центрального планового бюро: «Голландия не уделяет большого внимания долгосрочному планированию и не располагает всеохватывающими долгосрочными планами» [27] и «Долгосрочное планирование ограничивается, по существу, государственным сектором и капитальными вложениями, требующими длительной подготовки». (Там же, стр. 13). — *Лейф Юхансен*, опубликовавший в 1960 году модель, на основании которой были разработаны прогнозы экономического развития Нор-

[28]. Здесь Ковач ссылается на статьи *Л. Чапо*, *Д. Цукора*, *А. Балашши* *А. Мариаша*, *А. Пальди*, *М. Манделя* и *И. Хетени*, опубликованные в номерах «Кэзгаздашаги Семле» за 1965 и 1966 гг.

С тех пор дискуссия продолжается с участием вышеупомянутых, а также других экономистов — из числа которых я должен выделить *Ф. Яноши*, — но цитируемое выше замечание Ковача имеет силу и сегодня. И все же в Венгрии за последние два года в области долгосрочного планирования народного хозяйства произошло существенное изменение. В 1967 году были начаты широкие работы по подготовке народнохозяйственного плана на 1971—1985 гг. Значительную часть этой работы, естественно, в силу своих задач выполняет Госплан. Однако характерной чертой этой работы, отличающей ее от обычной плановой работы, является как раз участие в ней широкого круга негоспланов ских специалистов. Для обоснования и проверки своей работы Госплан организовал 9 комиссий, подготавливающих, разрабатывающих отдельные важные составные части и вопросы пятнадцатилетнего плана. В комиссии № 1 рассматриваются вопросы жизненного уровня и общественного воспроизводства рабочей силы, в комиссии № 2 — вопросы промышленности, № 3 — строительства и промышленности строительных материалов, № 4 — сельского хозяйства и пищевой промышленности, № 5 — транспорта и техники связи, в комиссии № 6 — развития международных связей и внешней торговли, № 7 — вопросы территориального размещения производительных сил. Деятельность этих комиссий координируется и поддерживается экономической (занимающейся синтетическим анализом и методологическими вопросами) комиссией № 8, и, наконец, из председателей восьми комиссий, с привлечением нескольких экономистов-теоретиков и хозяйственных руководителей, под руководством председателя Госплана состоит комиссия № 9 — Консультационная Комиссия.

В качестве первой своей задачи участники этой работы поставили перед собой целью проанализировать прошлое. Ими был выполнен анализ, главным образом, 17 лет в период между 1950—1966 годами, отчасти, однако, распространенный и на 1949 год, с одной стороны, и на 1967—68 годы, с другой стороны. К весне 1969 года был подготовлен сводный анализ, обобщающий ряд частных анализов. В нем содержится множество заключений, которые следует учесть при разработке долгосрочного плана. Трудно выделить из этого множества важных положений самое важное, и все же, мне кажется, что нам особенно надо будет учесть следующее: «По своей порядковой величине

вегии до 1990 года, в позапрошлом году сделал сообщение о работах, проделанных по сопоставлению рассчитанного на основании модели и действительного развития, заявив заодно: «. . . об окончательных и категорических наметках по экономике Норвегии к 1990 году нет и речи. И разработка их маловероятна» [29]. Модель служит для того, чтобы правительство могло опираться на нее при принятии относящихся в его компетенцию экономических решений и при составлении четырехлетних планов.

более высокий темп развития реально не был возможен. В то же время более продуманной экономической политикой и целенаправленным хозяйственным управлением, более осмотрительным использованием возможностей, прежде всего, путем возможного повышения эффективности в сфере производства и технического развития можно было бы обеспечить значительно более быстрое развитие» [30].

Такое подытоживание опыта прошлого предъявляет к будущему три больших требования: 1) нам требуется более продуманная, научно обоснованная экономическая политика; 2) мы должны улучшить хозяйственное управление; 3) нам необходимо повысить эффективность нашей экономической деятельности, прежде всего, в сфере производства и развития. В этом случае мы сможем достичь гораздо больших, чем в прошлом, темпов развития. По крайней мере, первое и третье требования можно адресовать непосредственно к перспективному планированию. Что касается второго требования: в начале 1968 года нами были сделаны существенные шаги по направлению улучшения хозяйственного управления, и начинающаяся в 1971 году четвертая пятилетка должна быть использована нами для его дальнейшего совершенствования.

Наиболее темным периодом нашей экономической политики было начало 1950-х годов, точнее, 1951, 1952 годы и первая половина 1953 года. Об этом говорилось уже много раз, что в это время проявлялся субъективизм, волюнтаризм; как в области капитальных вложений и производства, так и в отношении повышения жизненного уровня мы ставили перед собой цели, осуществление которых далеко превышало наши силы и возможности. Когда стало ясным, что одновременное осуществление всех наших целей совершенно невозможно, мы упрямо стремились — особенно в сфере капитальных вложений — выполнить задачи, которые сами по себе не были реальными. Все это привело к понижению жизненного уровня трудящихся и поколебало веру в правильность политики партии рабочего класса. Насильственные кампании коллективизации и борьбы с кулачеством вызвали протест в широких массах крестьянства и ослабили его союз с рабочим классом. За все это несколькими годами позже страна поплатилась контрреволюцией.

После завершения этого этапа, в конце июня 1953 года последовала не четкая, а шатающаяся из стороны в сторону экономическая политика, представлявшая органическую часть разлада, характерного для всей политической жизни [31]. Только после июля 1956 года начали развертываться и только к 1957 году развернулись условия создания научно обоснованной экономической политики. Но до этого дело не дошло. В качестве реакции на прежнюю неудачу и на наступившее за ней разочарование последовала экономическая политика, для которой, согласно вышеуказанному госплановскому сводному анализу, характерны были «многостороннее определение задач и неопределенное установление очередности и масштабов целей»;

ослабление по временам центрального управления и чрезмерные стремления к самостоятельности партикулярных сил.*

Вряд ли можно оспаривать, что все это должно было неблагоприятно сказаться на развитии венгерского народного хозяйства, и что при более благоприятных условиях темпы развития могли бы быть более высокими. Насколько выше? Это трудный вопрос. «Значительно более быстрые» — можно прочесть в процитированном тексте. Но в предыдущем предложении речь идет и о том, что «по своей порядковой величине более высокий темп развития реально не был возможен». И текст ссылается на несомненно имеющиеся и оказывающие тормозящее действие объективные причины, внутренние и внешние, на неразвитость международного сотрудничества, на относительную бедность нашей страны в сырье, вернее, на экономически неэффективные возможности его добычи и т. д. (Вопросом возможного темпа развития я должен заняться отдельно, здесь я упоминаю только о важнейших уроках из опыта нашего прошлого с точки зрения нашего будущего). И все это снова ставит нам затронутый в начале этой статьи вопрос: в какой мере являемся мы пассивными созерцателями и в какой мере сознательными преобразователями своей судьбы? Там я сослался на ответ науки, согласно которому «на развитие мы можем сознательно воздействовать в такой мере, в какой мере нам известны его внутренние взаимосвязи, законы, пружины движения, возможности, способы воздействия на него». Но здесь уже требуется более конкретный ответ. По-настоящему конкретный и бесспорный ответ, естественно, может дать только практика. Мы должны на практике доказать, можем ли мы и насколько ускорить темп нашего экономического развития. Однако и до тех пор, пока такое доказательство на практике нам удастся

* См. [30] — Но, по существу, об этом же: «. . . каждая хозяйственная и административная единица разрабатывает свой, представляющийся ей наилучшим план. . . . Однако эти планы нельзя обобщить в один народнохозяйственный план простым суммированием. Отдельным планирующим единицам известны их собственные потребности и преъявляемые им требования, но не известны *народнохозяйственные возможности*, имеющиеся в распоряжении ресурсы; их потребности невозможно только увязать, они не полностью дополняют друг друга. Таким образом, неизбежно своего рода затыкание дыр. Но есть беда и похуже. Что должно случиться — а при нашем нынешнем экономическом механизме это неизбежно, но может произойти и при других механизмах, — если их совокупные потребности в развитии превышают — и, возможно, на много — возможности, обеспечиваемые ресурсами общества? Должен ли в этом случае плановый орган сократить запросы каждого из них на равный процент? Это, наверняка, было бы неправильно, ведь какими правильными ни были эти цели сами по себе, для общества явно не может быть одинаково важным удовлетворение всех потребностей. Но кому следует принять соответствующее решение? Вероятно, все запросы могут быть обоснованы очень убедительно. Не остается ничего иного, как *торговаться*. Наверное, выигрывает тот, кто ловче торгуется. В результате же, как это показывает уже довольно большой опыт, получается распыление наличных ресурсов и сил, замедление развития, понижение его эффективности. Вот — последствие реализации *«отраслевого подхода»* [32]. Можно добавить, что речь идет не исключительно о венгерском явлении. Относительно советского примера я уже ссылался на статью Т. Морвы (см. прим. на стр. 19) Но можно привести пример и из капиталистических условий: «Стандартным примером современного плана развития является план капиталовложений . . . Но велика опасность, что такой план будет показывать все вещи одинаково важными. А ведь они неодинаковы. Крупные силы действуют против стратегической концентрации» [33].

(или не удастся), стоит этому вопросу уделить некоторые теоретические размышления.

Выдающимся произведением венгерской экономической литературы последних лет является изданная в 1966 году книга *Ф. Яноши* «Тренд экономического развития и восстановительные периоды» [34], исключительно богатая мыслями и возбуждающая новые мысли. Рассматриваемые в ней вопросы тесно связаны с проблематикой долгосрочного планирования. Автор исходит из бросающегося в глаза явления, — хотя до него это явление замечалось немногими, и еще меньше экономистов понуждалось им к размышлениям, — а именно: существования характерных для экономического развития трендов, имеющих удивительно постоянный характер. Тренды, конечно, дают только приблизительную тенденцию, но, что они существуют в экономическом развитии, по крайней мере, некоторых стран, убедительно показывается автором. Однако Яноши не останавливается на доказательстве существования этого поразительного и по существу им открытого явления.* Он строит модель, убедительно иллюстрирующую не только постоянство тренда, но и отклонения от него. И если даже это толкование и вызывает возражения, все же в нем имеются бесспорно правильные и достойные внимания мысли и положения.

Наступающее временами в некоторых капиталистических, и не в меньшей мере некоторых социалистических странах исключительно быстрое развитие, т. н. «экономические чудеса» объясняются им тем, что после вызываемых войнами или экономическими кризисами перерывов происходит или, по крайней мере, может произойти очень быстрое развитие, пока страна не достигает той ступени развития, которой она достигла бы в соответствии с трендом, характерным для ее бесперерывного развития. И тут очень быстрое развитие, как бы наталкиваясь на стену, внезапно приостанавливается и замедляется в соответствии с направлением тренда.

Экономическое развитие той или иной страны зависит от степени использования возможностей, кроющихся в рабочей силе — пишет Яноши. Степень экономического развития зависит в первую очередь от профессиональной структуры совокупной рабочей силы, то есть от ее членения по специальностям. Постоянность тренда экономического развития, по существу, обуславливается инерцией, стабилизирующей профессиональную структуру. Ее

* В последней книге *Э. Лундберга* имеется замечание, подтверждающее теорию Яноши о трендах и восстановительных периодах. В связи с графиком, изображающим рост валового национального продукта *Японии* после войны и экстраполяцию тренда межвоенного периода (1930—1963), он замечает следующее: «В 1953 году валовой национальный продукт приблизительно достиг довоенного уровня. Однако по сравнению с эктраполяцией тренда 4,3 процентного среднегодового роста между двумя войнами, данные 1953 года отстают от уровня тренда приблизительно на 50%. График вызывает глубокое впечатление какого-то громадного «экспансионного пространства» или же пропасти, таинственным образом как бы рвущей вверх кривую валового национального дохода до уровня его скачкообразного роста, наступившего после войны» [35]. Лундберг не продолжает этой мысли.

изменение является предпосылкой более быстрых темпов экономического развития. Как можно достигнуть того и другого? Ускорением подготовки рабочей силы, что, однако, возможно только посредством «неэкономичных» капиталовложений, учитывая, что из-за относительной неразвитости рабочей силы они используются лишь с низким эффектом и преждевременно изнашиваются. А осуществлять такие капиталовложения способно только — или главным образом — плановое хозяйство, сознательно мирящееся с низкой эффективностью в интересах ускорения развития. Ускорение экономического развития сверх определенного предела возможно только за счет «неэкономичных» капиталовложений.

Яноши — не историк народного хозяйства, но как раз его приведенные выше соображения явно противоречат господствующим в экономической истории мнениям о послевоенных «периодах восстановления». Наше наблюдавшееся в то время бурное развитие до появления книги Яноши мы приписывали исключительно преимуществу социалистической системы производства. Осуществление власти рабочего класса; проникновение его организаций в управление обществом; переход шахт, заводов, банков в собственность государства и централизованное государственное управление позволили, с одной стороны, увязать воодушевление, энтузиазм освободившихся из-под угнетения и террора, от ужасов войны масс с производственными возможностями, а с другой стороны, осуществить рациональную специализацию, слияние, управление, снабжение предприятий; устранить узкие места; использовать ранее созданные, но никогда еще не использованные полностью мощности; обеспечить работой могущих и желающих работать в невиданных до тех пор масштабах и обеспечить посредством всего этого скачкообразный рост продукции. Все эти положения, вероятно, не оспаривает и Яноши, но суть он видит не в этом, а в том, что как в социалистических, так и в капиталистических странах развитие, прерванное войной или по другой причине, после прекращения мешающего момента исключительно ускоряется до тех пор, пока это развитие, достигнув тренда, не преломляется, и подъем не спадает до уровня тренда. Изображение восстановительных периодов и трендов ряда стран показывает справедливость утверждений Яноши, представляя вероятным, что его теория — помимо приведенных примеров — справедлива и в общих принципах.

Однако же, утверждения Яноши относительно тренда развития социалистической Венгрии в силу природы этого вопроса опираются на слишком небольшое количество данных и слишком короткий отрезок времени. Если развитие может отклоняться от тренда на более или менее длительное время войнами или экономическими кризисами, то почему бы не могли влиять на него таким же образом возможные «кризисы» экономической политики? А если к тому же учесть, что в 1947—48 годы стали господствовать новые производственные отношения, и, таким образом, должна была изме-

ниться и крутизна линии тренда, можем ли мы с уверенностью утверждать, что в спаде темпа роста в 1952 году «несомненно проявились объективные закономерности экономического развития», то есть, что к этому времени закончился восстановительный период?

Далее: как установить предел, за которым ускорение развития возможно только за счет «неэкономичных» капиталовложений? А вдруг весьма значимого ускорения можно достичь и другими средствами? Яноши подчеркивает, что тренд — это не фатум. Он пишет и о том, что «линия тренда капиталистической Венгрии более полога, чем тренды других капиталистических стран . . . да и линия тренда социалистической Венгрии не поднимается так круто, как могла бы она расти в условиях планового хозяйства, лучше организованного, безупречнее отвечающего требованиям экономического развития» [36]. Последнее утверждение довольно-таки само собой разумеется. А вместе с ним и то, что сознательной деятельностью можно добиться усиления крутизны тренда.

Мы исходили из объективных закономерностей и пришли к необходимости сознательных человеческих действий. А средством сознательного согласования массовых человеческих действий в масштабах целой страны является план. И чем более длительный период избираем мы для планирования, тем менее связывают нас условия исходного положения, тем большей свободой мы располагаем. Поэтому настоящую возможность для желаемого и реально возможного воздействия на тренд, а заодно и осуществления правильных и смелых, лучших, чем до сих пор, соображений экономической политики, — если таковые имеются — представляет долгосрочный план. Мы должны использовать наш перспективный план и для повышения эффективности нашей деятельности в сфере экономики, в первую очередь, производства и развития.

В основу уже цитированной статьи *Г. А. Фельдмана* «*К теории темпов народного дохода*» заложено именно такое понимание плана. Это гениальное произведение — пожалуй, неповторимое сокровище всей литературы о планировании. «. . . *научно* проектировать то развивающееся социально-экономико-техническое целое, которое должна представлять советская страна на протяжении ближайших пяти- и десятилетий, без соответствующего научного метода, *как правило*, немыслимо», — писал он. И затем: «Нельзя себе представить *несложного метода* проектирования такого *сложного аппарата*, каким является народное хозяйство». Но так как «теории планирования народного хозяйства еще нет; она не создана» — он взялся со своей стороны продвинуть эту работу, убежденный в том, что «более или менее совершенное планирование народного хозяйства может быть осуществлено только на основе четко, математически формулированной теории, только тогда споры по планам могут быть сведены к принципальным установкам и целевым заданиям при полной уверенности в безошибочности расчетов» [37].

Как много такого знал этот человек уже более сорока лет тому назад, что нами — если мы, вообще, знали это — было позабыто, отчасти заново открыто лишь в последние годы и отчасти даже сегодня не всем известно! Он знал, что можно найти точное математическое выражение для многих фундаментальных, важных взаимосвязей, закономерностей экономики, и при этом в его исследованиях математика никогда не становилась самоцелью и не теряла связи с практикой советской действительности и развитых капиталистических стран.* Он указал на важность процента капиталов, сменяемых по моральным причинам, и на то, что хотя непрерывность в смене основного капитала для каждого предприятия в отдельности и невозможна, но в порядке *планового* регулирования можно установить чередование в обновлении отдельных отраслей и предприятий [39]. Он акцентировал внимание на таких показателях, как «эффективность использования капитала» (отношение вновь созданной стоимости к капиталу) и способность производственного аппарата к расширению воспроизводства (соотношение капиталов, требующихся для простого воспроизводства и расширения), и главную задачу плановых органов он видел именно в регулировании роста этих показателей [40]. Он открыл, что «чем выше эффективность тех капиталов, которые используются для производства экспортных товаров, по сравнению с теми капиталами, на которых основывается внутреннее потребление, тем значительнее будет рост потребления» [41].

Фельдман, таким образом, имеет в виду как обдуманную экономическую политику, так и целеустремленное хозяйственное управление и эффективность деятельности в сфере производства и развития. Настоящее его значение, вероятно, заключается даже и не в его утверждениях и положениях, а, по крайней мере, не в меньшей степени в том, что он знал и пропагандировал возможность планирования, развивающегося на подлинно научной основе, а таким образом, и все более научно обоснованного управления нашим обществом и экономикой, все более сознательного формирования нашей судьбы. И если внимательно прислушаться к самому важному уроку из анализа нашего экономического развития за прошедшие семнадцать лет, можно заметить, что прошлое обращается к будущему с тем же: у нас есть возможность делать наше дело лучше, чем до сих пор, и ускорить наше развитие. Используем же эту возможность!

* «Лишь изучение опыта индустральных стран и нашего опыта могут решить вопрос о правильном размере (доли рабочих масс во всем потреблении. — И. Ф.). Также по понятным соображениям не поддается математическому определению размер необходимых расходов на оборону страны» [38].

Как быстро может расти благосостояние?

Этот вопрос тесно связан с тем, насколько быстрыми могут быть темпы экономического развития. Этот вопрос я уже бегло затронул, заметив, что еще вернусь к нему. Действительно, это — один из фундаментальных вопросов долгосрочного планирования.

Я должен сказать, — и об этом уже говорили многие из занимающихся этим вопросом, — что здесь речь идет о росте и развитии не в обычном смысле слова. Легко сказать, на сколько процентов растет из года в год или за несколько лет выплавка стали или потребление молока. Легко установить и то, как изменилось число находящихся в употреблении легковых машин. В этом случае, однако, уже большее, чем в предыдущем примере, значение может иметь изменение качественного состава парка машин, и поэтому полученное число может уже менее достоверно отражать тенденцию роста. Если же рассматривать продукцию целой страны, миллионы различных изделий, производство которых изменялось в различной мере, причем некоторых из них было, вообще, прекращено, и в то же время появились какие-то другие товары, то очевидно, что измерение изменения становится сложной задачей и может быть решено лишь при определенных предположениях. Это тем более справедливо, чем более длительный период охватывается изменением. Но вместо того, чтобы детализировать эти трудности и возможные способы их устранения, я удовлетворюсь заявлением, что имеются методы, дающие приемлемые для планирования приближения, и приведу свидетелем одного из виднейших буржуазных специалистов в области экономического роста, *С. Кузнеца*. «Нельзя, — пишет он — чтобы проблемы сопоставимости в пространстве и во времени настолько одолели нас, что мы усомнились бы в возможности осмысленного и достоверного измерения национального продукта в расчете на душу населения. В конце концов имеется сильный коллективный элемент человеческих желаний и потребностей, который в эпоху современной экономики может быть переведен в систему широко распространенных понятий, средств, целей и ценностей хозяйственной деятельности» [41].

Естественно, экономический рост может измеряться весьма различными показателями, и из-за упомянутых проблем в его толковании целесообразно измерять его несколькими различными показателями. Наиболее распространенным мерилом является изменение производительности труда или родственного ему показателя: национального дохода, или же валового или чистого национального продукта, приходящегося на душу населения.

Исключительно интересно следующее замечание Яноши: «Если рассчитать средний рост производительности труда для периода, в начале и конце которого продукция достигает линии тренда, то мы всегда без исключения получим средней темп роста, располагающийся *в относительно тесных пределах, а именно между 1,7% и 2%*. Так, например, среднегодовой рост про-

изводительности в период между 1913 и 1963 годами составлял в Великобритании 1,7%, в Швеции и Бельгии 1,8%, во Франции и Норвегии 1,9%, в *Японии* и США — 2%» [43]. Яноши, отходя от только что приведенного предложения, констатирует еще, что в Японии между 1900 и 1960 годами рост производительности труда составлял 2,5% в год, и что в Соединенных Штатах «производительность труда . . . с 1870 года до наших дней, то есть приблизительно в течение целого века растет почти совершенно равномерными темпами ежегодно на 2%» [44]. А в связи с одним из приведенных для примера расчетов, в котором он предполагает, что производительность труда «ежегодно растет на 4%, то есть в течение 18 лет удваивается», он отмечает: «это — такая поразительная скорость, что подобный ей экономический рост — устойчиво, в течение длительного периода — никогда, ни в одной стране еще не наблюдался» [45].

Я цитирую Яноши обильно потому, что он считает максимальными гораздо более скромные темпы развития, чем остальные — буржуазные, да и социалистические — экономисты, исходящие, вероятно, из опыта более коротких и относительно благоприятных периодов. Директор голландского Центрального планового бюро уже упоминавшийся *П. де Вольф* пишет, например: «Теоретики много спорили о вопросе наиболее благоприятного темпа развития, однако их усилия еще не увенчались практическими результатами, . . . может быть, наиболее надежно установить максимальный размер роста производительности в 5%» [46]. *Клоппер Альмон* при помощи динамической модели межотраслевых связей разработал прогноз американской экономики до 1975 года, наметив темпы экономического развития, превышающие 5% в год.* По мнению чешского экономиста Отакара Лачины, согласно результату анализов, проделанных для прогнозирования перспективного развития чехословацкой экономики, она «в будущем сможет достичь роста национального дохода в среднем приблизительно на 5% в год» [48].

На основании анализа нашего развития в сводном докладе отмечается следующее: «*цели быстрого экономического роста* выполнялись среди явных противоречий . . . национальный доход в расчете на душу населения в 1967 году был приблизительно в 2,3 раза выше, чем в 1950 году, что для 17 лет в среднем означает темп роста в 5,2% в год. Этот темп существенно превышает темп роста между двумя мировыми войнами, составлявший прибл. 1,5—2%, но все же по сравнению с подъемом, последовавшим в развитых капиталистических странах, после второй мировой войны, его нельзя считать выдающимся и он отстает от среднего темпа стран-членов СЭВ. (В 1960—1967 гг. темп роста национального продукта в расчете на душу населения составлял в среднем по странам-членам СЭВ 7% в год, а по странам «Общего Рынка» — прибл. 4,5% в год. Согласно другому анализу, в 1937—1960 гг. по росту приходящегося на

* См. рецензию Андраша Броди на книгу К. Альмона [47].

душу населения национального дохода среди 24 европейских стран мы занимали 9-ое место). Зато положительным является ускорение темпа роста. За последние 10 лет темп роста составлял 5,6% в год, в то время, как между 1950—1958 гг. он достигал только 4,6% в год».*

2%, 4%, 5%, 7% — чего греха таить, довольно большие тут расхождения! А если еще прибавить к этому, что речь идет о среднегодовом, то есть соответствующем сложному процессу приросте. Национальный доход в расчете на душу населения при 2%-м росте ежегодно за 20 лет возрастает приблизительно в полтора раза, при 4%-м росте в год — в 2,2 раза, а при 5%-м росте в год — уже более чем в 2,6 раза. А если предположить, что социалистическая страна может достигнуть даже 8% среднегодового роста, то тогда уже можно говорить о росте национального дохода в 4,7 раза. Если же взять период в 100 лет, то при вышеупомянутых процентах национальный доход в расчете на душу населения возрос бы соответствующим образом в 7 1/4, раза, в 50 раз, в 131 раз и в 220 раз. А из этого следует, что нет никакого смысла рассчитывать большие проценты на сто лет, так как результатам невозможно придать какой бы то ни было рациональный смысл. Но ведь очевидно, что разработка столетнего плана и не имела бы никакого смысла, ведь из-за неопределенных моментов мы не в состоянии даже для гораздо более короткого срока предвидеть хотя бы основные черты его и проследить за их формированием. Именно поэтому разрабатываются нами 15-, а не 100- и даже не 30-летние планы. А за 15 лет наш национальный доход в расчете на душу населения не возрос бы до небес даже в случае ежегодного прироста в 8%, а лишь утроился бы, в результате чего приблизился бы по своей порядковой величине к североамериканскому. На основании наших нынешних познаний мы и это можем себе представить лишь ценой больших усилий.

Однако мы должны построить наш 15-летний план не на предположения, а на расчеты. Такие расчеты нами еще не производились, и, по существу, нам следовало бы удивляться, почему таковых мы еще не делали, даже если нам известно, что они не встречаются и в практике планирования других социалистических стран.** Мне представляется, мы можем поставить перед

* См. прим. 30.

** Действительно, в практике планирования социалистических стран не все ладится даже в развитом советском планировании. «Ошибки плана способны не в меньшей степени замедлить достижение желаемых целей, чем невыполнение плана отдельными предприятиями» — писали в своей статье, опубликованной в «Правде» 18 февраля 1967 года, *Б. Колпаков*, начальник ЦСУ РСФСР и *Ш. Камалетдинов*, начальник вычислительного центра ЦСУ РСФСР. Академик *Федоренко* в своей последней книге посвящает большое место критике экономической науки: До сих пор нет удовлетворительного ответа на вопросы практики планирования и управления хозяйственным развитием: умеем ли мы строить оптимальные централизованные планы, сравнивать варианты планов и выбирать из них лучшие . . . объективные экономические явления нередко игнорировались или недооценивались, научно обоснованный подход к решению народнохозяйственных задач подменялся чисто эмпирическим подходом. И далее: доминировавший в прошлом интуитивный подход к вы-

собой задачу выполнения таких расчетов и можем приблизиться к ней различными путями. Из числа факторов, влияющих на изменение производительности труда, далеко не все, но все же многие важны и поддаются числовому выражению и исчислению, причем *на народнохозяйственном уровне*, с учетом их вторичных эффектов. При этом следует использовать данные, которые если даже с затруднениями, но все же можно приобрести, и соответствующую вычислительную технику. Такими являются, например, устранение некоторых важных для народного хозяйства узких мест; механизация работ, требующих в народнохозяйственном масштабе больших затрат рабочей силы (например, транспортирование, внутрипроизводственное перемещение материалов); внедрение технологий, дающих большую экономию материалов и т. п. Аналогичным образом можно рассчитать на народнохозяйственном уровне и влияние некоторых особенно значительных капиталовложений на динамику производительности труда. То же самое относится и к производственным методам, лицензиям, которые можно приобрести из-за границы. При их правильном применении они могут в большой мере способствовать ускорению роста производительности труда.* Следует принять во внимание и учесть и то обстоятельство, что приобретение навыков в труде может и без капиталовложений сильно способствовать росту производительности труда. *Кеннет Дж. Эрроу* обращал особое внимание на это уже много лет назад.** Можно и нужно принять во внимание и учесть в расчетах и воздействие внешней торговли и еще нескольких прочих факторов на динамику производительности труда.

Что все это потребует больших раздумий, массу времени, труда, усилий? Действительно. Поднять планирование на подлинно научный уровень — большая и трудная задача. Я и не питаю иллюзий относительно того, что

работке экономических решений на любом уровне на основе ли так называемого практического опыта или же «общих принципов» экономической теории становится сейчас все более непригодным [49].

* Естественно, учитывая, что использование лицензии требует, кроме ее покупки, еще и выполнения ряда условий. «. . . для приема и внедрения передовой техники не достаточно того, чтобы передающая страна с готовностью оказывала всяческую помощь, для этого и перенимающая страна должна выполнить определенные персональные и материальные условия. Хотя перенятие готовых технических решений и может обойтись гораздо быстрее и дешевле, чем если бы пришлось изобретать нам самим, но смешно представлять себе, что перенятие может происходить без всяких затруднений, без забот и промедлений. Для этого требуется оборудование, станки, аппаратура, возможно, здания и даже не имеющиеся у нас материалы. Их приобретение, естественно, ложится бременем на народное хозяйство и, кроме того, требует времени и усилий. Часто еще труднее или, по крайней мере, возможно только в течение гораздо более длительного времени обеспечить персональные условия. Невозможно полностью избежать экспериментирования и даже детских болезней. . . . Различные факторы . . . имеют различную природу. Наименее гибкими могут оказаться персональные условия. Невозможно с одного дня на другой воспитать квалифицированных рабочих, инженеров и прочих специалистов, или даже ученых» [50].

** *Э. Лундберг* установил, что в металлургическом комбинате «Хорндал» в Швеции продукция в расчете на рабочий час ежегодно росла без капиталовложений в течение 15 лет на 2% (1961) . . . Я привожу здесь свое предположение о том, что технические изменения можно приписать, как правило, имеющемуся опыту, что сама производственная деятельность выдвигает проблемы, на которые со временем можно найти положительные ответы [51].

это можно осуществить с одного года на другой. Сейчас, когда вот уже два года мы — сотни специалистов и консультатов — работаем и размышляем над подготовкой долгосрочного плана без какого-либо показательного результата, нам это становится все более ясным. На нашей земле из образований, созданных до сих пор эволюцией, развитые общества являются самыми сложными. Уже Фельдман указывал: нельзя ожидать, что проблемы планирования можно решить несложными методами. Но кому же решать эти проблемы, как не тем, кому выпало на долю построение нового — и по возможности лучшего прежних — общества? Кому, как не тем, чье общественное существование заведомо связано с ростом производительности труда и социального благосостояния, с темпами, более быстрыми, чем это наблюдалось когда-либо в истории?

Почему Советский Союз выиграл войну?

Я знаю, что на этот вопрос, удовлетворяя требованиям научности, нельзя дать короткого ответа. Если все же мы хотели бы ответить на него очень кратко, то, наверняка, нам следовало бы сказать: потому что он защищал правое дело. Все это, однако, не связано — по крайней мере, непосредственно — с долгосрочным планированием. Зато в полном ответе имеется такая часть, которая может послужить важным уроком и для перспективного планирования.

Я имею в виду здесь то обстоятельство, что одним из важных, я сказал бы, решающих факторов победы было техническое превосходство Советского Союза над немцами, достигнутое им в течение войны. Есть, кто думает, что в этом превосходстве большую роль сыграла американская помощь. Однако статистические данные показывают, что по отношению к технике советского происхождения американская техническая помощь была незначительной, и что советское вооружение в заключительном периоде войны даже за вычетом самолетов, танков, автомашин, оружия зарубежного производства показывало ошеломляющее превосходство по сравнению с германским, что производившиеся в Советском Союзе за месяц боеприпасы далеко превышали боеприпасы, производившиеся в Германии.

Маршал Жуков в своих мемуарах на цифрах показывает, каким большим был советский перевес уже при битве на курской дуге, и каким уничтожающим стал он в последнем сражении за Берлин. А ведь война началась в совсем иных условиях. В июне 1941 года немцы напали на Советский Союз, имея много тысяч современных самолетов и танков, а у Красной Армии почти совсем не было ни современных самолетов, ни современных танков.

Ярко и очень наглядно изображает в своей книге советский авиаконструктор генерал Яковлев, как происходило это изменение в одном из родов

войск — у военно-воздушных сил. Производству самолетов были предоставлены все предпочтения по отношению к почти всем производственным отраслям, а вместе с остальными отраслями военной промышленности — безоговорочно по отношению ко всем отраслям гражданской промышленности. Правительство, военное командование предъявляли огромные требования к производству самолетов, причем не только количественные, но и качественные. Но советское правительство одновременно и обеспечивало все, что было в человеческих возможностях, а, может быть, даже несколько больше, в людях, материалах, деньгах, советах — все, что нужно было для выполнения требований.

Какой урок напрашивается из этого для планирования вообще и для перспективного в частности? Что если имеется ясно намеченная цель, и есть решение о подчинении этой цели ряда других целей и о концентрации для достижения этой цели требуемых для этого ресурсов, и если есть власть, осуществляющая это решение, — то можно достигнуть больших, нередко поразительно больших результатов. Для этого не обязательно требуется насильственного, строгого военного выделения и подчинения, как это происходило в приведенном примере в военных условиях, но обязательно нужно какое-нибудь организующее начало, какая-то *концепция*, определяющая место различных деятельностей, отличающая важные и очень важные вещи от неважных, устанавливающая или позволяющая установить очередность.

И сегодня еще может послужить примером долгосрочного плана, строящегося на определенной концепции, план ГОЭЛРО, разработанный в 1920 году и предусматривавший электрификацию и использование сырьевых ресурсов СССР. Правда, *Р. Бичанич* толкует эту концепцию следующим образом: «не всякая экономическая деятельность пригодна равным образом для планирования . . . Не случайно, что в Советском Союзе все общее планирование было начато впервые в области электроэнергетики (ГОЭЛРО) . . . Затем последовали природные ресурсы» [52]. Более правильной представляется характеристика, данная *Г. Колмеем:* «Еще перед оперативными планами . . . в общих чертах разрабатывается перспективный план. Это . . . историческое событие. Решающая основа для того, чтобы отдельные экономические процессы устойчиво и в полном их объеме могли остаться эффективными — это перспективное планирование всей общественной жизни» [53]. По мнению Иштвана Хетени «до сих пор этот план (ГОЭЛРО) был более всего способен дать адекватный ответ на международные политические, социальные и технические тенденции» [54].

В чем было преимущество этого плана по сравнению со многими последующими? Его авторы не обучались какой-либо науке народнохозяйственного планирования, т. е. научному народнохозяйственному планированию, не могли познакомиться с ним или применить его, так как такового вообще еще не имелось. Но ими были схвачены, разработаны некоторые вопросы фунда-

ментальной важности. Таким образом, сначала имелся общий план, а потом на его основе можно было построить остальные. Как об этом в только что цитированном произведении писал Колмей: «Так как всякое планирование представляет собой не только единство перспективного и оперативного планирования, но и единство народнохозяйственного, заводского, территориального и отраслевого планирования, то на основании ГОЭЛРО приступили к разработке перспективных планов для отдельных отраслей экономики и промышленности».

Авторы этого первого крупного плана не могли допустить ошибки, то и дело допускаемой их последователями — включая, естественно, и нас, — и заключающейся в построении народнохозяйственного плана посредством пригонки частичных планов. Что само по себе еще не было бы ошибкой, если бы при этом не терялось организующее начало — концепция.

Концепция содержит, в частности, степень важности целей, и, таким образом, предупреждает ошибку, заключающуюся в принятии в важных, крупных вопросах решений *по отдельности*, *независимо друг от друга*, что приводит иногда к кринятию частично или даже полностью противоречивых решений. «Все основные вопросы общества и народного хозяйства *взаимосвязаны* между собой настолько *тесно*, что нельзя принять решение по одному из них, чтобы не оказать этим воздействие на остальные. Принимая решение о повышении общественного благосостоянии и его направлениях, мы тем самым предопределяем очень многое в отношении капитальных вложений, производства, размещения производительных сил, внешней торговли, здравоохранения, просвещения, культуры. Подобно этому, принимая решение по основным вопросам развития сельского хозяйства, мы одновременно принимаем решение и относительно ряда вопросов развития промышленности, размещения производительных сил, внешней торговли, повышения жизненного уровня населения» [55].

Очевидно, что принятие концепции, содержащей степень важности, предпочтения относительно несоизмеримых или же только частично, только в определенных аспектах, с определенных сторон соизмеримых вещей, является не просто вопросом планирования, а одновременно и первостепенным политическим вопросом. Его можно было бы отнести к сфере планирования, если бы безусловно наилучшее решение можно было бы найти и принять на основании одних лишь научных методов, заключений, расчетов, без политического подхода. Это, однако, невозможно по отношению к концепции, могущей оказать влияние на формирование судьбы целой страны.

Именно поэтому так важно, чтобы принимаемые политические решения были научно обоснованы. Принятие концепции, политическое решение в дальнейшем предопределяет направление работы плановиков, основные черты плана. Стремиться к наилучшему научному обоснованию и построению плана, или к его оптимизации, к выбору наиболее выгодного варианта, не

проверив научной обоснованности лежащих в основе плана соображений и решений, — значит сделать полплана или еще меньше. Ведь если строящийся на неправильной концепции план и может быть подходящим с точки зрения техники планирования, хорошим или даже оптимальным он не будет.

Каким образом можно обеспечить правильность, научную обоснованность основного соображения, концепции, организующего начала? Во-первых: принимающий решения орган должен располагать доверием общества, поступать по его поручению, полномочию, так как речь идет о судьбе общества. Во-вторых: к разработке концепции, вариантов плана, к подготовке принимаемых решений следует привлечь как можно более широкий круг экспертов, специалистов, ученых, депутатов. В-третьих: необходимо стремиться к осуществлению широкого демократического контроля над принятием решений посредством привлечения масс.

Коротко, ограничиваясь лишь самым существенным: от выполнения этих условий зависит, удастся ли в будущем то, что до сих пор — как это было видно — не удавалось или удалось лишь наполовину: реализовать преимущества, кроющиеся в нашем общественно-производственном строе. Это ни в коем случае не противоречит тому, что наш жизненный уровень, наше развитие зависит в конечном счете от труда миллионов трудящихся и десятков тысяч руководителей. Речь идет как раз о том, что труд, обобществленный у нас на высоком уровне, требует высокого уровня сознательного централизованного управления. Тот факт, что в нашей стране мы, десять миллионов человек, не просто живем, а живем во все улучшающихся условиях, бесспорно является результатом труда миллионов трудящихся, десятков тысяч руководителей. Не они виноваты, что нашему обществу до сих пор не удалось использовать их труд более концентрированно, организованно, планомерно и эффективно. Научно обоснованная экономическая политика и политические решения; покоящийся на них и проверенный на повседневной практике широчайших масс, усовершенствованный план — вот альфа и омега оптимального или, по крайней мере, высокоэффективного использования общественного труда. Открывающая перспективу концепция повышает эффективность всей экономики не только своим организующим и координирующим влиянием, но и благоприятным воздействием на настроение, трудовое воодушевление трудящихся и руководителей.

Если таким образом при помощи соответствующей экономической политики, решений, плана мы сможем достигнуть концентрированного и координированного использования народнохозяйственных ресурсов в интересах правильных целей, то нами будут обеспечены важнейшие условия наиболее благоприятного развития за счет собственных сил.

О долгосрочном плане

До сих пор в связи с долгосрочным планом мною были затронуты только общие вопросы. Способны ли мы планировать наше будущее или же можем давать только прогнозы; можем ли мы при определении перспективных целей использовать пример развитых капиталистических стран; какие выводы можно сделать из нашего социалистического развития; каким может быть темп развития; почему необходима концепция и принятие политических решений — вот, рассматривавшиеся мною до сих пор общие вопросы, и почти не было речи о нашем собственном перспективном плане. Время перейти к нему.

Плановики и специалисты — число их достигает нескольких сотен, — работающие частью в различных комиссиях, частью же в аппарате Госплана над подготовкой долгосрочного плана, проделали до сих пор весьма многостороннюю и обширную работу. И если несмотря на массу проделанной работы мы все еще находимся лишь на стадии подготовки, и из самого здания пятнадцатилетнего плана еще ничего нет, кроме отдельных строительных элементов, то это — следствие новизны и исключительной сложности задачи. Правда, готов анализ венгерского экономического развития за 17 лет, и были подготовлены гипотезы, соображения, предположения относительно отдельных частей плана. Пожалуй, еще большее значение имеет то обстоятельство, что в участниках этой работы начинают вырисовываться определенные представления о возможных путях составления долгосрочного плана, а также о возможных способах увязки и направления выполняемой в комиссиях и прочих местах работы. Поэтому здесь я займусь не столько тем, что уже готово, сколько тем, какое представление сложилось во мне о возможном и желательном способе продолжения работы на основании разработанных и обсужденных до сих пор материалов.

Я не коснусь разделения труда, сложившегося между Госпланом и комиссиями, а также этапов работы, вытекающих отчасти из природы этой работы, отчасти же из этого разделения труда. Вместо этого я исхожу из того, что в общем процессе разработки плана будут иметься переломные, узловые пункты, когда проделанная работа будет подытоживаться определенным политическим решением, будет подводиться ее баланс и намечены следующие этапы работы. Я не могу себе представить, — и попытаюсь выразить, почему — что к готовому плану можно прийти одним единственным этапом, без принятия промежуточных политических решений.

Сейчас, таким образом, мы находимся на этапе подготовки первого политического решения, и то, вероятно, скорее в его начале, чем в середине. У нас имеется целый ряд сведений и предположений, на основании которых мы можем без плановой работы в строгом смысле этого слова и научно обоснованных расчетов в общих чертах наметить контуры нашего перспективного плана. Что это за предположения и сведения? Я представлю некоторые важ-

нейшие из них. Мы знаем, что в нашей стране национальный доход в расчете на душу населения в среднем за 17 лет рос на 5,3% в год, причем в среднем за последние десять лет — на 5,7% в год. Нам известно и то, что хотя эти 5,3% на 1% превышают средние темпы роста стран «Общего Рынка», но в то же время на 1,5% меньше средних по странам СЭВ темпов и меньше темпов капиталистической Японии. Мы знаем, что у нас быстрыми темпами происходит преобразование структуры занятости; доля занятых в сельском хозяйстве за прошедшее после освобождения страны время понизилась с 50% до 30%, значительно сократившись и по абсолютной величине, а число и доля занятых в промышленности значительно повысились, и в последние годы растут и в отраслях обслуживания (например, в торговле, транспорте и т. д.). Нам известно — как из собственного опыта, так и из примера более развитых стран — и то, что этот процесс еще далеко не закончился. Также довольно быстрыми темпами происходит и урбанизация, миграция сельского населения в города. С относительно большой точностью мы можем сказать, как сложится в течение 15 лет число, возрастно-половой состав трудоспособного населения. Мы знаем, что целесообразно считаться с сокращением рабочего и ростом свободного времени. На основании собственного опыта и примера более развитых стран нам многое известно о том, как сложится потребление населения, потребление энергии, транспорт и т. п. и т. п. Примером наиболее развитых капиталистических стран мы можем воспользоваться в особенности относительно производства (его отраслей, техники, организации, масштабов и т. д.), структуры потребления, а также организации науки, научных исследований, их связей с производством, конечно, при тщательном учете различий.

На основе таких и аналогичных им сведений и предположений мы в состоянии, как я уже указывал на это, набросать и без научно обоснованных плановых расчетов в общих чертах контуры долгосрочного плана. Нам известно, продукция скольких рабочих часов какого количества и состава рабочей силы будет иметься в распоряжении нашего общества в рассматриваемые 15 лет для производства материальных благ. Поскольку в не очень благоприятных условиях двадцати лет производительность труда повышалась в среднем более чем на 5% в год, не слишком дерзко предположить, что в период пятнадцатилетного плана мы можем рассчитывать на — по меньшей мере — аналогичный рост, и поэтому общество сможет принимать из года в год решения относительно использования соответствующего количества продуктов. Таким образом, с определенной вероятностью мы можем ожидать ежегодного роста национального дохода в расчете на душу населения в 5% приблизительно в течение 15 лет. Довольно долгое время нами прибл. 75% национального дохода используется на потребление и прибл. 25% — на накопление. Это соотношение может быть отнесено и к периоду 1971—1985 гг. Нечего и говорить, что все это не представляет собой научно обоснованного и разработанного плана. В самом *плане* уже надо будет доказать, что под вли-

янием таких-то и таких-то факторов производительность труда, продукция различных народнохозяйственных и промышленных отраслей, национальный доход и т. д. сложатся так-то и так-то, и на основании этого можно избрать те или иные последующие меры. Так или подобно этому будет говориться в плане. Однако уже на основании наших нынешних сведений, как это мы видели, можно подготовить схему плана, на основе которой можно начать планирование.

В Госплане эту работу проделали и составили таблицу об ожидаемых капитальных вложениях за 15 лет. Согласно ей, беря в сегодняшних ценах, вместо 430—450 миллиардов форинтов капиталовложений, осуществляемых в текущей пятилетке, за основу планирования в качестве минимальной суммы капиталовложений можно наметить на период 1971—1975 гг. 430—450 миллиардов, на 1976—1980 гг. — 540—560 миллиардов и на 1981—1985 гг. — 650—700 миллиардов форинтов. Эти суммы были разделены между тремя сферами капитальных вложений: сферой промышленности и строительства, сферой сельского и лесного хозяйств и сферой непромышленной инфраструктуры (водного хозяйства, транспорта, связи, торговли и непроизводственных отраслей). При распределении исходили из того, что промышленные и сельскохозяйственные капиталовложения несколько сократятся, а капиталовложения в инфраструктуру увеличатся, и, учитывая различные воможные степени этого сокращения и повышения, были разработаны два варианта для второго и третьего пятилетних периодов. Здесь уже можно отметить постепенное приближение к тому, что можно, пожалуй, назвать вариантами схемы плана.

Все это может быть принято за исходную основу, хотя сразу же возникают два небольших возражения. Одно из них заключается в том, что дается мало вариантов, и расхождения между ними незначительны. Другое: очевидно, что разделение капиталовложений на три группы недостаточно, так как оно не выявляет проблем. Например, каждая отрасль промышленности может согласиться с уменьшением доли промышленности и строительства в общем объеме капиталовложений с настоящих 48% до 40 или 45%, с той задней мыслью, что сокращение произойдет за счет остальных отраслей. Приняв изложенный ход мыслей за основу, может быть, его можно было бы развить следующим или подобным этому образом.

Для трех пятилетних плановых периодов можно разработать варианты распределения трех различных сумм капиталовложений, предполагая, например, ежегодный рост национального дохода в 5, 6 и 7%. Зная, что у нас удельный вес т. н. непроизводственных капиталовложений в их общей сумме, — по сравнению с более развитыми странами — слишком низок, при распределении капиталовложений можно было бы исходить из того, что их доля, по сравнению с периодом 1971—75 гг., в отношении которого, вероятно, уже вряд ли можно осуществить какие-либо значительных изменения, будет

возрастать каждые пять лет на 3%. К этой сфере капиталовложений отнесем прежде всего, то есть на первом месте, жилищное строительство, предусматривая, например, за три пятилетки строительство 450 000, 550 000 и 650 000 квартир соответственно. Но для того, чтобы построить эти квартиры, необходимо развить отрасли, производящие требующиеся строительству материалы, конструкции, оборудование и т. д. Для этого в свою очередь, вероятно, требуются дальнейшие капиталовложения, теперь уже за счет капиталовложений сектора промышленности и строительства. Во всяком случае необходимо проследить за всеми экономическими последствиями, воздействиями жилищного строительства. Затем следовало бы рассмотреть остальные статьи непроизводственных капиталовложений, уже сопоставляя и взвешивая их по степени важности. На первое место можно поставить здравоохранение, народное образование и науку. Естественно, и в этом случае косвенные последствия следует учесть по всему народному хозяйству, и тогда уже придется принимать решения по ряду фигурирующих в плане или в схеме плана вопросов производства и капиталовложений и в других областях, соблюдая при этом первоочередность здравоохранения и обучения.

После этого за счет предусматриваемой суммы капиталовложений можно будет включить в план капиталовложения тех областей, планирование которых мы в состоянии выполнить относительно надежно. Такими являются, например, дорожное строительство; энергетика; сооружение электролиний, водопроводных, паропроводных и нефтепроводных сетей; транспорт и, может быть, металлургия. Затем следовало бы определить долю, по крайней мере, 15—20 дальнейших отраслей, чтобы чрезмерное укрупнение не препятствовало вскрытию проблем. Здесь уже необходимо будет реализовать предпочтения и других отраслей и учесть все то, что нам известно о прогрессивном, вырывающемся вперед или же отстающем в мировом масштабе характере отдельных отраслей, а также о положении и потребностях отечественного и международного рынков. Кроме того, чтобы хоть приблизительно обеспечить правильное распределение, необходимо создать такие условия, чтобы заинтересованные стороны соревновались, сталкивались между собой. Предположим, например, что в первом распределении отрасли А, Б, В, Г и Д обрабатывающей промышленности получили из общей суммы в 50 миллиардов форинтов соответственно 13, 8, 15, 9 и 5 миллиардов форинтов, и что представители той или иной, или всех отраслей считают свою долю недостаточной. Тогда можно сказать: давайте, посмотрим, что вы дадите при помощи этих капиталовложений народному хозяйству! И основательно рассмотреть, взвесить их предложения, рекомендации. Решения, принимаемые на основании последних, вероятно, основательно изменят первоначальное распределение. И задачи в отношении капиталовложений, а частично и производства, постепенно уложатся в определенный порядок, и, таким образом, сложится проект концепции.

Конечно, после всего этого у нас на руках будут иметься лишь грубые прикидки, точнее, для каждого их трех пятилетних плановых периодов — а если разработка первого уже слишком продвинется к тому времени, — по крайней мере, для двух последних периодов будет иметься по три варианта ориентировочных цифр. С точки зрения подлинного *научно обоснованного плана* этого еще довольно-таки мало: это — всего лишь расплывчатые соображения с отдаленным зерном действительности. Ведь не следует забывать о том, что наши исходные предположения были далеки от научной точности. Покинув надежно точные данные об имеющемся в распоряжении общества рабочем времени, мы сейчас же ступили на зыбкую почву. Нами предполагался, например, некоторый, не очень отличающийся от прежнего рост промышленной продукции в расчете на одного человека. Однако общеизвестно, что под ростом промышленной продукции мы понимаем увеличение суммы цен, посредством которой, за неимением лучшего, мы обычно сводно выражаем промышленную продукцию. В то же время сумма цен зависит от очень разнообразных факторов, ее движение во многом отклоняется от динамических процессов, происходящих в производстве. Почему должна сумма цен в ближайшие 15 лет изменяться таким же или приблизительно таким образом, как это было в течение проанализированных 17 лет? Это было бы чистой случайностью. История обнадеживает нас только тем, что в различных странах в различные периоды измеряемый аналогичными методами «рост промышленной продукции» колеблется все же в относительно узких пределах. К этому можно добавить, что имеется целый ряд факторов экономического развития, о будущем формировании которых мы можем, по существу, большей частью только гадать. Два из них особенно важны. Один из них — это колебание цен на внешнем капиталистическом рынке. Оно сильно влияет на наши возможности сбыта и закупок на зарубежных рынках. Другой фактор — это техническое развитие. Оно тоже сильно влияет на рынок и коренным образом может изменять производство.

Что же следует из всего этого? Посмотрим-ка: мы исходили из фактов, из показателей, обобщенных на основании имеющегося опыта. Из их числа особенно важными представлялись темпы роста производительности труда, темпы роста продукции (промышленной и сельскохозяйственной), темпы роста национального дохода, изменения в структуре занятости, пропорции потребления и накопления при разделении национального дохода, урбанизация и демографические сдвиги. Нами был использован международный опыт, в частности, пример промышленно более развитых стран. С учетом всего этого, а частью и других фактов и предположений, нами ориентировочно были определены возможности капиталовложений на период 15-летнего плана в современных ценах и разработаны варианты по их распределению. То обстоятельство, что эти варианты согласованы с определенными зарубежными примерами и опытом, хотя и придает им солидный, заслуживающий внимания вес,

однако еще не возводит их в ранг научно обоснованного плана, не доказывает их реальности и согласованности. Само планирование, исчисление производительности и эффективности, анализ согласованности следуют только после этого.

Нам еще предстоит принять первое политическое решение относительно долгосрочного плана. Правильно ли начата работа, правильны ли набросанные в общих чертах варианты плана, какому из различных возможностей следует оказать предпочтение, какой риск мы можем принять на себя, не следует ли принять во внимание какие-нибудь другие варианты и возможности, поставить и другие цели или придать некоторым из них иной вес? Эти вопросы требуют многостороннего политического взвешивания и обсуждения, принятия политически ответственного решения. Речь идет о 15-летней программе нашей партии, еще не в окончательной форме, но все же так, что уже различимы — причем всем трудящимся — основные цели и возможности 15 лет: как будут они жить, за что им надо — и стоит — упорно работать в течение 15 лет. Одновременно речь идет и о выдвигаемом на повестку дня четвертом пятилетнем плане на период 1971—75 гг., о контроле над ним с точки зрения пятнадцатилетней перспективы, о том, что созреет из посеянного за эти пять лет.

Одна из комиссий, Комиссия по вопросам рабочей силы и жизненного уровня, выполнив соответствующую часть анализа развития за 17 лет, разработала и то, что на профессиональном языке перспективного планирования называют «гипотезой», о которой, однако, комиссия заявляет, что это «первый набросок концепции экономической и социальной политики в области занятости и жизненного уровня». Я не могу привести здесь даже самого сжатого резюме этого исключительно богатого и интересного материала, но хочу обратить внимание на два важных и общедействительных вывода.

Один из них заключается в том, что даже в таком не слишком широком коллективе, объединяющем всего лишь четыре дюжины специалистов, плановиков, хозяйственных руководителей, ученых, не удалось по всем важным вопросам прийти к согласию, хотя им представлялась возможность для основательного и неоднократного обсуждения вопросов. Одни, например, отстаивали позицию, согласно которой следует повысить с целью ускорения нашего развития долю накопления, а по мнению других, ее следовало бы уменьшить с целью повышения эффективности. (В скобках я должен заметить, что ни одно из этих утверждений не выражает вечной закономерности, и в настолько общей форме этого вопроса и нельзя решить).

Другой важный и общедействительный урок — это конкретная иллюстрация того уже ранее осознанного и, в частности, мною не раз повторенного факта, что важные вопросы, как правило, комплексны, и решение одного вопроса влияет на решение ряда других вопросов, в значительной мере предопределяя его. Решения по вопросам жизненного уровня и обеспечения занятости в большой мере воздействуют на урбанизацию и на условия размещения производительных сил, на значительную сферу капитальных вложе-

ний, в первую очередь, на жилищное строительство, дорожное строительство, расширение канализационной и водопроводной сетей, строительство больниц, ясель и детских садов, строительство средних школ, на расширение и оснащение высших учебных заведений, на внешнюю торговлю, внутреннюю торговлю, пищевую и швейную промышленности, на всю систему обучения, на всю систему социального страхования и т. д. и т. д.

В самой плановой работе, которую — как мы видели — нам еще предстоит выполнить, большие задачи стоят перед применением математики. Значительную роль должны приобрести расчеты эффективности, исчисления в области производительности труда и структурных изменений. А многоступенчатое народнохозяйственное программирование *Я. Корнаи* более, чем когда-либо и кто-либо, приблизило действительное проникновение математического программирования и оптимизации в планирование. Наконец нам дается в руки метод программирования, развитый в тесной связи с практическими плановыми работами, который поэтому может быть опробован в планировании. Этот метод позволяет достичь — по словам его автора — «равновесия всех взаимосвязей плана — соответственно *нашей информированности, то есть относительно* — посредством минимизации потенциальных нарушений равновесия». Уместно добавить: и обеспечить действительное равновесие, по крайней мере, в соответствии с подразделением, применяемым в плане, и при нормальных обстоятельствах. Этот метод позволяет — опять-таки по словам автора — «плановым органам представлять органам, принимающим политические решения, соответствующе подготовленные варианты политических планов . . . и изобразить различные последствия отдельных вариантов» [56].

На экономическое развитие Венгрии сильно влияют — как и вообще на развитие небольших стран, стоящих выше определенного уровня развития — ее международные экономические связи, а среди них в первую очередь внешнеторговые связи. Это обстоятельство учитывалось в проделанной до сих пор работе по подготовке долгосрочного плана, по крайней мере насколько этого позволяла масса неопределенных моментов, кроющихся в природе этого вопроса. Единственный большой недостаток в этой области, что у нас пока еще нет или почти нет возможности взвесить и особенно взвесить на цифрах влияние усиливающейся интеграции стран СЭВ на наше экономическое развитие. Наши связи со странами-членами СЭВ, естественно, в должной мере учитываются нашими соображениями по перспективному плану, но таким образом, что мы считаемся только с таким развитием и расширением этих связей, на которое можно рассчитывать, учитывая результаты, достигнутые в этой области в предыдущие годы, и итоги переговоров, проведенных в последнее время. Если же в интеграции стран-членов СЭВ, в их экономическом сотрудничестве за эти 15 лет произойдет качественный сдвиг, то это, естественно, сможет очень ускорить наше развитие и обеспечить достижение на несколько лет раньше намеченных нами целей.

Очень краткое заключение и дополнение

Мы можем быть не только созерцателями, но и сознательными преобразователями нашего экономического развития.

В результате самоотверженной борьбы лучших сынов и дочерей нашего народа (и с внешней помощью) мы создали строй, открывающий возможности для осуществления требований разума и интересов общества.

Для этого, однако, мы еще должны создать соответствующую систему принятия политических решений, чтобы важнейшие вопросы нашего экономического развития разрешались на основании добросовестной научной подготовки единственно компетентным общественно-политическим органом, причем фактически, а не только формально.

Имеется возможность для того, чтобы при принятии решений выбирались наиболее благоприятные из возможностей. Которая из них является наиболее благоприятной, решает вышеупомянутый орган,

так как темпы развития можно до определенной степени регулировать путем воздействия на факторы, влияющие на него;

так как можно с удовлетворительной степенью точности рассчитать динамику отношения капитал/продукция, согласно отдельным вариантам и, вообще, динамику показателей, выражающих народнохозяйственную эффективность;

так как с удовлетворительной степенью точности можно рассчитать капитальные затраты на крупнейшие запланированные промышленные объекты, стоимость их продукции и их народнохозяйственную экономическую эффективность, по сравнению с прочими возможными капиталовложениями;

так как с удовлетворительной степенью точности можно рассчитать, как сложится в будущем производительность труда в зависимости от того, какие изменения произойдут в составе рабочей силы, и какова будет при различных вариантах производительность ее труда;

потому что имеется возможность для представления принимающему решения органу одинаково увязанных вариантов, чтобы можно было ясно видеть и оценить различные последствия отдельных вариантов, то есть принимаемых по ним решений.

Но мы создали не только общественный строй, позволяющий осуществить требования разума и интересы общества, но и аппарат огромных масштабов, успешно сопротивляющийся требованиям разума и интересам общества. Вот уже сколько лет мы принимаем решения о строительстве большего числа объектов, чем это возможно при имеющихся в нашем распоряжении строительных мощностях, рабочей силе, строительных материалах, оборудовании и т. д. Мы знаем, что от этого не будет больше готовых объектов, чем было бы при решении, соответствующем имеющимся в нашем распоряжении строительным мощностям, а наоборот, еще меньше, так как мы не можем соблюсти дис-

циплину и концентрированно, с относительно наибольшим эффектом использовать наши ресурсы. Несмотря на это, мы из года в год принимаем неправильные решения, подходя к этому вопросу, как к стихийному бедствию, как будто какая-то, внешняя, стоящая над нами сила препятствовала бы «согласованию потребностей с возможностями».

Но нам не следует прибегать к экстраполяции — как бы общепринято и полезно ни было это в перспективном планировании — и проектировать недостатки прошлого в будущее. Вместо этого нам следует сделать все для того, чтобы такое положение изменилось, чтобы в соответствующей системе принятия решений рождались должные решения, и чтобы на основании хорошего долгосрочного перспективного плана существенно ускорилось наше развитие.

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ON THE LONG-TERM PLANNING OF THE NATIONAL ECONOMY: PROBLEMS SOLVED AND THOSE WAITING FOR SOLUTION

I. FRISS

Starting from earlier negative experiences gained in long-term planning, the author raises the question: can we, and to what extent, get active figures in shaping our economic fate and how far is the latter influenced by factors independent of our will. In his reasoning he points out the significant role of conscious social action, from which

it also follows that economic processes may be influenced, shaped and thus planned for the long run — of course, with many factors of uncertainty suitably accounted for.

To draw up such a plan, some principle of ordering is absolutely indispensable, some *concept* which distinguishes the important and highly important factors from the unimportant ones, establishes a ranking or enables the establishment of such a ranking. But a concept which comprises ranking and preferences which are not commensurable or only partly so, from certain aspects or from some points of view, is not simply a problem of planning but requires political decision. Political decisions must be scientifically founded. The decision-maker must have the confidence of society and act on its behalf. The widest possible circle of specialists must be drawn into the preparation of the decision. Wide democratic control of the decision must be secured. Only a plan founded thus can secure a highly conscious central control of a highly socialized work, the concentrated, ordered, planned and efficient use of the labour of millions participating in social productive work, and, with this the assertion of the inherent superiority of the socialist social order.

The author lists some of the most important facts and assumptions on the basis of which a long-term plan may be outlined even without fully founded plan calculations. The preparation of a long-term plan covering 1971—1985 has now been going on in Hungary for some time, organized by the National Planning Office with the participation of many outside experts. It may be rather accurately established, the product of how much and what kind of labour, produced in how many hours will be available to society in these 15 years. Since in the last 20 years, under not too favourable conditions, the productivity of labour increased on annual average by more than 5 per cent, the assumption is not too bold that a similar growth may be reckoned with in the next 15 years. The proportion between consumption and accumulation may be also calculated by relying on the experience of some longer period. Many other things can be taken into account, partly by building on our own experience, partly by relying on the example of other countries which are more developed, among them on that of advanced capitalist countries. Thus, there are some facts and figures, starting from which the planning work and the related calculations can be performed.

The author surveys some results of the work done up to now and presents his ideas about how the work should be continued. Thus, e.g. he suggests that for the three five-year periods three investment allocation variants could be worked out, based on different sums and assuming different growth rates of national income. Reference is made to the preferences to be applied in the decisions, e.g. to the central place of residential construction and to the necessity of following up the effects of individual decisions through the whole of the economy.

In the concluding part of the study the author points out the many difficulties and unsolved problems related to long-term planning, among these the uncertainties of technical progress and of the trends in international markets. Finally, however, he draws the conclusion that, by accounting for uncertainty, there is a possibility for drawing up scientifically founded plan variants on the basis of which the competent socio-political organs may take the proper decisions.

It can be worked out with reliable accuracy how the capital/output ratio will develop in the case of the different variants, and what will be the general trend of the indicators of national economic efficiency.

The cost of the major planned productive investment projects can be also worked out with reliable accuracy, together with the value of their output and their national economic results and efficiency as compared to other planned investments.

The future trends in labour productivity can also be calculated with adequate accuracy, depending on the changes in the composition of the labour force and, in the case of several variants, on the distribution of labour among the works of different productivity.

Finally, there is a possibility to submit to the decision-makers equally consistent variants with the differences in the consequences of different variants and decisions elearly visible and evaluable.

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Zs. Újlaki

APPLICATION OF AN AGGREGATE PROGRAMING MODEL IN PREPARING THE FOURTH FIVE-YEAR PLAN

In recent years the practical application of mathematical planning methods has made great progress in Hungary. The author reviews the model employed and the calculations performed in the course of preparing the fourth five-year plan for 1971—1975 as well as some of the experiences gained.

In a working phase of about one and a half years the National Planning Office of Hungary has worked out the conception and directives of the 4th five-year plan covering the period 1971—1975. Detailed elaboration of the 4th five-year plan is the task for a further phase.

In the course of formulating a conception for drawing the outlines of economic-political orientation and of the five-year plan, first a plan-variant was worked out — essentially on the bases of traditional, non-mathematical methods — to serve as a starting point for further planning. This will be called the *basic variant.*

However, for checking the basic variant, ensuring its consistency and defining then alternative economic policies different from the former ones, we have already used also mathematical planning methods, an aggregate programing model. With this model a series of calculations have been performed and up to the date of writing this study 60 programs have been worked out. One group of programs serves to check the consistency of the basic variant and to supply a final version of the plan conception. This group comprises 17 programs. Another group of programs, numbering about 40, was no longer coupled directly to the basic variant but — assuming a much greater freedom of movement — served the purposes of planning-methodological analysis.

In the following, a brief survey will be given of the aggregate national programing model, the character of the series of calculations embracing the first 17 programs and some conclusions to be drawn from these calculations from the viewpoint of economic policy, finally the experiences derived from the work hitherto performed. The results of the planning-methodological analysis will not be dealt with in the present article.

Short description of the model

Our model is an improved version of the aggregate national economic model B_1, tested already in the course of drawing up the third five-year plan.

As regards its mathematical character, the model is a standard linear programing problem with 113 constraints and 115 activity variables.

The variables and the program

The model is based on a special 23-sector input-output table interpreting three technologies for each of the productive sectors.*

In this sense, the productive inputs of some sector appear not in a single column but in three columns differing in structure. The output of the three technologies combined satisfies requirements raised against the sector in question.

The technologies were defined as follows:

1st technology: Production with the productive capacities available at the beginning of the plan period and with the generally accepted technologies. This production requires, in addition to current inputs, only maintenance costs. The capacity constraints of production are externally given.

2nd technology: production based on a technology which is, in some sense, more up-to-date, having come about as a result of the reconstruction of the initial, generally available capacities. This second technology may result also in the expansion of capacity as compared to that available at the beginning of the plan period. In addition to current and maintenance costs, it may require also some investment inputs. It has an externally given capacity constraint related to the one of the 1st technology. Output of the 2nd technology comprises not only the increment due to the reconstruction but the whole production based on the reconstructed fixed assets.

3rd technology: production with new capacities brought about in the plan period, representing at the same time a new, up-to-date technology. The 3rd technology requires investment inputs in all cases. It has no capacity constraints.

The sums of the outputs of the production with the three types of technology give the production value by sectors for 1975.

Of course, the three technologies cannot be interpreted for each sector. From among the 23 sectors the second technology was taken into account in 10, the first and the second in 4, and all three technologies in 9 sectors.

In choosing the technologies, the criterion was first of all whether the 3rd technology can be interpreted at all for the sector in question (which is, for example, impossible in principle in the case of agriculture). On the other hand we had to know whether there is any new project planned in the sector in the period under review (for these reasons, in the case of the pharmaceutical industry the first and the second technologies were only considered). The first technology was not interpreted for the sectors where production is impossible with unchanged inputs (e.g. the mining branches).

* In further developing the model, we made use of the experience gained in two-level economy-wide planning for 1966—1970, e.g. in distinguishing three types of technology, in the handling of investment quotas, etc.

The role of the three technologies is one of the most characteristic changes introduced as against the previous aggregate programing model used in drawing up the third five-year plan.

The *variables*, the unknowns of the linear programing model are the following:

— production in 1975 of the 23 productive sectors of the economy, in a breakdown by technologies, in forints;

— exports and imports in 1975, separately for the rouble and the dollar relations* in sector breakdown, in terms of foreign exchange forints.

In the course of working out a program, a whole series of further estimates have been calculated:

— foreign-exchange balances for 1975;

— utilization and production of the major resources in sector breakdown (investments, machinery imported from rouble and dollar countries, manpower employed, national income, etc.);

— production and foreign trade targets, as well as the economic evaluation of resources; a system of economic efficiency indicators and shadow prices to express the relationships between the various targets;

— with the aid of complementary calculations, a system of product balances can be generated on the basis of the mathematical program. With some re-arrangement, to each program also an input-output table can be assigned, on the basis of which it will be possible to perform the usual input-output analysis.

The constraints and the underlying economic concepts

First of all, let us review the economic concepts on the basis of which the basic model's system of constraints was formulated.

1. Complete equilibrium must be brought about between resources and uses. Thus, we require the mathematical program to evolve a full equilibrium of balances, with due consideration of all reverberating effects.

2. The mathematical program must not yield less than a prescribed level of products for domestic final use (that is, for personal and public consumption, investment and stock-building for 1975). This target of final utilization is prescribed as a lower bound, as regards both its total volume and its sector breakdown.

3. The mathematical program must by no means yield less favourable balances of foreign exchange in either relation than the prescribed level.**

* Rouble relations include the USSR, Poland, Czechoslovakia, the German Democratic Republic, Romania, Bulgaria, Albania, Mongolia, the Chinese People's Republic, North Vietnam and North Korea; dollar relations cover the rest of the world.

** Speaking about the balances of foreign exchange, the problem of foreign trade prices should be mentioned. At present uniform foreign exchange multipliers are used in planning for every sector, namely 40 Ft/Rb and 60 Ft/$. In the model calculations,

4. In connection with imports we used the following assumption: one of the major groups of imports is constituted by non-competitive imports, for which no domestic products can be substituted. These comprise the inputs which, owing to natural or technical reasons, must by all means be obtained through import. The import requirements of domestic final uses have been considered as fixed. It was, however, assumed that the non-competitive import requirements of productive consumption envisaged in the model are proportionate to domestic production. This is expressed by the coefficients of non-competitive imports given for each sector and, within that, for each technology.

The other major group of imports is that of *competitive imports* which compete with domestic production. This constitutes a decision variable whose magnitude has not been fixed in advance. It has, however, been assumed that import possibilities from the socialist countries are not unlimited. It is not only global balance-of-payments requirements that impose certain limits but in respect of the major groups of products there are interstate agreements, quotas, or at least limits of supply on the part of the sellers. As against that, no limits were set in respect of imports from the capitalist countries; for the groups of products where imports from dollar countries are conceivable at all, there is no upper bound on imports on part of the seller. Actual limitations arise on part of the buyer, that is, on our side; this is, however, taken into account by the model in another way — in connection with the balance of dollar payments.

5. In all calculations — by country groups and sectors — the volume of exports is bounded from above, in consideration of the realistic selling possibilities.

6. In addition to those listed, the production targets must satisfy also the following conditions:

a) Investment requirements in 1971—1974, for production in 1975, must not exceed a prescribed upper bound for gross investments — inclusive of maintenance and replacement of existing fixed assets, reconstructions and the creation of new fixed assets;

b) imports of machinery in the years 1971—1974 must not exceed the upper limits prescribed separately for the rouble and the dollar relations;

c) possible additional demand for machinery imported from convertible-currency countries may be covered by medium-term interest-bearing credits, the repayment of which must begin already in the course of the plan period. Credit requirements must not exceed an upper limit;

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both export and import multipliers were differentiated by sectors. The actual 1968 figures were for each sector corrected in the case of exports for export subsidies and production taxes, in that of imports for customs duties, customs turnover tax and price levies. In this way, exports and imports were brought to a common price level with domestic products.

d) manpower requirements must not exceed a prescribed upper limit;

e) production in the branches with restricted natural resources (coal and other mining) must not exceed a prescribed upper limit;

f) production in the branches where the first and the second technologies are used should not exceed the value set by their common bound on capacity.

Having reviewed the economic concepts which serve as a basis for the system of constraints, let us briefly sum up the major types of constraint in the model:

i. Product balances
ii. Investment quotas
iii. Rouble and dollar investment quotas for machinery imports
iv. Medium-term dollar credit quotas for machinery imports
v. Bounds on manpower
vi. Bounds on natural resources
vii. Capacity constraints of the 1st and 2nd technologies
viii. Export bounds
ix. Import bounds
x. Balances of trade in rouble and dollar relations.

Alternative objective functions

In the series of calculations, the following objective functions were used:

A) Maximization of additional consumption over and above the prescribed final utilization.
(In order to quantify this objective function, the pattern of additional consumption by 23 sectors was built into the model.)

B) Maximization of the dollar balance of trade.
(Minimization of the deficit or maximization of the surplus of the balance of trade.)

C) Maximization of additional national income over and above the prescribed target.
(Assuming a free development of structure.)

D) Minimization of total labour employed in the productive sphere.

Sources of the data

The model's data requirements were met partly by utilizing the plan calculations performed with traditional methods, partly with the aid of calculations carried out by experts of the sectors concerned. The sectoral current input, investment, import machinery and labour coefficients were calculated, in a breakdown by the three technologies, on the basis of centrally

verified expert computations. The coefficients were established on the basis of the assumption that they were valid only for a pre-determined interval of production value. Should some program yield a production value outside this interval, the coefficients will have to be revised again.

Quantification of the constraints was carried out by the experts of the National Planning Office.

Conclusions for economic policy

Survey of the calculations performed

The seventeen calculations performed with the aid of the aggregate economy-wide programing model can be subdivided into two groups. The first eight calculations relate to the basic variant of the plan and represent various stages in the consistency analysis of this variant. As a result of these first eight calculations, we have obtained a program which already agreed in its main targets and internal relationships with the basic variant. The 9th program may be considered as being a mathematically formulated variant of the basic variant originally worked out with non-mathematical methods.

In working out the further programs (Nos 10 to 17) the aim was to analyse *alternative economic policies*, policies which would deviate in some respect from the lines laid down in the basic variant, i.e. in the program No. 9.

The calculation series was partly planned in advance, according to the types of questions to which we expected an answer, and partly it was modified according to the new problems emerging from some program.

A survey of the contents of the calculations is facilitated by Table 1. The rows in the table show the serial number, name and major characteristics of the programs. The programs differ from each other in respect of seven economic criteria, and the economic character of the individual programs is determined by various combinations of the criteria.

In this article only the most characteristic programs will be dealt with, those representing some well-defined line of economic policy.

Analysis of economy-wide interrelations

The lessons to be derived from the model calculations do not represent unequivocal and definite plan proposals. Nor is this the task of analysis performed with the aid of the model.

When decision is made regarding the plan conception, a variety of viewpoints is taken into consideration; in addition to economic factors in the narrow sense of the term also points of view of domestic, foreign, and social policy are considered, interrelations which, although essential, do not fall within the scope of the model. Thus, also such effects are considered which

Table 1

Survey of the programs

Name of program	Consistency analysis	Investment oriented, dollar-optimization	Investment oriented, consumption optimization	Modified foreign trade, dollar-optimization	Modified foreign trade, consumption optimization	Consumption oriented
Number of program	9.	11.	12.	15.	16.	17.
Objective function	Dollar optimization	Dollar optimization	Consumption maximization	Dollar optimization	Consumption maximization	Dollar optimization
Level of investment limit for 1971–1974	Basic variant	Raised	Raised	Basic variant	Basic variant	Slightly raised
Level of accumulation in 1975	Basic variant	Basic variant	Basic variant	Basic variant	Basic variant	Slightly raised
Level of consumption in 1975	Basic variant	Basic variant	Basic variant	Basic variant	Basic variant	Slightly raised
Are exports to rouble countries a decision variable?	Partly	Yes	Yes	Yes	Yes	Yes
Level of constraints on export to dollar countries and of constraints on imports from rouble countries	Basic variant	Raised	Raised	Raised	Raised	Raised
Level of constraint on agricultural production	Basic variant	Raised	Raised	Basic variant	Basic variant	Raised

the mathematical model is unable to sense. The aggregate programing model cannot serve as a substitute for this work of weighing, it can only supply some points to hold on and offer some help by presenting the quantified consequences of this or that alternative. Should we accept alternative "A", this would mean simultaneously to discard alternatives "B" and "C". In this case, the model may answer the question: what do we gain with "A" and what do we lose with "B", "C" and so on. The model thus presents the economic programs emerging from planning and considered feasible, comparing them (of course) within the system of economic interrelations taken into account in the model, with each other without, however, taking a stand in favour of one or the other alternative.

The analysis performed with the model served to investigate three groups of problems, with the calculations embracing foreign trade, investments, and consumption. In the series of calculations, the possibility and consequences of deviations from the basic variant were surveyed. Program No. 9 was serving as the basis of comparison.

Some broad conclusions derived from the calculations could be formulated as follows:

— Within realistically raised upper market bounds a deviation from the present pattern of foreign trade will favourably affect both consumption and the dollar balance of trade. The result that can be obtained in this way is rather modest, barely exceeding 1.5 per cent of consumption. This must not be underrated but it should be pointed out that, although changes in the pattern of exports are of importance, they will in themselves not bring substantial results.

— The consumption level cannot be considerably raised by changes of merely distributive character (modification of the relative proportions of consumption and accumulation, regrouping of exports). A rise in consumption also presupposes investments.

— With the efficiency indicators given at present, an annual growth rate in consumption exceeding 5 to 6 per cent can, even with increased investments, not be secured without serious deterioration in the foreign exchange situation.

— With a slight modification of initial investments and the pattern of foreign trade, if we are ready to allow the balance of payments to deteriorate by $ 1, we may gain an additional consumption of Ft 107 or, conversely, in order to improve the balance of payments by $ 1, we have to forgo consumption worth Ft 107.

— In case of raising investment limits by 10 per cent or improving the efficiency of fixed-asset utilization by an average 4 to 5 per cent, consumption worth Ft 89 must be forgone in order to improve the balance of dollar payments by $ 1.

Structural analysis by sectors

Based on the evaluation of the national economic indicators, the general conclusions were drawn for economic policy from the calculations. With the aid of indicators relating to individual sectors we will now attempt to trace the implications of the above statements for the individual sectors and to analyse them in some detail.

Table 2 presents the trends in sectoral indicators. For a clearer presentation, the changes will be indicated not by figures but by arrows pointing in different directions. The changes are measured as compared to the program No. 9. that is, the basic variant.

The meaning of the signs is the following:

— a change below 1 per cent,
↗ a rise between 1 and 10 per cent,
↙ a decline between 1 and 10 per cent,
↑ a rise exceeding 10 per cent, and
↓ a decline exceeding 10 per cent.

The table can be analysed from two points of view. The first is, how stable does the program behave in various calculations. If in some bloc (e.g. in production or in exports to dollar-countries) the signs are *identical* in a row (irrespective of the concrete meaning of the sign), we say that the target in question is stable. E.g. in the textile industry's imports from rouble countries, the sign is ↓ in each program, that is, there appears invariably a decline exceeding 10 per cent, irrespective of the numerical characteristics of the individual programs and their other features from the point of view of economic policy.

The other viewpoint of analysis may be whether the various targets fall close to or far from the program No 9. representing the official plan. In this respect we can say that only the signs ↑ and ↓ are considered as *wide* deviations, the signs —, ↙ and ↗ are qualified as relatively small deviations; although the latter two are true only with some reservations since it is known that changes of 3 to 4 per cent in the production volume of a given year may involve serious consequences.

The scope of this article does not permit a thorough analysis of the sectoral indicators; we should like to stress only some phenomena which seem to claim attention.

As regards *production*, it is perhaps the "other chemical industries" (production of organic and inorganic chemicals, paints and dye stuffs, industrial gas, household chemicals and cosmetics) which seem to cause the greatest problems. Even program No. 9, which ensures consistency, established the production level of this sector well below the basic variant worked out with non-mathematical methods. The subsequent rises or declines should be interpreted in comparison to this already reduced level.

Table 2

Trend in sectoral indicators

Activity / Sector	Production					Imports from										Exports to									
						Rb countries					$ countries					Rb countries					$ countries				
Number of program	11	12	15	16	17	11	12	15	16	17	11	12	15	16	17	11	12	15	16	17	11	12	15	16	17
1. Coal mining	–	↗	–	–	↗	↗	↗	–	–	↗					–	–	–	–	–	–	–	–	–	–	–
2. Crude oil and natural gas extraction	↗	↗	↗	↗	↗	↗	↗	↗	↗	↗	↓	↓			↑						–	–	–	–	–
3. Bauxite mining	–	–	–	–	–											–	–	–	–	–	–	–	–	–	–
4. Other mining activity	↗	↗	–	–	↗	↗	↗	–	–	–	↑	↑	↗	↗	↗	–	–	–	–	–	–	–	–	–	–
5. Electric energy	–	–	–	–	–	↑	↑	↑	↑	↑							–								
6. Metallurgy (except aluminium)	↗	↗	↙	↙	–	↗	↗	↙	↙	↗	↗	↗	–	–	↗	–	↓	–	–	–	↗	↙	↗	↗	↗
7. Aluminium metallurgy	–	–	–	–	–	–	–	–	–	–	–	–	–	–	↗	–	–	–	–	–	↙	↙	↗	↗	↙
8. Crude oil processing	↗	↗	↗	↗	↗	↗	↗	↗	↗	↗	↗	↗	↗	↗	↑					↑	↑	↗	↓	–	↑
9. Pharmaceutical industry	↗	↗	↗	↗	↗	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	↗	↗	↗	↗	↗
10. Other chemical industries	↑	↗	↗	↗	↗	↗	↓	↓	↓	↓	↑	↑	–	↗	↑						↓				
11. Metal working industries	–	↗	–	–	↗	–	↗	–	↗	↑	–	–	–	–	↑	–	–	–	–	–	↗	↗	↗	↗	↗
12. Wood processing	↑	↑	↑	↑	↗	↗	↗	↗	↗	↑	↓	↙	↓	↓	↑										
13. Paper industry and printing	↗	↑	↗	↑	↑	↙	↗	–	–	↗	↗	↗	↗	↗	↗						–	–	–	–	–
14. Textile and textile clothing industries	↑	↑	↓	↓	↑	↓	↓	↓	↓	↓	↑	↑	↓	↓	↑	↑	↑	↓	↙	↑	↑	↑	↓	–	↑
15. Leather, fur and shoe industries	↙	↗	↗	↗	↗	↙	–		–	↑	↙	↙	↗	↗	↗	–	–	–	–	–	↗	↗	↗	↗	↗
16. Other small-scale, privately operated industries	–	–	–	–	–	–	–		–	–	–	–				–	–	–	–	–	–	–	–	–	–
17. Building material industry	↗	↗	–	–	↗	–	–	–	–	↗	–	–	–	–	↗	–	–	–	–	–	–	–	–	–	–
18. Food industry	–	↗	–	–	↗	↓	↓	↓	↓	↓	↙	↙	↙	↙	–	↓	↓	↓	↓	↓	↗	↗	↗	↗	–
INDUSTRY, TOTAL	↗	↗	–	–	↗	–	↙	↙	↙	↙	↗	↑	↙	↙	↑	↗	↗	↙	↙	↗	↑	↗	↙	↙	↗
19. Construction	–	–	–	–	↗																				
20. Agriculture	↗	↗	–	–	↗	↗	↗	↙	↙	↗	↗	↗	–	–	↗	↓		↓	↓	↓	↑	↑	↑	↑	↑
21. Transport and communications	↗	↗	↗	↗	↗											–	–	–	–	–	–	–	–	–	–
22. Home trade	–	–	–	–	–																				
23. Foreign trade	–	–	–	–	–											–	–	–	–	–					
GRAND TOTAL	↗	↗	–	–	↗	–	↗	↙	↙	↙	↗	↑	↑	↑	↑	–	↑	↑	↑	↗	↑	↑	–	↑	↑

Using an objective function which optimizes the balance of dollar payments, both the changing of foreign trade constraints and the raising of investment affect favourably the development of the chemical industry. In every other program, however, where *either* investments are scarce *or* consumption is maximized, development of the chemical industry seems to be economically inefficient.

In the list of problematic branches, the "other chemical industries" are followed by the textile industry. The production levels of the textile and textile clothing industries hardly react to the change of the objective function (optimization of dollar balance or maximization of consumption). This is understandable since the textile products are "valuable" in both cases and as far as this sector is concerned, a change in economic policy reduces to a distribution problem.

With changing the foreign trade constraints or investment limits, the situation is different. To changes of this type, both production and the necessary investments react sensitively in the textile industry.

Apart from these two branches, the sector pattern of production shows considerable stability.

In *rouble imports* it is that of chemical products which seems to be the least stable, immediately followed by agricultural imports.

Within *dollar imports* the chemical industry behaves similarly and there are fluctuations also in the imports of textiles.

Programs have qualified the *rouble exports* as presented below. Evaluation was based on the degree of utilization of the upper market bounds. The sectors whose upper market bounds were exhausted to 100 per cent in each program were qualified as unequivocally favourable, and those where the degree of utilization was zero in all programs, as unequivocally unfavourable. To the third category belong the sectors where the upper market bounds were exhausted only partly, or were exhausted only in some of the programs and not exhausted in others.

Unequivocally favourable sectors	Unequivocally unfavourable sectors	Sectors behaving differently in various programs
Pharmaceutical industry Metalworking industries	Wood industry	Metallurgy (excluding aluminium) Aluminium metallurgy Paper industry and printing Other chemical industry Textile and textile clothing industry Food industry Agriculture

It is characteristic of the majority of branches belonging to the third group that they play a key role in exports to socialist countries as regards both volume and importance in trade.

The level of textile and clothing exports is highly variable. In the programs with wide investment possibilities (Nos 11, 14 and 17) the upper bound was fully exhausted — every other program reduced the exports of textiles to a greater or lesser extent, but particularly program No. 15 with a dollar-optimizing objective function.

The upper bound on rouble exports of foodstuffs has not been exhausted in any of the programs. The cause should be sought primarily in the unfavourable foreign-exchange multiplier; however, the high material costs and capital intensity of the sector may have also played a part.

The exports of "other chemical industries" to rouble countries are generally disadvantageous. Proposed exports figure only in a single program in the series of calculations.

On the basis of the points of view outlined above in connection with rouble exports, the *dollar exports* were evaluated by the programs in the following manner:

Unequivocally favourable sectors	Unequivocally unfavourable sectors	Sectors behaving differently in various programs
Pharmaceutical industry Metalworking industries Paper industry and printing Leather, fur and shoe industries Food industry	Wood industry	Metallurgy (excluding aluminium) Aluminium metallurgy Crude oil processing Other chemical industry Textile and textile clothing industry

The distribution of technologies

On the basis of the breakdown of production by technologies in the individual branches, the share of production turned out with old, reconstructed and new technologies can be worked out from the programs for the whole of the economy. Further, also the distribution of investment quotas by technologies and the relation of the two indicators to each other can be determined.*

The diagrams below show the distribution of production and investment by technologies in four major programs.

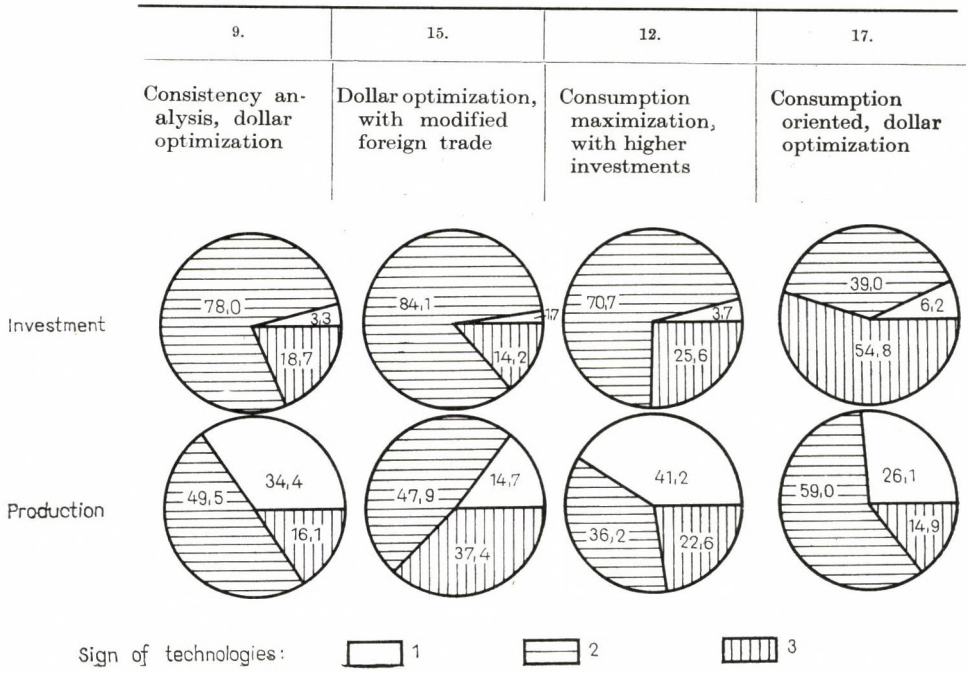
Since the three technologies cannot be interpreted for all sectors, the distribution refers only to those where all three technologies appear, that is, to nine out of the twenty-three sectors covered by the plan. These are the following: "other chemical industries" (oil processing and pharmaceuticals

* The notions of maintaining the production level, of reconstruction and of new technology must, of course, be understood as defined in the model, taking into account the fact that the distinction is frequently arbitrary. Maintenance of the production level does not mean in reality absolutely unchanged conditions, and reconstruction may also comprise costs which fall under the heading of maintaining the production level.

excluded), metalworking industry, wood industry, paper and printing, textile and textile clothing industry, leather, fur and shoe industries, food industry, building material industry, as well as construction.

The distribution of investments and production by technologies (see p. 56) is the following:

Number and name of the program



Raising of the investment limits will usually bring new technologies into the fore. In the programs which economize on investment, the share of new technologies varies between 14 and 19 per cent; by raising the investment limits, the share of investment in new technologies rises to 25 per cent. Program No. 17 is an exception since here the investments representing new technology exceed half of the total investment in these nine branches. The share of investments with reconstruction character fluctuates in all programs around three-fourths of total investments. The programs utilize only a small portion of investment quotas for the maintenance of old techniques on an *unchanged* level.

The distribution of production by technologies differs from the corresponding investment indicators. With old technologies, 2 to 5 per cent of investments secure 15 to 40 per cent of production, while 15 to 30 per cent of investments in new technologies result in the period analysed in 13 to 38 per cent of production.

Experiences in linking the traditional planning methods with mathematical programing

A few years ago, when a start was made to work out mathematical programing models for the purpose of five-year planning, the practical planners working with traditional methods did hardly join in this work. The models were completed with considerable delays only, after the basic documents had already been accepted. The situation at the time may be characterized briefly by stating that programing remained *outside* the actual process of working out the plan.

Before reviewing the present situation we wish to outline in short the situation which would be *ideal* in our opinion. Speaking about this ideal situation, it should be stressed that what we have in mind is not some utopia for which the necessary technical and organizational conditions do not exist. All essential technical conditions for the "ideal situation" do exist and, essentially, also its organizational conditions have been brought about.

The general criterion of the ideal situation is that *the mathematical planning methods should be fully integrated into the process of actual planning.* This will depend on several conditions.

The problems begin with the compilation of *data* for the model. In the mathematical model *the same* figures should appear as those taken for a basis in the other (non-mathematical) planning calculations. The planners should bear full responsibility for the data they have to furnish according to their field of competence; for the technical coefficients, the price and cost characteristics, the constraints, and so on. The reliability of the body of data incorporated into the model must be guaranteed by the entire planning apparatus; by everybody, according to his competence.

The next task is related to the *use* of the model. The model may be regarded as a special device which can give proper answers to properly posed questions on condition that the person posing the question can speak the language of the model and will understand the answer the model gives in its own language. Once this condition is met, a *dialogue* may develop: not a single question and an answer to this question but a whole series of questions and answers where each subsequent question is prompted precisely by the answer obtained to the preceding one.

Should we intend to develop such a dialogue, the planners will have to understand the language of the model. This does not require knowledge of mathematical details, but demands knowledge of *the logic and the conceptual framework of the model.* It is further necessary that planning should really call for the answers to be obtained from the model. Running ahead should be avoided and so should the continuous modification of earlier ideas before the answers to previous questions have been obtained, before it has been

Table 3

Logical survey of the dialogue

Number of the		Questions put by the planning agency, purpose of the calculation	Modification in the model as against the previous program	Essential lesson of the calculation from the point of view of planning or economic policy
calculation	program			
1—2	—	Is there a solution with the given constraints to the variant prepared with traditional methods?	—	No — the plan is inconsistent. The targets cannot be simultaneously attained.
3—5	1, 2, 3	Do the modifications yield a solution? If so, what is the result in the case of a different economic policy?	Removal of the obligatory bounds on production and on the balance of dollar payments.	There is a solution but the program yields an unrealistically high agricultural production.
6	4	Since the level of agricultural production seems to be unrealistic, what happens if it is bounded from above?	Upper bounds are set on agricultural production.	Agricultural production corresponds to the planned level but the balance of dollar payments deteriorates to a considerable extent.
7	5	Do the input coefficients correspond to the sales targets of the sectors?	Modification of the investment and labour input coefficients in coal mining, chemical ind., agriculture, construction.	The modification results in high material costs and this leads to deteriorating foreign exchange position.
8—10	6, 7, 8	Analysis of the effects of modifications in the central system of constraints.	Modification of the foreign trade constraints and of investment and consumption.	The modifications are favourable from the point of view of the balance of foreign exchange.
11	9	Modification of material costs and constraints in harmony with the basic variant.	Modification of input coefficients, investment and consumption.	A decreasing material cost improves the foreign exchange situation. *The program has been brought into harmony with the basic variant.*
12	10	What are the results of a partial lifting of the foreign trade constraints?	Lifting of the obligation to export into rouble countries, raising of export bounds (in both relations).	A free development of the pattern of trade, improving balance of foreign exchange.

Table 3 (contd.)

Number of the calculation	Number of the program	Questions put by the planning agency, purpose of the calculation	Modification in the model as against the previous program	Essential lesson of the calculation from the point of view of planning or economic policy
13—14	11, 12	What is the result of various economic policies with increased investment limits?	Raising of investment limits, change in objective function.	Changes in investment limits considerably influence the balance of foreign exchange and consumption.
15—16	13, 14	What is the result of raising the consumption fund?	Raising of the prescribed consumption level.	Increasing consumption requires considerable investment.
17—18	15, 16	How do the economic-political results of the basic variant develop with a more free foreign trade?	Reduction of obligatory consumption, realistic raising of bounds on foreign trade. Change in objective function.	Better results than the official one, in respect of both foreign exchange and consumption.
19	17	What dollar position can be attained if both the consumption fund and accumulation are raised and there is a surplus in the rouble balance?	Raising of the investment level in 1971—74, of consumption and accumulation in 1975, prescribing an obligatory surplus on the rouble balance.	Simultaneous increase of consumption and accumulation with a higher investment level than in the basic variant will result in a less favourable dollar position.

proven with the aid of the model that there is no internal contradiction in the earlier concepts. All this will, of course, also require that the model gives its answers *quickly*, without delaying the planning process.

Now we may raise the question: how far have we approached this ideal situation in the application of the aggregate programing model? The short answer would be: about half-way. In comparison to the situation in former years, great steps have been made forward. The results of programing were available in time for the formulation of the conception of the fourth five-year plan and also the detailed description of the calculations reached all those deciding on the further elaboration of the plan. This happened the first time in the practical application of mathematical programing in planning work.

In spite of this important progress, the ideal situation has as yet not been achieved. Let us take in turn the conditions that have been described above and examine what we have succeeded in realizing and what remains still to be done in the future.

The data. The planning apparatus has participated in the collection and checking of the data; in the future, however, much broader and more active participation is needed.

The "dialogue". A great number of planners have already become acquainted with the model's language, conceptual framework and logic and really intend to make use of the results of the calculations. These planners have developed a dialogue as described above; its course is presented in Table 3. It is shown how the results obtained from one calculation raise the questions which we try to answer in the next round of calculations.

It indicates a certain shortcoming of the dialogue that in the past period a particular "race" developed between "running" the traditional planning work and the programing model. In comparison to the earlier Hungarian models we tried to perform the calculations extremely quickly in order to keep pace with planning. Unfortunately, however, this race proved not infrequently to be difficult, partly because of still existing problems of planning methodology and partly owing to the insufficiency of computation-technical facilities. In spite of this, we have succeeded to reduce step-by-step the differences in time between the individual planning stages and the relating mathematical calculations.

All this is shown in Table 4.

On this basis of the experiences gained hitherto we are of the opinion that the necessary steps can now be taken to further improve planning work by developing aggregate programing models (e.g. by introducing multi-stage dynamic models).

Table 4

The planning process in the course of time

Number	Documented planning calculations with non-mathematical methods		Related mathematical calculations		Time lag between the two calculations
	Title	Date	Name	Date	
1.	Preliminary calculations for the requirements of the 4th five-year plan in respect of economic policy	November, December, 1968	Math. programs Nos. 1—4. First report	Feb. 10—17, 1969 March, 1969	2 months 3 months
2.	Calculations of the plan conception for the 4th five-year plan	March, 1969	Math. programs Nos. 5—8.	April 17—19, 1969	1 month
3.	Summary of the plan conception of the national economy in the 4th five-year plan	April, 1969	Math. program No. 9.	May 7, 1969	15 days
4.	1st report to the government on the plan conception of the national economy in the 4th five-year plan	April 28, 1969	Math. program No. 10.	May 7, 1969	9 days
5.	2nd report to the government on the plan conception of the national economy in the 4th five-year plan	July, 1969	Math. programs Nos. 11—17. Second report	June 10—20, 1969 July, 1969	0 days

ИСПОЛЬЗОВАНИЕ СВОДНОЙ МОДЕЛИ ПРОГРАММИРОВАНИЯ ПРИ РАЗРАБОТКЕ КОНЦЕПЦИИ IV ПЯТИЛЕТНЕГО ПЛАНА

Ж. УИЛАКИ

В Госплане ВНР разработаны концепция и основные направления экономической политики IV пятилетнего плана на 1971—1975 гг. Наряду с традиционным методом планирования при разработке концепции пятилетнего плана было использовано и математическое моделирование, метод математического программирования. При помощи этого метода рассчитывались варианты планов, равные по своему значению, но различные по исходным условиям экономической политики.

В статье излагается сводная модель народнохозяйственного программирования, ее построение, система условий и исходные экономические соображения. Автор описывает экономическую характеристику семнадцати расчетов, произведенных при помощи модели. Используя наиболее характерные программы, на основании народнохозяйстренных взаимосвязей и результатов отраслевых расчетов она обобщает выводы для экономической политики, полученные из серии расчетов. Ввиду того, что в модели по каждой отрасли предполагаются три, соревнующиеся друг с другом технологии, — распростаненная в начале планового периода, реконструкционная и создаваемая в течение планового периода новая, современная технология — автор анализирует распределение этих технологий в рассматриваемом периоде.

Метод сводного программирования был впервые использован в ходе планирования и стал органической частью плановой работы. В статье, в частности, анализируются проблемы совмещения традиционных методов планирования с математическим программированием.

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I. Gönczi—J. Tóth

EIN VERSUCH ZUR ANNÄHERUNG WIRTSCHAFTLICHER KONSEQUENZEN DER TECHNISCHEN ENTWICKLUNG IM MODELL DER LPG

Es ist bekannt, dass die Entwicklung der LPG mit der Mechanisierung und mit der Arbeitskräfteversorgung eng verbunden ist. Die Verfasser machen hier einen Versuch, diesen Zusammenhang der beiden Faktoren und ihre Wirkung auf das Bruttoeinkommen mittels mathematischer Modelle auszudrücken und die dadurch erhaltenen Folgerungen in Ansätzen zu formulieren. Die Formeln können auch zu konkreten wirtschaftspolitischen oder betriebswirtschaftlichen Rechnungen verwendet werden.

Die Entwicklung der landwirtschaftlichen Produktionsgenossenschaft steht einerseits mit der technischen Ausrüstung, andererseits mit der Arbeitskräfteversorgung in untrennbarem Zusammenhang; die Intensität dieser Faktoren, ihr Verhältnis zueinander und zur Nutzfläche, ihre Dynamik — bei gegebenen Naturbedingungen — können bei der Gestaltung der Produktionsstruktur* sowie des Betriebs- und Personaleinkommens eine ausschlaggebende Rolle spielen.

Die technische Entwicklung in der Landwirtschaft ist — was ihren Inhalt und ihre Wirkungen betrifft — ziemlich mannigfaltig. Der Einfachheit halber *wollen wir hier nur das beweglichste Element der Technik, die Mechanisierung*, in Wechselwirkung mit der Rentabilität und der Arbeitskraft, *eingehender analysieren*, nachher weisen wir auf die Verallgemeinerung des Problems hin, ohne die Untersuchung auf die Einbeziehung sonstiger Elemente der Technik (Chemisierung, Bautätigkeit, Biotechnik usw.) auszudehnen.

In unserer Untersuchung gehen wir von folgenden Annahmen aus:

In einer gegebenen LPG wird sich die Anzahl der aktiven Mitglieder im Laufe der Zeit vermindern, da wir es auf lange Frist sicherlich als Tendenz betrachten können, dass ein Teil der landwirtschaftlichen Erwerbstätigen in andere Arbeitskreise, in die Industrie, in Dienstleistungszweige abwandert. Die Wirkung dieser Abwanderung kann sich *a)* in der Erhöhung des Mechanisierungsgrades, *b)* in der Veränderung der Produktionsstruktur, *c)* in der gemeinsamen Veränderung des Mechanisierungsgrades und der Produktionsstruktur zeigen. Gleich, ob nun dieser oder jener Fall besteht, hängt das *a)* mit der Grösse des Produktionswertes und *b)* mit der Grösse des Bruttoeinkommens zusammen.

Da für die Mitglieder einer landwirtschaftlichen Produktionsgenossenschaft das Bruttoeinkommen von grundlegender Bedeutung ist, wird die LPG auf die verschiedenen Veränderungen solcherweise reagieren, wie diese auf

* Unter Produktionsstruktur verstehen wir hier und im weiteren die Zusammensetzung der Produktion nach Produktionszweigen.

das Bruttoeinkommen wirken. Zu bemerken ist, dass hier in erster Linie nicht das Gesamtvolumen des Bruttoeinkommens, auch nicht dessen Betrag je Flächeneinheit, sondern vor allem sein Betrag pro Kopf massgebend sein kann.

Um die Zusammenhänge numerisch auszudrücken, werden wir im weiteren mit folgenden Grundbegriffen verfahren:

Produktionswert: die Forint-Summe des zu laufenden Preisen berechneten Wertes der Produkte (und Dienstleistungen), die in der Wirtschaft in einem Jahr hergestellt werden; dies hängt im wesentlichen von zwei Faktoren ab, einerseits von der Menge, beziehungsweise der Zusammensetzung, anderseits vom Einheitspreis der Produkte. Das heisst:

$$1. \qquad T = \sum_{j=1}^{n} x_j p_j$$

wobei

x_j = die Menge des j-ten Produkts
p_j = der Einheitspreis des j-ten Produkts
n = die Zahl der Produkte
T = der Produktionswert

Die Zusammensetzung des Produktionswertes kann in der betrieblichen Kalkulation auf verschiedene Weise gruppiert werden; für die weiteren Untersuchungen nehmen wir folgende Gruppierung an:

$$2. \qquad T = H + G_k + B$$

wobei

H = die Kosten der vergegenständlichten Arbeit ohne Maschinenkosten
G_k = die Kosten der vergegenständlichten Arbeit der Mechanisierung
B = das Volumen des Bruttoeinkommens (dies enthält die Arbeitskosten und den Gewinn)

Im weiteren sehen wir vorläufig von der Analyse der zu H gehörenden Faktoren ab, beziehungsweise setzen wir für diese vorübergehend ein bestimmtes Niveau voraus. Wir richten unsere Aufmerksamkeit einerseits auf die absolute und relative Grösse des Bruttoeinkommens, andererseits auf die Gestaltung der Kosten der Mechanisierung. Dabei haben wir für unsere Analyse solch eine speziale Kategorie nötig, die auch die Rentabilitätseinflüsse des Tausches von lebendiger-vergegenständlichter Arbeit widerspiegelt. Dementsprechend ist:

$$3. \qquad T' = T - H$$

wobei

T' = modifizierter Produktionswert (ohne H)

Auf Grund der Formeln 2. und 3. ist es offenbar:

$$T' = G_k + B \tag{4.}$$

das heisst: *der modifizierte Produktionswert enthält die Summe des Bruttoeinkommens und der Kosten der vergegenständlichten Arbeit der Mechanisierung.*

Danach untersuchen wir die Gestaltung des Bruttoeinkommens je Mitglied in einer gegebenen LPG für den Fall, wenn der Rückgang der Arbeitskräfte durch die Veränderung der Produktionsstruktur und der Mechanisierung kompensiert wird.

In der Darlegung werden wir — der leichteren Verständlichkeit und der Anschaulichkeit wegen — die nachstehenden Prinzipien verfolgen:

a) Wir nähern das Problem in seiner vollen Komplexität und Kompliziertheit schrittweise an, wobei die Faktoren im Anfang einzeln, und später gleichzeitig zusammen verändert werden.

b) Im Laufe der Untersuchung werden wir unsere Folgerungen in Ansätzen formulieren.

c) Die aufgestellten Formeln werden auch durch zahlenmässige Beispiele anschaulich gemacht. Als Anschauungsbeispiel nehmen wir den folgenden Grundfall: Gegeben ist eine LPG von 4900 Kat. Joch, für deren Mitgliederdichte charakteristisch ist, dass auf ein arbeitendes Mitglied eine Fläche von 7 Kat. Joch entfällt.

Dementsprechend zählt die LPG 700 arbeitende Mitglieder. Das Bruttoeinkommen der LPG beträgt 15 000 000 Ft, die Maschinenkosten machen 5 000 000 Ft pro Jahr aus, so beläuft sich der modifizierte Produktionswert auf 20 000 000 Ft.

Auf Grund der obigen können wir das Bruttoeinkommen folgenderweise berechnen:

$$B_M = \frac{T' - G_k}{M} = \frac{B}{M} \tag{5.}$$

wobei

B_M = Bruttoeinkommen je arbeitendes Mitglied

M = Anzahl der arbeitenden Mitglieder

In unserem Beispiel ist:

$$B_M = \frac{20\,000\,000 - 5\,000\,000}{700} = \frac{15\,000\,000}{700} = 21\,428{,}57 \text{ Ft}$$

Das Bruttoeinkommen je Flächeneinheit ist:

$$6. \qquad B_F = \frac{T' - G_k}{F} = \frac{B}{F}$$

wobei

F = Gesamtfläche

In unserem Beispiel ist:

$$B_F = \frac{20\,000\,000 - 5\,000\,000}{4\,900} = \frac{15\,000\,000}{4900} = 3061\ 225\ \text{Ft.}$$

Nehmen wir nun die Tendenz an, dass die Zahl der Arbeitskräfte in der LPG in der Dynamik der Zeit abnehmen wird, und dies durch die Steigerung der Mechanisierung sowie durch die Veränderung der Produktions- (und Dienstleistungs-) struktur kompensiert werden kann, so müssen wir die Wirkung dieser Abnahme auf die Rentabilität untersuchen. Die Verminderung der Arbeitskraft und die Erhöhung der Mechanisierung kommen in der Formel 5. durch die Veränderung von M, beziehungsweise von G_k zum Ausdruck. Die Wandlung der Struktur sowie die ertragsteigernde Wirkung der Mechanisierung zeigen sich aber in der Veränderung von T'. (Lassen wir jetzt die sonstigen — die Veränderung von T' herbeiführenden — Faktoren, z. B. den Einfluss der Witterung ausser acht, angenommen, dass ihre Wirkung aus T' schon vorher eliminiert wurde.)

Als erste Annäherung gehen wir vom Falle aus, wenn sich die Veränderung des Personalstandes nur aus Abwanderung der ohnehin überflüssigen Arbeitskräfte ergibt, dass unter ihrem Einfluss sich weder T' noch G_k verändert haben, beziehungsweise eine Veränderung weder in der Mechanisierung noch in der Produktionsstruktur eingetreten ist. Nehmen wir an, dass sich die Mitgliederzahl auf das Δ_M-fache erhöht, wobei $\Delta_M < 1$, sich also die *Arbeitskraft vermindert.*

Bezeichnen wir das Bruttoeinkommen je veränderte Flächeneinheit und je arbeitendes Mitglied mit B_{F_1} und B_{M_1}. Mit Rücksicht darauf, dass die Veränderung der Arbeitskraft keine Modifizierung von T' und G_k herbeiführte, ist es offenbar, dass $B_{F_1} = B_F$, aber $B_{M_1} \neq B_M$. Das Bruttoeinkommen pro arbeitendes Mitglied kann — der neuen Lage entsprechend — mittels folgender Formeln berechnet werden:

$$7. \qquad B_{M_1} = \frac{T' - G_k}{M} + \left[\left(\frac{T' - G_k}{M}\right)\left(\frac{M}{\Delta_M M} - 1\right)\right]$$

beziehungsweise

$$8. \qquad B_{M_1} = B_M + B_M\left(\frac{M}{\Delta_M M} - 1\right)$$

Die Formel 8. reduzierend erhalten wir

$$9. \qquad B_{M_1} = \frac{B_M}{\Delta_M}$$

Dementsprechend kann auch die Formel 7. abgekürzt werden und so erhalten wir:

$$10. \qquad B_{M_1} = \frac{T' - G_k}{M} : \Delta_M$$

beziehungsweise

$$11. \qquad B_{M_1} = \frac{T' - G_k}{M} \cdot \frac{1}{\Delta_M}$$

Die bisher gezogenen Folgerungen können wir in folgenden Ansätzen formulieren.

Ansatz I: Falls die anderen Faktoren unverändert bleiben und *sich die Anzahl der arbeitenden Mitglieder vermindert, wächst das Bruttoeinkommen pro arbeitendes Mitglied.*

Ansatz II: Falls die anderen Faktoren unverändert bleiben, ist die prozentuale Zuwachsrate des Bruttoeinkommens je arbeitendes Mitglied schneller als das prozentuale Verminderungstempo der Mitgliederzahl, hinsichtlich dessen, dass $\frac{1}{\Delta_M}$ mit der Verminderung von Δ_M in beschleunigtem Tempo wächst.

Beispiel: Nehmen wir an, dass die Anzahl der arbeitenden Mitglieder um 20 v H, das heisst von 700 Mann (0,8 · 700 =) auf 560 Mann abgenommen hat.

$$B_{M_1} = \frac{20\,000\,000 - 5\,000\,000}{700} + \left[\left(\frac{20\,000\,000 - 5\,000\,000}{700}\right) \times \right.$$

$$\left. \times \left(\frac{700}{0{,}8 \cdot 700} - 1\right)\right] = 21\,428{,}57 + 21\,428{,}57 \cdot \left(\frac{700}{560} - 1\right) =$$

$$= 21\,428{,}57 + 21\,428{,}57 \cdot (1{,}25 - 1) = 21\,428{,}57 +$$

$$+ 21\,428{,}57 \cdot 0{,}25 = 21\,428{,}57 + 53\,57{,}14 = 26\,785{,}71 \text{ Ft.}$$

Das Bruttoeinkommen je arbeitendes Mitglied hat sich also infolge der Verminderung von 20 vH der Mitgliederzahl von 21 428,57 Ft auf 26 785,75 Ft, das heisst $\frac{26\,785{,}75}{21\,428{,}57} = 1{,}25$ also um 25 vH erhöht.

Wenn also $\Delta_M = 0{,}8$, so ist das Einkommen auf

$$\frac{1}{\Delta_M} = \frac{1}{0{,}8} = 1{,}25\text{-fach gewachsen.}$$

Ansatz III: Aus den ersten zwei Ansätzen — in sich selbst untersucht — folgt, dass die *in der Landwirtschaft überflüssigen Arbeitskräfte* — wenn sie in der Industrie angestellt werden können — *unbedingt in diese umgruppiert werden müssten.* Dadurch ist es nämlich möglich — auch im Falle, wenn das Bruttoeinkommen je Flächeneinheit unverändert bleibt —, sowohl das Einkommen der landwirtschaftlichen Erwerbstätigen als auch die zentrale oder betriebliche Akkumulation in der Landwirtschaft zu erhöhen. Ein Teil des Bruttoeinkommens pro Arbeiter kann zur zentralen und betrieblichen Akkumulation, ein anderer Teil — als Kompensation für die grössere Leistung — zur Erhöhung des Einkommens der landwirtschaftlichen Erwerbstätigen verwendet werden.

Als zweite Annäherung nehmen wir den Fall an, dass sich die Mechanisierungskosten steigern, während T' und M unverändert bleiben. Dies kann einerseits erfolgen, wenn keine Veränderung in der Mechanisierung eintritt, die Mechanisierungskosten aber infolge der Preisänderung ansteigen (z. B. die Preise der Betriebsstoffe, der Bestandteile, usw. sich steigern), anderseits, wenn man bei unveränderten Preisen mechanisiert, dies aber ausschliesslich den sogenannten »sozialen Zielen« (der Verminderung der manuellen Kraftentfaltung, der günstigen Arbeitszeiteinteilung, der Verbesserung des Arbeitsplatzes und der Arbeitsverhältnisse, usw.) dient, und weder den Produktionswert noch den Arbeitskräftebedarf verändert.

Nehmen wir an, dass die Mechanisierungskosten sich auf das Δ_G-fache erhöhen. In diesem Falle ist das Bruttoeinkommen je Flächeneinheit wie folgt:

$$12. \qquad B_{F_2} = \frac{T' - G_k}{F} - \frac{\Delta_G G_k - G_k}{F}$$

beziehungsweise

$$13. \qquad B_{F_2} = B_F - \frac{\Delta_G G_k - G_k}{F}$$

Beispiel: Wenn $\Delta_G = 1{,}2$ ist, dann gestaltet sich B_{F_2} wie folgt:

$$B_{F_2} = \frac{20\,000\,000 - 5\,000\,000}{4\,900} - \frac{1{,}2 \cdot 5\,000\,000 - 5\,000\,000}{4\,900} =$$

$$= \frac{15\,000\,000}{4\,900} - \frac{1\,000\,000}{4\,900} = 3\,061{,}224 - 204{,}08 = 2\,857{,}14 \text{ Ft}$$

In unserem Beispiel hat das Bruttoeinkommen je Kat. Joch — zufolge der 1,2-fachen Steigerung der Mechanisierungskosten, und bei Unveränderlichkeit der anderen Faktoren — von 3 061,224 Ft auf 2 857,14 Ft, das heisst $\frac{2\,857{,}14}{3\,061{,}224} \cdot 100 = 93{,}33\,\%$, also um 6,67% abgenommen.

Dem neuen Verhältnis entsprechend können wir auch das Bruttoeinkommen pro arbeitendes Mitglied gleicherweise berechnen, das heisst:

$$14. \qquad B_{M2} = \frac{T' - G_k}{M} - \frac{\Delta_G G_k - G_k}{M}$$

beziehungsweise

$$15. \qquad B_{M_2} = B_M - \frac{\Delta_G G_k - G_k}{M}$$

In unserem Beispiel, wenn $\Delta_G = 1{,}2$, dann ist

$$B_{M_2} = 21\,428{,}57 - \frac{1{,}2 \cdot 5\,000\,000 - 5\,000\,000}{700} =$$

$$= 21\,428{,}57 - 1\,428{,}57 = 20\,000 \text{ Ft}.$$

Also das Einkommen je arbeitendes Mitglied hat zufolge der Erhöhung der Mechanisierungskosten um 20% von 21 428,57 Ft auf 20 000 Ft, das heisst:

$\frac{20.000}{21.428{,}57} \cdot 100 = 93{,}33\%$, also um 6,67% abgenommen.

Ansatz IV: Die anderen Faktoren unverändert angenommen, *wird das Bruttoeinkommen sowohl je Flächeneinheit als auch pro arbeitendes Mitglied durch die Steigerung der Mechanisierungskosten vermindert*, und zwar nach dem Mass der Steigerung der Mechanisierungskosten je Flächeneinheit, beziehungsweise pro arbeitendes Mitglied.

Ansatz V: Die anderen Faktoren unverändert angenommen, hat die Erhöhung der Mechanisierungskosten einen vermindernden Einfluss auf das Bruttoeinkommen je Flächeneinheit, beziehungsweise pro arbeitendes Mitglied. Das Mass dieser Verminderung *hängt von dem Verhältnis des modifizierten Produktionswertes und der Mechanisierungskosten zueinander ab.* Je grösser das Verhältnis $\frac{T'}{G_k}$, das heisst die gegebene prozentuale Veränderung der Mechanisierungskosten ist, desto kleiner ist die dadurch verursachte Veränderung im Bruttoeinkommen je Flächeneinheit, beziehungsweise pro arbeitendes Mitglied.

Wird die prozentuale Abnahme des Bruttoeinkommens je Flächeneinheit, beziehungsweise pro arbeitendes Mitglied durch Δ_{B_F} beziehungsweise durch Δ_{B_M} bezeichnet, dann gilt bei gegebenem Δ_G der folgende Zusammenhang:

$$16. \qquad \Delta_{B_F} = \frac{\Delta_G G_k - G_k}{T' - G_k}$$

beziehungsweise

$$17. \qquad \Delta_{B_M} = \frac{\Delta_G G_k - G_k}{T' - G_k}$$

Aus den Formeln 16. und 17. ersehen wir, dass $\Delta_{B_F} = \Delta_{B_M}$, das heisst, dass die Veränderung der Mechanisierungskosten, prozentuell genommen, hinsichtlich des Bruttoeinkommens je Flächeneinheit, beziehungsweise pro Arbeitskraft die gleiche Wirkung hat.

Wenn $\frac{T'}{G_k} > 1$, dann gilt bei gegebenem Δ_G

$\Delta_G > \Delta_{B_M} = \Delta_{B_F}$, und zwar je grösser das Verhältnis $\frac{T'}{G_k}$, desto grösser ist das Verhältnis $\frac{\Delta_G}{\Delta_{B_F}}$ beziehungsweise $\frac{\Delta_G}{\Delta_{B_M}}$.

Wenn $\frac{T'}{G_k} = 1$, dann $\Delta_G = \Delta_{B_F}$, beziehungsweise $\Delta_G = \Delta_{B_M}$ und wenn $\frac{T'}{G_k} < 1$, dann $\Delta_G < \Delta_{B_F}$, beziehungsweise $\Delta_G < \Delta_{B_M}$.

Ansatz VI: Da $\frac{F}{M} > 1$, *wird* deshalb neben unveränderten sonstigen Faktoren das *Bruttoeinkommen pro Mitglied* durch die Erhöhung der Mechanisierungskosten *um eine grössere Summe vermindert als das Bruttoeinkommen je Flächeneinheit.* Dieser Unterschied nimmt um so eher ab, je mehr sich das Verhältnis eins annähert. Daraus folgt, dass *der Unterschied zwischen dem Bruttoeinkommen je Flächeneinheit, beziehungsweise pro Arbeitskraft durch die Zunahme der Mitgliederdichte immer mehr vermindert wird,* dagegen, je schlechter die Arbeitskräfteversorgung, um so grösser die Differenz — unter gegebenen Bedingungen — zwischen den beiden Kennziffern.

Ansatz VII: Die gegebene *Maschinenkostenerhöhung zeigt sich in der Abnahme des Bruttoeinkommens je Mitglied durch eine um so kleinere Summe, je grösser die Arbeitskräftedichte ist,* mit Rücksicht darauf, dass $\frac{\Delta_G G_k - G_k}{M}$ sich durch die Erhöhung von M vermindert.

Dies kann uns aber irreführen, wenn wir das Niveau von B_M nicht in Betracht ziehen. Je niedriger nämlich — unter gegebenen Bedingungen — das Ausgangsniveau von B_M, um so grösser das prozentuale Verhältnis von $\frac{\Delta_G G_k - G_k}{M}$ zu B_M. Die Grösse von B_M hängt aber — bei gegebenem T' und G_k — von der Grösse von M ab, und zwar, je grösser M, desto kleiner ist B_M.

Ansatz VIII: Aus den vorherigen Ansätzen folgt, dass die in den Produktionsgenossenschaften erträgliche Grösse von Δ_G (d.h. die erträglichen Mechanisierungskosten aus sozialen Gründen) — bei gegebenem T' und G_k —

teils vom Verhältnis $T' : G_k$, teils von der Grösse von M abhängt. Je grösser das Verhältnis $\frac{T'}{G_k}$, desto grösser, beziehungsweise je grösser M, desto kleiner ist der erträgliche Wert von Δ_G. Das heisst: *im Falle gegebener Bedingungen und Produktionsstruktur gibt es um so grössere Möglichkeiten zur Mechanisierung vom »sozialen« Standpunkt aus, je weniger der Betrieb mechanisiert und je niedriger seine Mitgliederdichte ist.*

In der Praxis ist der Fall, wo ausschliesslich aus »sozialen« Zwecken mechanisiert wird, seltener. In den meisten Fällen besteht ein enger Zusammenhang zwischen der Arbeitskräftedichte und der Veränderung der Mechanisiertheit. Die Veränderung der Arbeitskräftedichte wird im allgemeinen die Veränderung der Mechanisierung mit sich bringen.

Im weiteren untersuchen wir, was für eine Wirkung der Tausch der Maschinenarbeit–lebendigen Arbeit–vorläufig einen unveränderten Wert von T' angenommen —, auf das Bruttoeinkommen je Flächeneinheit, beziehungsweise je Arbeitskraft ausübt.

Es ist leicht einzusehen, dass die Arbeitskräfteveränderung bei unverändertem T' auf das Bruttoeinkommen je Flächeneinheit gar keinen Einfluss hat. Die Formeln 12., beziehungsweise 13. sind also auch im Falle des Tausches der Maschinenarbeit–lebendigen Arbeit für das Bruttoeinkommen je Flächeneinheit gültig. Was aber das Bruttoeinkommen pro Arbeitskraft anbetrifft, sieht die Lage anders aus. Um die Wirkung des Tausches der Maschinenarbeit–lebendigen Arbeit auf das Bruttoeinkommen je arbeitendes Mitglied zu untersuchen, verbinden wir jetzt die Formeln 7. und 14., beziehungsweise 8. und 15., das heisst:

$$18. \qquad B_{M_3} = \frac{T' - G_k}{M} + \left[\left(\frac{T' - G_k}{M}\right)\left(\frac{M}{\Delta_M M} - 1\right)\right] - \left[\left(\frac{\Delta_G G_k - G_k}{M}\right)\left(\frac{\Delta_M M}{M}\right)\right]$$

beziehungsweise

$$19. \qquad B_{M_3} = B_M + B_M\left(\frac{M}{\Delta_M M} - 1\right) - \left[\left(\frac{\Delta_G G_k - G_k}{M}\right)\left(\frac{M}{\Delta_M M}\right)\right].$$

Die Formel 19. reduziert, erhalten wir:

$$20. \qquad B_{M3} = \frac{B_M}{\Delta_M} - \frac{\Delta_G G_k - G_k}{M \Delta_M}.$$

Beispiel:

$$B_{M_3} = \frac{21\,428{,}57}{0{,}8} - \frac{1{,}2 \cdot 5\,000\,000 - 5\,000\,000}{700 \cdot 0{,}8} = 26\,785{,}71 - 1785{,}71 = 25\,000 \text{ Ft}.$$

Die Formel 18. kann sinngemäss gleicherweise wie Formel 19. gekürzt werden. Statt dessen untersuchen wir jetzt die Formel 18. im einzelnen. In dieser Formel haben wir das Bruttoeinkommen je arbeitendes Mitglied in dreifacher Gliederung dargestellt. Daraus zeigt die Formel

$$21. \qquad \frac{T' - G_k}{M}$$

eigentlich das Volumen des Bruttoeinkommens vor der Veränderung.

Die Formel

$$22. \qquad \left(\frac{T' - G_k}{M}\right)\left(\frac{M}{\Delta_M M} - 1\right)$$

zeigt die durch die Veränderung des Arbeitskräftebestandes verursachte Zunahme des Bruttoeinkommens, und endlich stellt die Formel

$$23. \qquad \left(\frac{\Delta_G G_k - G_k}{M}\right)\left(\frac{\Delta_M M}{M}\right)$$

die durch die Veränderung des Maschinenbestandes verursachte Abnahme des Einkommens dar. Aus diesem Grund *hängt die Veränderung des Bruttoeinkommens bei unverändertem T' von der Grösse des Bruttoeinkommens pro Kopf, von den Maschinenkosten, von dem Substitutionsverhältnis der Maschinenarbeit – lebendigen Arbeit ab.* Daraus können wir einige Folgerungen ziehen.

Ansatz IX: Infolge der *Wirkung der Maschinenkostenerhöhung* — bei gegebenem und unverändertem *T'* — *vermindert sich das Bruttoeinkommen je Flächeneinheit*, was immer auch das Verhältnis des Tausches Maschinenarbeit – *lebendiger Arbeit sein mag.*

Ansatz X: Bei gegebenem und unverändertem *T' hängt die Wirkung des Tausches der Maschinenarbeit – lebendigen Arbeit auf das Bruttoeinkommen je arbeitendes Mitglied von dem Niveau des Bruttoeinkommens je arbeitendes Mitglied vor der Veränderung von den Mechanisierungskosten sowie von dem Substitutionsverhältnis der Maschinenarbeit – lebendigen Arbeit ab.*

Ansatz XI: Je höher das Niveau des Bruttoeinkommens je Mitglied vor der Veränderung ist, mit der Verdrängung um so weniger lebendiger Arbeit können die gegebenen Maschinenkosten kompensiert werden. Daraus folgt, dass die gegenwärtigen, verhältnismässig hohen Maschinenpreise und *das verhältnismässig niedrige Niveau des Bruttoeinkommens je arbeitendes Mitglied bei unverändertem T' die technische Entwicklung behindern können.*

Ansatz XII: Die Möglichkeiten der Mechanisierung sind in den einzelnen Betrieben verschieden. In den unter ungünstigen Naturverhältnissen wirtschaftenden Betrieben mit einer hohen Mitgliederdichte, in denen das Brutto-

einkommen je Mitglied niedrig ist, ergibt die Mechanisierung nur in dem Falle eine Steigerung des Bruttoeinkommens je Arbeitskraft, wenn die gegebene Mechanisierung die Freigebung von verhältnismässig vielen Arbeitskräften zur Folge hat — natürlich vorausgesetzt, dass die freigegebenen Arbeitskräfte in andere Volkswirtschaftszweige oder Betriebe abwandern können. *In solchen LPG-s aber, die unter günstigen Naturbedingungen wirtschaften und über wenige Arbeitskräfte verfügen, kann die Mechanisierung — bei unverändertem T' — schon im Falle von Freigebung verhältnismässig weniger lebendiger Arbeit die Erhöhung des Bruttoeinkommens je Arbeitskraft zur Folge haben.*

Im Laufe der bisherigen Untersuchung der Veränderung der Mechanisierung und Arbeitskraft haben wir vorausgesetzt, dass der Produktionswert unverändert bleibt. In der Tat verändert sich aber oft in solchen Fällen auch der Produktionswert (bzw. »der modifizierte Produktionswert«), und so hängt das Volumen des Bruttoeinkommens, nach der Veränderung, nicht nur vom Verhältnis der in den Formeln 22. und 23. angezeigten Einkommensteile, sondern auch von der Veränderung des Produktionswertes ab. Erstrecken wir also unsere Analyse auf den Fall, wenn T' auf das Δ_T-fache zunimmt.

Der Einfachheit halber gehen wir zuerst von einer solchen Lage aus, wo die Arbeitskraft und der Maschinenbestand unverändert bleiben, das Volumen von T' aber infolge der Wirkung von anderen Faktoren (z. B. Fachkenntnisse, Kunstdünger, Witterung, usw.) sich auf das Δ_T-fache erhöht. In diesem Fall gestaltet sich das Bruttoeinkommen pro Mitglied wie folgt:

$$24. \qquad B_{M_4} = \frac{T' - G_k}{M} + \frac{\Delta_{T'} T' - T'}{M}$$

Im weiteren setzten wir voraus, dass sich T' und auch G_k veränderten, das heisst, dass sich der modifizierte Produktionswert und die Mechanisierungskosten gleichzeitig erhöht haben. In diesem Fall ist die Summe des Bruttoeinkommens pro Kopf:

$$25. \qquad B_{M_5} = \frac{T' - G_k}{M} + \frac{\Delta_{T'} T' - T'}{M} - \frac{\Delta_G G_k - G_k}{M}$$

Gleichfalls wie vorher, können wir das Verhältnis der letzten zwei Glieder der Formel untersuchen, von dem die Gestaltung des Bruttoeinkommens je Mitglied bestimmt wird. Daraus ergibt sich die folgende einfache Folgerung: *um die Verminderung des Bruttoeinkommens je Arbeitskraft zu vermeiden, ist es bei unverändertem M notwendig, dass die Mechanisierung eine Steigerung des modifizierten Produktionswertes zur Folge haben sollte, die mindestens ihren Kosten gleich ist.*

Im weiteren nehmen wir an, dass sich T' und M verändern, das heisst, der modifizierte Produktionswert ansteigt, während die Arbeitskraft sich vermindert. So erhalten wir folgenden Zusammenhang:

$$26. \quad B_{M_6} = \frac{T' - G_k}{M} + \frac{\Delta_{T'} T' - T'}{M} + \left[\left(\frac{T' - G_k}{M}\right)\left(\frac{M}{\Delta_M M} - 1\right)\right] + \\ + \left[\left(\frac{\Delta_{T'} T' - T'}{M}\right)\left(\frac{M}{\Delta_M M} - 1\right)\right]$$

Die Formel 26. kann folgenderweise reduziert werden:

$$27. \quad B_{M_6} = \left[B_M + (\Delta_{T'} - 1)\frac{T'}{M}\right]\frac{1}{\Delta_M}$$

Beispiel: Wenn

$$\Delta_{T'} = 1{,}2 \quad \Delta_M = 0{,}8$$

$$B_{M_6} = \left[21\,428{,}57 + (1{,}2 - 1)\frac{20\,000\,000}{700}\right]\frac{1}{0{,}8} = \left[21428{,}57 + \right.$$

$$\left. + \frac{9{,}2 \cdot 20\,000\,000}{700}\right] \cdot 1{,}25 = \left[21\,428{,}57 + \frac{4\,000\,000}{700}\right] 1{,}25 =$$

$$= (21\,428{,}57 + 5\,714{,}25)\,1{,}25 = 27\,142{,}82 \cdot 1{,}25 = 33\,928{,}53 \text{ Ft.}$$

Das Endresultat der Formel 27. kann noch folgenderweise umgestaltet werden:

$$28. \quad B_{M_6} = \frac{B_M}{\Delta_M} + \frac{T'}{M} \cdot \frac{\Delta_{T'-1}}{\Delta_M}$$

Und daraus können wir die nachstehenden Folgerungen ziehen:

Ansatz XIII: Bei gegebenen Mechanisierungskosten wirken sowohl die Steigerung von T' als auch die Verminderung von M in Richtung der Erhöhung des Bruttoeinkommens je Arbeitskraft.

Das Mass der Erhöhung hängt vom ursprünglichen Niveau des Bruttoeinkommens je Arbeitskraft, vom Verhältnis des modifizierten Produktionswertes und der Arbeitskräfteversorgung vor der Veränderung, von der Arbeitskräfteveränderung, sowie vom Verhältnis der Arbeitskräfteveränderung und der Veränderung des modifizierten Produktionswertes ab.

Untersuchen wir das Bruttoeinkommen je Flächeneinheit, so können wir leicht einsehen, dass falls sich nur T' verändert, die Veränderung von B_F nach der Grösse der Veränderung von T' je Flächeneinheit erfolgen wird.

Verändern sich sowohl T' als auch G_k, so wird sich das Bruttoeinkommen je Flächeneinheit nach der Grösse von $T' - G_k$ je Flächeneinheit ändern. Daraus ergibt sich eine Folgerung:

Ansatz XIV: Bei gleichzeitiger Veränderung von T' und G_k nimmt B_F zu, wenn $\Delta_T,T' > \Delta_G G_k$; es bleibt unverändert, wenn $\Delta_T,T' = \Delta_G G_k$; und vermindert sich, wenn $\Delta_T,T' < \Delta_G G_k$. Das heisst: die Veränderung von B_F hängt davon ab, in welchem Mass die infolge der Wirkung der Mechanisierung eingetretene Erhöhung des modifizierten Produktionswertes die Mechanisierungskosten kompensiert. Die Veränderung von M hat auf B_F keinen Einfluss.

Nun setzen wir voraus, dass sich sowohl T' als auch G_k und M verändern, dass T' und G_k zunehmen, M aber sinkt.

So erhalten wir folgende Formel:

$$29. \quad B_{M_7} = \frac{T' - G_k}{M} + \frac{\Delta_{T'} T' - T'}{M} - \frac{\Delta_G G_k - G_k}{M} + \left[\left(\frac{T' - G_k}{M}\right)\left(\frac{M}{\Delta_M M} - 1\right)\right] + \left[\left(\frac{\Delta_{T'} T' - T'}{M}\right)\left(\frac{M}{\Delta_M M} - 1\right)\right] - \left[\left(\frac{\Delta_G G_k - G_k}{M}\right) + \left(\frac{M}{\Delta_M M}\right)\right]$$

Die Formel 29. kann leicht auf die untenstehende einfache Form gebracht werden:

$$30. \quad B_{M_7} = \frac{1}{\Delta_M}\left[B_M + (\Delta_{T'} - 1)\frac{T'}{M}\right] - \frac{\Delta_G G_k - G_k}{\Delta_M M}$$

Daraus ergeben sich folgende Folgerungen:

Ansatz XV: Wenn sowohl T' und G_k steigen, M aber sinkt, dann hängt das Bruttoeinkommen pro Mitglied von seinem Niveau vor der Veränderung, vom Verhältnis $T' : M$; $\Delta'_T : \Delta_M$; $G_k : M$, sowie vom Verhältnis $\Delta_G : \Delta_M$ ab.

Die Veränderung des Bruttoeinkommens je arbeitendes Mitglied wird von der Grösse von B_M, $\frac{T'}{M}$ und $\frac{\Delta_{T'}}{\Delta_M}$ in geradem; von $\frac{\Delta_G}{\Delta_M}$ und $\frac{G_k}{M}$ in umgekehrtem Verhältnis beeinflusst. Daraus folgt aber, *dass die LPG-s, in denen T' und B_M je Mitglied — infolge der günstigen Naturbedingungen und der diesen entsprechenden, verhältnismässig niedrigen Mitgliederdichte — auf hohem Niveau sind, und T' infolge der Mechanisierung, bei gleichzeitigem Rückgang der Mitgliederzahl (der Wert von T' je Personalverminderung ist hoch), wesentlich erhöht werden kann, in der Lage sind auch bei relativ kleinerem Substitutionsverhältnis von Maschinenarbeit – lebendiger Arbeit höhere Maschinenkosten zu ertragen.* In den LPG-s aber, die unter ungünstigen Bedingungen und bei relativ höherer Mitgliederdichte wirtschaften, kann die Mechanisierung — selbst wenn sie

auch die Erhöhung von T' ermöglicht —, nur im Falle von verhältnismässig hoher Substitution der Maschinenarbeit–lebendigen Arbeit entwickelt werden. Daraus geht allerdings hervor, dass die Naturbedingungen und die Arbeitskräftedichte in der Wirtschaftlichkeit des Fortschritts, der auf dem Gebiet der Mechanisierung erreicht werden kann, eine grosse Rolle haben.

Was das Bruttoeinkommen je Flächeneinheit betrifft, ist der Ansatz XI nach wie vor gültig, da die Veränderung von M auf das Bruttoeinkommen je Flächeneinheit keinen Einfluss hat. Daraus ergibt sich aber eine neue Folgerung.

Ansatz XVI: Der Einfluss der Mechanisierung zeigt sich verschieden, wenn man ihn vom Gesichtspunkt des Bruttoeinkommens je Flächeneinheit oder je Arbeitskraft betrachtet. *Hinsichtlich des Bruttoeinkommens je Flächeneinheit können die Mechanisierungskosten nur durch die ertragsteigernde Wirkung der Mechanisierung kompensiert werden, dagegen vom Gesichtspunkt des Bruttoeinkommens je Arbeitskraft gesehen, kompensieren sich die Mechanisierungskosten zusammen mit der Ertragssteigerung und der Arbeitskräfteverminderung.*

Daraus folgend, liegt die Wirtschaftlichkeitsgrenze der Mechanisierung im ersten Falle auf niedrigerem, im letzteren Falle auf höherem Niveau, natürlich vorausgesetzt, dass die Arbeitskraft in anderen Zweigen der Volkswirtschaft beschäftigt werden kann. In gegebenem Falle, wenn man das Bruttoeinkommen pro Mitglied in Betracht zieht, kann die Mechanisierung selbst dann wirksam sein, falls sich der modifizierte Produktionswert je Flächeneinheit vermindert.

Beispiel: Nehmen wir an, dass $\Delta_{T'} = 1{,}2$, $\Delta_M = 0{,}8$ und $\Delta_G = 1{,}2$ gleichzeitig gültig sind.

Dann ist das Bruttoeinkommen pro Mitglied nach Formel 30:

$$B_{M_7} = \frac{1}{0{,}8}\left[21\,428{,}57 + (1{,}2 - 1)\frac{20\,000\,000}{700}\right] -$$

$$- \frac{1{,}2 \cdot 5\,000\,000 - 5\,000\,000}{0{,}8 \cdot 700} = \frac{1}{0{,}8}\,[21\,428{,}57 + 0{,}2] \cdot$$

$$\cdot\, 28\,571 - \frac{1\,000\,000}{560} = 26\,785{,}72 + 5\,714{,}2 - 1\,785{,}71 =$$

$$= 30\,714{,}21\ \text{Ft}.$$

Man kann B_F gleicherweise berechnen:

$$B_{F_7} = \left[3\,061{,}23 + (1{,}2 - 1)\,\frac{20\,000\,000}{4\,900}\right] -$$

$$- \frac{1{,}2 \cdot 5\,000\,000 - 5\,000\,000}{4\,900} = [3\,061{,}23 + 816] -$$

$$- 204 = 3\,673{,}23\ \text{Ft}.$$

Da erscheint aber auch ein anderes Problem. Für die Mitglieder einer LPG ist nicht nur das Bruttoeinkommen pro Mitglied, sondern — in Hinsicht der Gesaltung des Lebensstandards — *auch das Bruttoeinkommen pro abhängiges Familienmitglied* von grosser Bedeutung. In der Tat aber sind es im allgemeinen eben die erwerbsfähigen und arbeitenden Mitglieder, die aus der Landwirtschaft in grosser Menge abwandern, und infolgedessen nimmt die Anzahl der Abhängigen pro arbeitendes Mitglied, das heisst, die Anzahl der abhängigen Familienmitglieder in kleinerem Mass ab als die der arbeitenden Mitglieder.

Bezeichnen wir die Anzahl der abhängigen Mitglieder mit E, so ist die Anzahl der Abhängigen pro arbeitendes Mitglied (die Pensionäre umgerechnet) $\frac{E}{M}$.

Mittels des Bruttoeinkommens pro arbeitendes Mitglied und der Anzahl der abhängigen Familienmitglieder pro arbeitendes Mitglied können wir die Summe des Bruttoeinkommens pro abhängiges Familienmitglied folgenderweise berechnen:

$$31. \qquad B_E = B_M \frac{M}{E} .$$

Mit Rücksicht auf die Anzahl der abhängigen Familienmitglieder modifiziert sich die Formel 29. wie folgt:

$$32. \quad B_E = \left[\frac{T' - G_k}{M} + \frac{\Delta_T \cdot T' - T'}{M} - \frac{\Delta_G G_k - G_k}{M} + \right.$$
$$+ \left[\left(\frac{T' \cdot G_k}{M} \right) \left(\frac{M}{\Delta_M M} - 1 \right) \right] + \left[\left(\frac{\Delta_T \cdot T' - T'}{M} \right) \left(\frac{M}{\Delta_M M} - 1 \right) \right] -$$
$$\left. - \left[\left(\frac{\Delta_G G_k - G_k}{M} \right) \left(\frac{M}{\Delta_M M} \right) \right] \right] \cdot \frac{M}{E} .$$

Es ist leicht einzusehen, dass die Anzahl der Abhängigen pro arbeitendes Mitglied bei gegebenem T' und G_k auf die Grösse des Bruttoeinkommens je Flächeneinheit ebenso keine Wirkung ausübt wie die Veränderung der Anzahl der arbeitenden Mitglieder. (In der Tat gibt es doch eine solche Wirkung, sie kommt aber z. B. in der Grösse von T' zum Ausdruck.) Aus der Formel 32. können wir die nachstehenden Folgerungen ziehen:

Ansatz XVII: Der Einfluss des Tausches der Maschinenarbeit–lebendigen Arbeit auf die Steigerung des Bruttoeinkommens pro Kopf kann durch die Erhöhung der Anzahl der abhängigen Familienmitglieder teilweise kompensiert werden, sogar, *wenn ein Teil der in voller Leistungsfähigkeit stehenden Arbeitskräfte von der LPG abwandern, ihre abhängigen Familienmitglieder zurücklassen, erfolgt dadurch — selbst trotz der Steigerung der Mechanisierung —*

eine solche Veränderung in der Produktionsstruktur, dass sich $\Delta_T T' - \Delta_G G_k$ *vermindert, was zu einer Abnahme des Bruttoeinkommens pro abhängiges Familienmitglied führen kann.* Fraglich ist, in welchem Mass diese Abnahme durch die Beiträge der Abgewanderten, beziehungsweise des Staates zur Versorgung der Zurückbleibenden kompensiert wird.

Ansatz XVIII: Vom Gesichtspunkt des Bruttoeinkommens je abhängiges Familienmitglied untersucht, finden wir, dass die Wirtschaftlichkeitsgrenze der Mechanisierung *der hinsichtlich des Bruttoeinkommens je Flächeneinheit bestimmten Grenze näher liegt als die Grenze, die man bezüglich des Bruttoeinkommens je arbeitendes Mitglied festsetzen kann.* Die Grenzen aber, die in Hinsicht des Bruttoeinkommens je arbeitendes Mitglied und je abhängiges Familienmitglied gezogen werden können, liegen um so näher zueinander, je mehr die gemeinsame Verminderung der Mitgliederzahl und der Anzahl der abhängigen Familienmitglieder koinzidieren.

Beispiel: Ist in unserem Grundbeispiel die Anzahl der abhängigen Familienmitglieder je arbeitendes Mitglied 3, das heisst $\frac{M}{E} = \frac{1}{3}$, so ist es offenbar, dass

$$B_E = 21\,428{,}57 \cdot \frac{1}{3} = 7\,142{,}86 \text{ Ft.}$$

Wenn nun die Anzahl der abhängigen Familienmitglieder je arbeitendes Mitglied — bei $\Delta_{T'} = 1{,}2$, $\Delta_M = 0{,}8$, $\Delta_G = 1{,}2$ —, von 3 auf 3,5 steigt, dass heisst $\frac{M}{E} = \frac{1}{3{,}5}$, dann ist

$$B_E = 30\,714{,}21 \cdot \frac{1}{3{,}5} = 8\,775{,}5 \text{ Ft.}$$

Die angegebenen Formeln ermöglichen die Untersuchung des Problems in jedweder gegebenen LPG. Sie können sehr gut angewendet werden, um die zu erwartenden Einflüsse künftiger Entscheidungsmöglichkeiten im voraus abzuspielen. Die Untersuchungen dieses Charakters können erleichtert und beschleunigt werden, wenn man sie mittels im voraus konstruierter Nomogramme ausführt; dies können wir hier wegen Raummangel nicht behandeln.

Bisher haben wir hinsichtlich der Anwendung der vergegenständlichten Arbeit ausschliesslich die Mechanisierung in Betracht gezogen und haben von den sonstigen Kosten der vergegenständlichten Arbeit abgesehen. Eine volkswirtschaftliche oder eine betriebliche Entscheidung besteht aber im allgemeinen aus in mehrere Richtungen laufenden, komplexen Massnahmen. Wenn wir aber T' als Produktionswert (also nicht als modifizierten Wert ohne H), und G_k als Kosten der vergegenständlichten Arbeit (die Kosten der Mechani-

sierung + H) betrachten, dann können die Formeln verallgemeinert werden und sind zur Untersuchung der Wirkung jedweder Massnahme, die irgendeine Veränderung im Aufwand von komplexer vergegenständlichter Arbeit zur Folge hat, geeignet. Die Formeln können auch in solcher Art weiterentwickelt werden, dass wir in erster Annäherung die speziale Wirkung einiger technischer Entwicklungsgebiete (Mechanisierung, Gebäudekomplexe, Kunstdüngung, usw.) und dann — diese zusammengezogen — ihre gemeinsame Wirkung untersuchen.

Dieser Gedankengang und diese Serie von Formeln formulieren — unserer Beurteilung nach — die Konsequenzen des Eindringens der Technik in die Produktionsgenossenschaft *nicht nur als Abstraktionen*, sondern sie können auch zu gewissen *konkreten wirtschaftspolitischen oder betriebswirtschaftlichen Rechnungen* verwendet werden. So z. B. sind diese Formeln besonders dazu geeignet, mit ihrer Hilfe auf Grund verschiedener Voraussetzungen (voraussichtliche Preisverhältnisse, technische Lösungen, Arbeitskräftefluktuation, Marktverhältnisse, usw.) prognostische, aber der Grössenordnung nach annehmbare Kennziffern zu erhalten, um dadurch einerseits die mittel- und langfristigen Tendenzen der Wirtschaftspolitik optimalisieren zu können, anderseits, die voraussichtlich ungünstigen Erscheinungen durch rechtzeitig getroffene Massnahmen zu eliminieren. So kann diese Methode zur erfolgreichen wirtschaftlichen Grundlegung der volkswirtschaftlichen und betrieblichen Entscheidungen beitragen.

Die besprochenen Zusammenhänge machen uns auch ohne mathematische Untersuchungen auf einige mit dem LPG-Sektor verbundene wirtschaftspolitische Probleme aufmerksam, die in der nahen oder ferneren Zukunft auftreten.

1. Es ist wohl bemerkbar, dass sich *die wirtschaftlichen Konsequenzen der technischen Entwicklung in den LPG-s* — ihrer natürlichen und wirtschaftlichen Gegebenheiten, der Arbeitskräfteversorgung, bzw. der Familienzusammensetzung entsprechend — *sehr differenziert zeigen*. Die technische Entwicklung bzw. die Beschaffung der dazu notwendigen Fonds bleibt in den unter ungünstigen Bedingungen wirtschaftenden LPG-s (schlechte Standortbedingungen, verhältnismässig viele Arbeitskräfte und abhängige Familienmitglieder) immer mehr hinter denen zurück, die sich in günstiger Lage befinden.

2. Es ist besonders zu beachten, dass während die Veränderung — namentlich die Steigerung — des Preisniveaus der Produktionsmittel von den LPG-s günstiger Gegebenheiten leicht kompensiert wird, dies für jene, die sich in ungünstiger Lage befinden, unerträglich ist. Also, *die Preisänderung der technischen Lösungen hat auf die LPG-s von differenten Gegebenheiten sehr verschiedene Einflüsse*. Den Vorteil einer eventuellen allgemeinen Preisniveausenkung können ebendeshalb in erster Linie die unter günstigen Bedingungen wirtschaftenden LPG-s ausnützen.

3. Die LPG-s von ungünstigen Gegebenheiten werden jene Wege der technischen Entwicklung vorziehen, *die Beschäftigung, beziehungsweise Ertragssteigerung, und dadurch das Wachstum des Bruttoeinkommenvolumens sichern.* Wo aber auf einem günstigen Standort wenige Arbeitskräfte (nicht zu viele abhängige Familienmitglieder) vorhanden sind, dort kann in erster Linie mit der Entwicklung der *Mechanisierung* in *beschleunigtem Tempo* gerechnet werden. Bei diesem letzteren Typ, zu dem — infolge der auf lange Frist voraussichtlichen Abwanderung der Arbeitskräfte — in Zukunft immer mehrere LPG-s gerechnet werden können, wird es selbst trotz den hohen Maschinenkosten (in einer unveränderten Preisstruktur) zur Ertragssteigerung keinen entsprechenden Anreiz geben. Das Personaleinkommen je Mitglied kann nämlich wegen der grossen Bodenfläche je Mitglied, selbst bei verhältnismässig kleinerem Bruttoeinkommen je Flächeneinheit wachsen. So ist es möglich, dass *die betrieblichen und volkswirtschaftlichen Interessen in einem gegebenen Zeitraum entgegengesetzt sind*, da ein immer grösserer Teil der LPG-s das Personaleinkommen der Mitglieder ohne Ertragssteigerung erhöhen könnte. Um solch eine — mit den objektiven volkswirtschaftlichen Bedürfnissen nicht im Einklang stehende — Erscheinung aufzulösen (soweit die Volkswirtschaft die Steigerung der landwirtschaftlichen Warenproduktion erfordert), muss man *zu rechter Zeit entsprechende Anreizsysteme ins Leben rufen.*

Solche ähnliche Folgerungen können wir selbst auf Grund der schon besprochenen Ableitungen ziehen. Die Wirtschaftsführung hat selbstverständlich Bedarf an nuancenreicheren, besser qualifizierten Rechnungen, besonders zur Ausarbeitung von Wirtschaftsprognosen. Die Nomogramme, die auf Grund der dargelegten Formeln ausgearbeitet werden können, ermöglichen auch die Ausführung solcher grundlegender Rechnungen.

ПОПЫТКА ИССЛЕДОВАНИЯ ЭКОНОМИЧЕСКИХ ПОСЛЕДСТВИЙ ТЕХНИЧЕСКОГО РАЗВИТИЯ В МОДЕЛИ СЕЛЬСКОХОЗЯЙСТВЕННЫХ КООПЕРАТИВОВ

И. ГЭНЦИ – Й. ТОТ

В статье отвлеченно, при помощи математических формул рассматриваются экономические последствия технического развития (особенно механизации) в модели сельскохозяйственных кооперативов. При этом авторы исходили из предположения, что в данном кооперативе в функциональной зависимости от времени численность работающих членов убывает, и в соответствии с этим изменяются степень механизации, структура производства и в зависимости от всего этого — валовая продукция и валовой доход.

На основании приведенных в анализе формул можно сделать ряд выводов, отражающих определенные тенденции относительно будущего, особенно в отношении дифференциации производственных кооперативов, их природных и экономичеких условий, плотности рабочей силы, технической оснащенности и т. д., а на основании всех этих факторов — и в отношении влияния различных структур цен.

При помощи представленного метода могут быть подготовлены и количественные прогнозы относительно влияния технического прогресса на макро- и микроэкономические уровни, с учетом различных обстоятельств.

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I. VAJDA

NEW TRENDS IN WORLD ECONOMY AND WORLD TRADE

In this posthumus article the author points out the new trends discernible in the last decade. The new phenomena may be summed up as follows: institutional liberalization of trade, the growing role of integrations, new policies in the exports of American capital, increasing liberalization of production. The author deals extensively also with the pressing problems of the Common Market, as reflected by the Mansholt report and its reception. The latter proved that the EEC has no common economic policy. World monetary problems are also dealt with pointing out, however, that these problems have not impeded trade as yet.

The first question is whether we can really speak of new trends, whether we can face new tendencies in the caleidoscopic maelstrom summarily called — since Karl Marx recognized it — the world economy? The doubt inherent in the question is justified by the fact that since the first third of the fifties — when the reconstruction period after the second World War had on the whole been concluded and when also the waves caused by the Korean war had subsided — no major breaks or sudden dramatic changes have appeared in the pattern of world economy. Development is, however, dynamic; the shift towards new points of emphasis is first less perceptible but takes later sharper outlines and assumes new dimensions. Thus, it is advisable to survey the picture from time to time and make an attempt at an analysis of the trends and contradictions which, though perhaps present for some longer time and having made their effects felt, have unfolded only recently to full extent.

When, about ten years ago, I surveyed the structural changes in the world market after the second World War, I already pointed out that two opposed trends may be discerned in the world economy: on the one hand, the economies of the socialist countries are growing at an essentially even and quick rate and, on the other hand, there is an unequal development to be discerned in the capitalist countries which tends to aggravate the differences between development levels, making them insuperable. It may, nonetheless, be stated — I wrote in 1959 — that the rapid growth of capitalist world trade in the last two decades was not interrupted by any economic crisis of a dimension like the depression between the two world wars, in the preceding period. In the most developed capitalist countries production has been raised to an unprecedented level by means of new industrial methods, by developing technology, by increasing the productivity of human labour; these were accompanied by the first steps in the direction of utilizing atomic energy. The new techniques, originally designed for destruction, gradually penetrated the

sphere of peaceful production in the years following the end of the war, expanding reproduction to a great extent and opening bold horizons for a humanity which has become aware of its almost unlimited possibilities. But, as an irreconcilable contradiction to these seemingly unlimited human faculties, we find the limitations imposed by the exploiting, imperialist monopoly capitalism; so that each day millions of people would ask themselves in anguish whether it is a curse or a blessing these latest achievements of human knowledge have brought us. This anguish will cease only with the general and complete victory of socialism.

In the same "tour d'horizon" I wrote about the increasing role of the state in the capitalist economy, about the efforts at creating international organizations that would embrace a wider circle of capitalist countries and I admitted that, in spite of their contradictions, these organizations have achieved certain results, particularly as regards liberalization and expansion of trade among their member countries. In the decade 1948—1957 the volume of world trade rose to twofold and the advance of West-Germany and Japan, the growing role of the "oil countries" in boosting exports as well as the relative lagging behind of the USA could already be established. A strong differentiation of the commodity pattern of world trade was already discernible: the role of agricultural and other raw materials was decreasing and the share of industrial finished goods, particularly of investment goods, was quickly growing in world trade. This uneven development continued, with competition among the most developed capitalist countries growing; the difference between the development levels of the advanced and the backward capitalist countries was increasing, the contradiction between industry and agriculture, inherent in capitalism, was becoming unbridgeable and carried the germ of new revolutionary tensions. On the other hand, working people all over the world demanded peace and welfare.[1]

Confronting the picture that can be drawn today with the one of ten years ago, our first question seems justified: what has changed since then, what are the new trends? As a matter of fact, the phenomena and contradictions then listed persist to this day; the unsolved problems and the consequent tensions are still constituting a contrast incomprehensible to the human mind if confronted with the human faculties which seem to be unlimited. Today, we would speak of a scientific-technological revolution; in those years this expression was not yet widespread but we did know and did even take account of the accompanying phenomena. From the restless crater of the backward people's fight for freedom and national existence several flows of lava erupted in the last decade. To mention only the most important ones: the aggression against Cuba, Congo, Viet-Nam, the Arab—Israeli war, Nigeria—Biafra . . . The cold war moved away from the freezing point but other, seemingly endless, hot wars putrefy on the body of mankind.

There emerges, however, a new fact — at least as regards its dimensions — that in these last ten years world economy and world trade have shown stability in spite of all contradictions, tensions and the crises which affected some important institutions; the initial motive power appearing in the early fifties was due not to the healing of wounds caused by the war, nor — as was thought by many people — to preparations for a new world war (to the role of which we shall revert later on) but to long-term factors, whose weight could be only guessed but not assessed in the 1948—1957 decade. Now, the time has come not only to present these factors but also to outline some delimiting phenomena. We are, of course, aware of the fact that "stability" is *not* an unequivocally positive measure of value, independent of class aspects and of the situation within this stability. The Indian peasant, whose four children out of ten still die in the first years of their life (earlier the rate was six or seven) may consider this misery stable — but why should he praise it; the American Negro — though rebelling — may consider stable his humiliation and dispossession; the workers in capitalist industry and a great part of the intellectuals may consider their exploitation as stable — though, true, in their bulk they are not unemployed, their real income is growing, but so is their alienation, as testified by the great French, Italian, English and even American strike movements. On the whole, the share of socialist countries in world trade has proved to be stable, but stability cannot be considered as reassuring even in this respect, because its growth rate in the preceding period exceeded that of the capitalist countries while in recent years it has lagged behind the latter. On the other hand, the volume of exports of the advanced capitalist countries increased between 1961—1968 only by $ 11 millions, that is, the gap between the two camps essentially widened.

The share of the developing countries in world trade is diminishing — in spite of the incessantly growing flow of oil from their area — and, although the volume of their exports increased in 1968, it is still lagging behind the world average. The law of unequal development is invariably acting in this field, and that with undiminishing force. It is, however, my conviction that the law of unequal development *within* capitalism cannot be employed without qualification to the problems of the overwhelming majority of developing countries. The particular historical circumstances which — in the wake of the English, Dutch and French bourgeois revolution, and with the spread of external conquests and exploitation — brought about in Europe the single conditions of capitalist development, will not repeat themselves.[2] One of the profound contradictions of the capitalist system should be recognized in the fact that, while its policies are aimed at developing a capitalist system similar to its own also in the developing countries, the power relations emerging in the world economy, the weight of developed capitalist countries and monopolies in the countries which have not yet arrived at the stage of capitalist

development, make impossible the transformation of society according to the capitalist pattern, i.e. the emerging of a capitalist class structure even where power passes temporarily into the hands of its servants and business partners. In the bulk of the still underdeveloped countries a competitive *capitalist* system cannot evolve, not only thanks to the volcanic strength and justice of the revolutionary and independence movements and not only because of the hindering factors inherent in the given social customs, traditions and other elements of consciousness — capitalist politics become shipwrecked here on the cliffs of capitalist economy and this makes it evident that the historical road of the past has become impassable for inherent reasons and that the example cannot be repeated. With Japan, the chapter is closed.

The new trends

In my opinion, the main motive power of the dynamic development of world economy in our age can be found in two trends: the first is the scientific-technical revolution, the second the qualitatively new assertion of the international division of labour. These two are in close interaction, they mutually strengthen each other, expand each other's scope. It was the scientific-technical revolution which gave a new direction to the international division of labour, shifting its point of emphasis from the exchange of various factors (natural and geographic endowments, climatic conditions, abundance or lack of manpower, mineral deposits, geographic distances) which became established during the centuries of capitalistic development, to another level where the role of traditional factors is being increasingly pushed into the background and the human creative and organizatory capacities are steadily growing in importance. The most astonishing and most recent phenomena of this world-wide transformation can be found in the relative shrinking of geographical distances — although in this field every year provides surprises and unexpected turns. Distances between continents can be bridged over by sea, even if exceeding several thousand sea miles, easier — that is, cheaper — than a 100 km land route. The transport costs per ton with the present-day tankers of 2—300 000 DWT are lower — even if they have to circumnavigate Africa round the Cape of Good Hope — than they were a few years ago with much smaller craft, in spite of the fact that the latter may have been in a position to save several thousand kilometres by passing through the Suez Canal. All this testifies to the revolutionary reciprocity of the two trends: scientific-technical progress and the international division of labour. In addition, already ships of 500 000 DWT are being built and there are no unsurmountable difficulties in the way of building and operating ships with one and a half million DWT capacity — only the harbour concept must be modified since these ships will not touch land, only approach it.

But this unheard-of transformation of transportation techniques and its effect on the international division of labour is only one illustrative element of the process — I do not wish to dwell here on air transport, the container and pipeline systems; our attention has been drawn to this fact for a moment only because it is hardly two years that the Suez Canal, one of the most frequented traffic routes of the world, has been closed, and even if it were reopened in the near future, it could never regain its earlier importance. Two years! At the same time, it must not be forgotten that in the building of giant ships Japan has left behind herself all other ship-building nations of the world — a land so poor in raw materials, particularly in those necessary for the production of iron and steel, of which she needs huge imports. True, in 1968 Japan has increased its exports by 24 per cent and in the average of the last three years by 10,5 per cent (whereas the average annual increase in the exports of the developed industrial countries between 1966—68 was 9,5 per cent).

The scientific-technical revolution is proceeding in parallel with large-scale internationalization of production and the concentration of big enterprises. Also these processes are mutually feeding each other and growing from year to year in intensity. E.g. in England the capital involved in mergers and the concentration of big firms amounted in 1968 to 1,7 billion pounds, twice as much as in 1967. In the USA the number of industrial mergers was about 1000 both in 1965 and in 1966; in 1967 the corresponding figure was 1500. In 1968 the number of firms swallowed mostly by the "giants" was estimated at 2200, with the capital of the swallowed firms amounting to $ 31 billions in 1964 and growing to 64 billions in 1968. To characterize the scale on which production is becoming international, suffice it to quote one series of data: in 1966, the American-owned producing and distributing companies generated 5—6 per cent of the British GNP, about 10 per cent of industrial output and 17,5 per cent of British exports.[3] In recent years, one fifth of investments in English manufacturing industry has been made by American enterprises. Should the present trend continue unchanged, by 1980 the enterprises controlled by American interests will turn out about 20—25 per cent of English industrial production and 40 per cent of exports. It will be worth while to look at another revealing series of data. From the exports of American companies operating in the United Kingdom, in 1966 not less than 56 per cent consisted of "inter-group" deliveries — that is, of goods shipped within the framework of cooperation between big enterprises of international character. The figure is all the more interesting since international trade statistics do not reveal the pattern of foreign trade in this sense: whatever is exported from England, is accounted for as a British product. In the light of this fact the views about the diminishing role of American exports in world trade must be subjected to revision since they do not correspond to the facts. The truth

is that a considerable part of West-European and Canadian exports originates from American companies; the expansion of American *capital* in world trade has undoubtedly increased in the sixties. According to publications of the US Board of Trade, capital investments abroad increased between 1964 and 1966 by an annual 20 per cent, in 1967 and 1968 — in spite of the restrictions introduced — by 7 and 3 per cent, respectively, reaching $ 10 billions in 1968. In 1969, the trend again appears to be rising with new American investment in Europe estimated at 4 billion dollars.[4]

It is hardly contestable that the USA was in the lead of the scientific-technical revolution *of development and production* (in respect of basic research the situation is less unequivocal). Here, we cannot go into the history of this process. It is further undoubted that the extent of the US domestic market, its capital power and absorptive capacity are so great that they do not impose limitations on any conceivable growth of productive forces. More than half of all cars produced in the world are turned out and sold in the United States. Though it is true that in most branches of industrial production and, within that, in innumerable intermediate phases, the key of raising productivity and competitiveness is a huge expansion of the scale of production (the size of series), in the US there are no obstacles to attaining the maximum size of series within a complexity of plants — and that with relying exclusively or mainly on the domestic market.

In addition, there exists, as a curious fact of economic history, a traditional and rigidly maintained protectionism in the US with its wall of customs duties that cannot be penetrated. One of the first steps of President Nixon was aimed at pressing his European and Asian allies to "voluntarily" restricting their steel and textile exports to the United States, reminding them that Congress is inclined to enact import restrictions. Of course, there are no national interests involved, only the immediate interests of individual groups of capitalists operate the political machinery — but their influence (and money) is sufficient to make Congress and the Administration satisfy their demands.

Three historical phases

It may seem, therefore, as if the scientific-technical revolution concentrated in the capitalist sector of world economy to the United States and the above-mentioned trend of internationalization were represented exclusively — or at least mainly — by the expansion of American capital. The picture is deficient and distorting, owing to our hitherto one-sided presentation. But it is incontestable that the American capital has had and still has a big role in strengthening this process.

Examining economic development from the point of view of international relations since the beginning of the 20th century — with the war years naturally left out of account — the period can be broken down into three,

quite sharply separable stages. The first lasted from the 1890's to 1914, the outbreak of the first World War. In this stage the gold standard was generally in operation and, as a consequence, there prevailed full freedom of international payments. In commodity trade, however, medium-size (though sometimes prohibitive) walls of customs duties, unregulated by international agreements, squeezed the international division of labour between limits. From the nineties of the last century to 1913, the last year of peace, the relative proportions of industrial production and world trade remained — apart from crisis periods — unchanged on the whole, they rose and fell together. Though broken by the turmoil of the war years, this phase continued roughly along the same lines up to 1929, the outbreak of the great depression. It is remarkable that in those times economic theories were based on unlimited free trade, but practice did not follow this theory.

The second phase was marked by the crisis of the thirties and ended with the catastrophe of the Second World War. In this decade world economy and world trade relations disintegrated at an accelerating rate, there followed unlimited protectionism and under its effects the system of international payments collapsed.

As distinguished from the previous phases, this third phase is characterized by the birth of international agreements both on commodity trade and financial regulation; their substance may be described as an *institutional liberalization* of trade. Its framework is constituted by the GATT, OEEC, IMF, the mutual agreements on tariff reduction emerging from the Kennedy round and, in a narrower sense — because embracing a more limited number of countries — by the Common Market and EFTA. The individual institutions comprise a varying number of countries or blocks of states; the CMEA countries are outside their framework (with the exception of GATT, of which Czechoslovakia and Poland are members). We are dealing here, however, with the advanced industrial capitalist countries which, with their decisive share in world trade, determine the major trends in the latter. It should, however, be emphasized that an institutional liberalization of commodity trade has been realized primarily by the European capitalist countries (and, as has been pointed out above, to a lesser extent by the US), while in international payments the tendency has been general. Both the EEC and EFTA countries have abolished customs duties on industrial products in intragroup trade — the Common Market forms customs union as regards imports from third countries while the EFTA countries have maintained their autonomous tariffs on goods from outside the area.

Let us first have a look at the development of world trade in the last ten years.

Under the mutual effects of liberalization and the scientific-technical revolution the proportion between industrial world production and world

trade has considerably shifted *in favour of the latter*, with both increasing rapidly. Thus, world trade is growing quicker than industrial production. The UN reports on this the following data:

Table 1

World trade (exports)

(millions of dollars)

	Total	Of which	
		industrialized capitalist countries	socialist countries
1961	135 100	83 200	16 500
1962	142 800	87 500	18 000
1963	155 300	95 300	19 300
1964	173 500	107 500	20 900
1965	187 500	118 400	22 200*
1966	204 800	130 800	23 400*
1967	217 000	137 700	26 400*
1968**	240 000	155 800	28 000

* Exports by China and Albania estimated.
** Preliminary figures.
Source: International Financial Statistics, Vol. XXII. May, 1969.

Within this global development, two further trends may be observed. First, the trade between advanced industrial countries is growing quicker than the trade of the latter with less developed countries. Second, the share of industrial products in the total trade volume is steadily increasing. The three tendencies together point towards an intensification of the international division of labour in the field of industrial production, its new level and changed character.

Table 2

World production and world exports

(1963 = 100)

	GNP	Industrial world production	World exports
1963	100	100	100
1964	107	108	112
1965	113	115	121
1966	121	124	132
1967	125	130	139
1968		138*	154*

* Estimated figure.
Source: UN Yearbook of Statistics, 1967 (for 1968: data collected by GATT).

Integrations — the Common Market

Let us examine the degree of efficiency with which these forces (liberalization, customs unions, abolition of customs duties on industrial products within the integrations, internationalization of production, new points of emphasis in the division of labour) have asserted themselves in the foreign trade turnover of the capitalist integration organizations. It may be unequivocally stated that intra-group trade in both integrations has increased at a quicker rate than the exchange of goods with third countries. Intra-group exports in the Common Market have increased from 6,8 billion dollars in 1968 to $ 24 billions by 1967 while the trade with third countries increased in the same period from $ 16 billions to $ 31,6 billions. In 1964, the index of total exports (1959 = 100) was 244, that of intra-group exports 353 and of exports to countries outside the area about 200. In the case of EFTA, mainly because of the poor performance of the UK, the growth of exports between 1959 and 1967 has by far not reached that of the Common Market, but the preferences offered to the member countries have not missed their export boosting aim, either. The index number of total exports was 170, of intra-group exports 231, and of exports outside the area 155. In connection with the EFTA countries, however, the fact must not be neglected that their imports increased at a quicker rate than exports (the index number being 177) and this resulted mainly in growing deficits on the balance of payments with outside countries — the Common Market, the USA and Japan could expand their markets in the EFTA countries in spite of the detrimental customs situation. Imports from the USA increased almost twofold, from Japan to two and a half-fold.[5]

But is the assertion of the two main tendencies unequivocal, free from contradictions and opposed tendencies even in the relatively restricted framework formed by the advanced capitalist countries? The dialectics of history provides sufficiently frequent and rather ruthless examples (even in most recent years) for the fact that there is no evolution without contradictions; it has also taught us that the contradictions emerging do not arise exclusively from the internal laws of the capitalist system. Every social system, every historical order bears its own particular contradictions which follow the development of each system and its viability is not proved by its developing free from contradictions as though in a "prestabilized harmony" of idealistic philosophy, but that it recognizes the contradictions and is capable of eliminating them — knowing also that new ones will make their appearance later on.

International division of labour has been greatly promoted by the spread of the liberalization trend, then by the creation of integration institutions — inclusive also of CMEA, independently of the fact that the latter differs in character from the capitalist integrations. However, the organized integrations, being restricted to groups of countries, have erected themselves certain barriers with their particular system of preferences which influence also the

directions and extent of the international division of labour. A most characteristic example is provided by the agricultural protectionism of the Common Market and its outlined development in the Mansholt report. By setting as their objective *self-sufficiency within the integration* in respect of agricultural products — at least in that of the foodstuffs which can be produced under the conditions of the temperate European climate — the Common Market countries openly refuted liberal trade policies, and set up a regulated market mechanism which cannot be reconciled with free trade, basic dogma of the bourgeois economic theory. At the same time, however, by separating in principle the two fields of economy and production — namely agriculture and industry — they acknowledged, willingly or not, the fact that under modern circumstances, in the current of the scientific-technical revolution, *industrial* production would be menaced by the danger of decline even in a highly developed community such as the Common Market with its 200 million inhabitants, if protectionistic measures sensitively interfered with the international division of labour and its "carrier rockets", the international flow of capital and competition. Although, undoubtedly, in the background of the agricultural agreements of the Common Market there are reasons of domestic policy in the participating countries (namely, the rural votes for the governing right-wing conservative parties), but, in themselves, these would not have had a decisive force. Clearly, it was the particular features of the problems of agricultural production, the character of the market and consumer demand which differ so greatly from those in the industrial field, that gave rise to this agricultural protectionism, making way for the protectionistic tendencies that are always ready to come to the fore from behind the liberal façade.

In this connection it will be worth while to deal briefly also with the Mansholt report mentioned above; partly because it is the first attempt at the structural transformation of a whole economic branch in international dimensions (as yet, we have not produced any such comprehensive plan for a sector in the framework of CMEA), and partly because hitherto it represents the most consistent example of integrational protectionism (the technocratic approach). Differentiation by geographical units (regions) is given up in favour of general technical criteria (although the area concerned comprises regions so different in character as Holland with its gardening, cattle-raising Bretagne, the vineyards of the Provence, the intensive rice cultures of the Po valley and the agricultural poverty of Southern Italy, beside the medium-sized farms of West Germany and French, German, Belgian and Dutch farming which produce the great surpluses of wheat, sugar and butter). The report deals with social problems, the disparity between the agrarian and non-agrarian way of living and incomes, the resulting dissatisfaction and frustration of the agricultural population only as one of the starting points, but what it suggests for their solution in the proposals on implementation is only a rather savage, inhuman

automatism (we would say mechanism); the effects of the world market are fully neglected by the report — the world economy is considered only as a background, as a potential disturbing medium that should be eliminated.

The Mansholt plan aims at a twofold rationalization.[6] It proposes to rationalize agricultural production by increasing the size of farms, eliminating the small ones, by substantially reducing the area under cultivation and the livestock of cattle (in the warehouses of the Common Market there are several thousand tons of unsaleable butter, milk powder, sugar, etc.) and, finally, by a massive re-settlement of the peasantry (according to French sources, in the next two decades 10 million active workers would have to leave French agriculture). At the same time, it wishes to rationalize the Community's expenditures which amounted in 1960 to $ 1350 million — mainly in the form of price subsidies — and rose to $ 4500 by 1969. According to the report, by 1980 these expenditures — consisting, beside subsidies, of the "negative" costs of reshaping the price structure — could be reduced to 2 billion dollars. We do not wish to waste much time in criticizing the plan but, obviously, the decisive question to which this *sectoral plan* cannot yield an answer is: can ten million "superfluous people" be given a job in industry in the era of automation? And how should these "positive" costs of structural transformation be distributed? In proportion of those to be re-settled? In this case the Germans, Dutch, Belgians would have to bear the major part of Italian and French industrial development, since the proportion of agricultural population is almost 25 per cent in Italy, 17 per cent in France, as against 11 per cent in Western Germany, 8 per cent in the Netherlands and 6 per cent in Belgium (1965 data). Human sacrifices can, of course, not be quantified; and the technocrats do not care. Looking at the Mansholt plan from the point of view of the international division of labour, the fact cannot be overlooked that it wants to realize autarky in its extreme form; not only imports should be abolished, but also the surpluses, also exports! No wonder that the report was in general coldly received even in France.[7]

Let us be frank about it: the Mansholt report is the reflection of the differences in level and of the tensions existing between industry and agriculture under capitalist conditions, which we had pointed out a decade ago already. With some self-criticism, it must be added that in the socialist countries this difference in level and this tension between the two main branches of production could not be eliminated either. The recognition and formulation of the social tasks of the socialist system do not secure by themselves an automatical solution of the problems raised by development. Not even planned economy could — nor will, in foreseeable time be able to — do away with the tensions which derive from the unequal dynamism of productive forces in the short run, lest the dynamism itself should be slowed down. But such an attempt would again mean distortion, not equilibrium.

The refusal of the Mansholt report in the majority of the Common Market countries is due not solely to its extremely protectionistic character and technocratic approach coupled with considerable competence, nor to its debatable perspectives. The tragedy is that it is out of date. When the Eurocrats — who were given this nickname by the London periodical, the Economist — began to draw up the plan in Brussels, at the Headquarters of the Community, they have not yet realized that the conception with which the Community had been started, the conception of *economic union*, was getting into an impasse, a deep crisis. At another place, I already took up the argument and tried to prove the irrealistic character and unfeasibility of a concept which had proposed to develop from the customs union — the Common Market — an economic community and then build on this basis the political union. The events of recent years have justified my doubts about the Brussels conception, and borne out my statement that the Common Market *has no common economic policy*. The Mansholt report was doomed to failure because it could be realized — if at all — only in the framework of a uniformly elaborated and implemented economic policy of the Community, not in isolation. The carrier of a uniform — and thus common — economic policy can be only a political community, and the EEC is farther from that now than ever since its creation. In none of the financial crises emerging in series since 1967 has the Community acted really in common. While earlier it seemed as if its hard core were the French—German entente (brought about at the time by De Gaulle and Adenauer), in the discussions erupting around the possible inclusion of the United Kingdom, the devaluation of the French franc, or the revaluation of the West-German Mark it was the German and the French viewpoints which clashed with a sharpness (attenuated only by diplomacy). The notorious saying of Bismarck, the "Iron Chancellor" and inspirer of present-day West-German policies: "In Geldsachen hört die Gemütlichkeit auf!" (there is no joviality in financial matters) was obviously applied in Bonn also to the Franco–German friendship treaty. Nor is there, even after De Gaulle, much joviality to be found in Paris when the subject is the revanchist aspirations of West-Germany in the East, its fidelity to NATO or the internationalization of the French atomic forces.

Though fortune-telling is not a grateful role in international politics either, since it must stand the proof of history, it still seems that the decade nearing its end, the sixties of this century, may be characterized as the era of the rise and decline of supra-nationalism. The path of this conception was short: its initial enchantment soon faded away and political science had to look for a new way instead of the unpassable one. But supra-nationalism was only the ideological hull, the "false consciousness" of integration and liberalism in trade policy, not their substance and we cannot speak of the failure or decline of the latter. *Nothing testifies in a more convincing manner to the force of integra-*

tion as the governing trend of movement in the modern economy and the adequate and indispensable medium of the productive forces called into being by the scientific-technical revolution, than the fact that it has survived unimpaired the fading away of the concept of economic union, of liquidating the national economies. And we may safely reckon with a further progress of these ideas, though it is no less certain that the interactions and possible disturbances of the trading, domestic and foreign policies of the individual countries may result also in opposite measures. And transitory disturbances are unavoidable; the cyclicality of economic development (meaning thereby not cyclical crises but fluctuations of a narrower range) could not be eliminated by the economic policies of the capitalist countries — nor will this be possible in the future. (Neither by the socialist countries, for that matter.)

The European Free Trade Area

A few words should be devoted to the development and perspectives of EFTA. Since its birth in 1960 the EFTA could not, as an *institution*, essentially influence the development of world trade; but since the area accounts for 16 per cent of world imports (while its population is only 3 per cent of the world total) its weight is rather significant in world trade both in positive and negative terms. This is mainly due to the participation of the United Kingdom. In the framework of the EFTA supra-nationalism, the idea of a common economic development or financial policy has not even emerged, nor is its existence a hindrance to the integration process though, as a matter of fact, it has not promoted the latter among the member countries to any significant extent. The most that could be said is that the existence of the agreement sets certain limits to the autonomous decisions on economic policies in the individual countries, though these limits are at times disregarded (as was the case in the UK when, a few years ago, a transitory surcharge on imports was imposed without prior consultations with the members). According to the Economist, the EFTA is a waiting room yielding a good income; we would add on our part that those waiting have not yet decided which train to take — nor indicated the time of departure. The United Kingdom, Austria (if she were not bound by a pledge to neutrality), perhaps Denmark and Portugal would join the Common Market, while the Scandinavian countries (with or without Denmark) work on the creation of a Northern Union; Switzerland will, obviously, remain outside. Thus, EFTA is a function of the further development of the Common Market, it has no future of its own, though its near dissolution is not probable either. But, as a free trade area, by abolishing within its scope the customs duties on industrial goods, it has considerably contributed to the unfolding trend of liberalistic trade policies.

The role of the United States

The leading role of the USA has been referred to already in connection with the practical application of the results of the scientific-technical revolution. However, the role of the USA is less unequivocal in world trade, in the field of the international division of labour. The survey of the trends emerging in the sixties would not be complete if we neglected this fact. As regards the share of exports and imports in the national product, the USA takes the last place in the line of advanced industrial countries: in 1967 her imports accounted for 3,9 per cent and her exports for 3,3 of GNP — while the corresponding figures for West-Germany are 17,9 and 14,3 per cent and for the UK 13,2 and 16,2 per cent, respectively. Still, the United States supply almost 15 per cent of world exports[8] though at the end of the fifties her share was about 20 per cent. I have already mentioned the expanding role of American capital in world trade, capital exports and investments abroad. For the time being, the book value of productive capacities controlled by the Americans is estimated at about $ 50 billion — the real value can be hardly less than twice that amount. This means billions of dollars in profits, exploitation of European labour costing not even half as much as American, expropriation of foreign sources of income and power, and the abuse of it. The other aspect of the matter — which exists, even if not for humanitarian reasons or for rendering help but for profits and power — is the transfer of American technology to Europe and Japan, involving a considerable intensification of the international division of labour. Undoubtedly, at present, the American superiority is depressing, the American challenge exciting — and the international division of labour provides also the means to take up this challenge.

And here is where we must speak about armaments. We cannot be bribed by the statement that armaments have "nevertheless" furthered technical development to an unheard-of extent, that fine metallurgy has much to thank for to the atomic bomb, miniaturization of tools and electronics to war strategy, disguised as space research, and biology and meteorology to the conquest of the moon. We are unshakeable in the opinion that the 90 billion dollars devoted to war, armament and space research purposes in the 1968—1969 USA budget — almost 10 per cent of the national income of the USA and more than the total national income e.g. of Italy — are not the engine of the American Boom but its parasite, its curse. Freed from the burden of armaments, international division of labour could, by its own dynamism, achieve — without blushing and with pride — a performance that would be equivalent to the "results" and "progress" covered by the word "nevertheless" which is only providing an excuse for so many intellectual abuses, an opportunity to the "trahison des clercs". Considerable forces flowed and are flowing from the United States into the network of the international division of labour, but her policies are, at the same time, a brake on the latter.

From among the factors influencing the development of world trade, an important role should be attributed to international liquidity, the money market, the situation of the leading currencies — the dollar and sterling — as well as to the international financial institutions. I intend to deal in a separate study with this complex of problems, on which so many lively debates have been conducted in recent years with so many half-solved, half-disguised problems emerging. In this place I wish to remark only that up to the middle of 1969, when these lines are being written, development and growth of world trade have not been impeded by the crises connected with the repeated devaluations or revaluations of the pound, the dollar, the French franc or the DM, by gold speculation breaking through the limits of a gold price fixed 30 years ago, by the abolition of the enacted — though symbolical — gold cover for the dollar, the closure and reopening of currency and gold exchanges, flows of gold or speculative capital which has by now swollen to many billions. A sharp contrast has emerged between the situation of the world money market which is felt to be critical and the unbroken development of world trade, indicating thereby the qualitative change which has taken place in the international division of labour since the great world crisis of 1929—1933.

As a conclusion, let us unequivocally declare that the more liberal measures in world trade and the progress of integration had a decisive role in the relatively rapid growth of the world economy over the last decade; these factors have not yet been exhausted, the further possibilities of growth persist, above all in the countries whose development level provides an opportunity for utilizing world market impulses. The qualitatively new trends in the international division of labour can now not only be proved in the actual process of economic history, but may be considered to constitute a method which has stood the test and *one of the modern productive forces* beside the technical-scientific revolution, acting in interconnection with the latter. As any other force of production, it is only a potential one. No "manna" falling from heaven but the fruit of human, social preparation and action.

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НОВЫЕ НАПРАВЛЕНИЯ В МИРОВОЙ ЭКОНОМИКЕ И МИРОВОЙ ТОРГОВЛЕ

И. ВАЙДА

Автор в своей посмертно опубликованной статье указываетт на необходимость повторного анализа тех проявляющихся в мировой экономике направлений и противоречий, которые, если даже и действуют уже довольно длительное время, полностью развернулись лишь в последнее время. По сравнению с анализом, проведенным десять лет назад, новым обстоятельством представляется тот факт, что мировая экономика за прошедшее десятилетие оказалась по существу стабильной. Автор видит главную движущую силу динамического развития настоящей мировой экономики в двух тенденциях. Одна из них — научно-техническая революция, а другая — это качественно новое проявление международного разделения труда. Эти два фактора взаимно действуют друг на друга, научно-техническая революция сопровождается значительной интернационализацией производства и концентрацией крупных предприятий. Какая значительная роль ни принадлежала бы в этом факте Соединенным Штатам, ошибочно было бы отождествлять эти процессы с экспансией США.

Для развития мировой торговли в настоящее десятилетие характерны либерализация и ее взаимодействия с научно-технической революцией. Эти обстоятельства ведут к тому, что темп ее роста опережает темп роста мирового промышленного производства. В рамках мировой торговли, однако, торговля между промышленно развитыми странами растет быстрее, чем их экономические связи с менее развитыми странами, а внутри торгового оборота постоянно увеличивается доля промышленных изделий. Эти три тенденции в совокупности указывают на углубление международного разделения труда.

Международному разделению труда в значительной мере способствовало распространение тенденции либерализации, а затем возникновение интеграционных организаций. Интеграция в то же время может стать источником тенденции протекционизма. В связи с этим автор ссылается на аграрную политику Европейского экономического сообщества. Какие бы противоречия, однако, ни приходилось преодолевать экономическим интеграциям, они все же являются адекватной и обязательной средой современной экономики, научно-технической революции.

В заключительной части статьи автор излагает некоторые соображения относительно будущего Европейской зоны свободной торговли, считая ее бесперспективной на длительный период. В связи с ролью Соединенных Штатов он подчеркивает, что из США проникли значительные силы в сеть международного разделения труда, однако, политика США одновременно является тормозом развития международного разделения труда.

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А. РАЦ

СРАВНЕНИЕ НЕКОТОРЫХ ВАЖНЕЙШИХ ПОКАЗАТЕЛЕЙ ВЕНГЕРСКОГО И БОЛГАРСКОГО НАРОДНЫХ ХОЗЯЙСТВ

На основании межотраслевых балансов Болгарии — за 1963 год и Венгрии — за 1965 год, имеющих тождественную структуру и содержание, нами была сопоставлена структура хозяйств этих двух стран. При этом предусматривалось определить, насколько пригодны балансы, исчисляемые на основе различных валют и систем цен для проведения структурных анализов. В результате этой работы мы пришли к выводу, что при помощи межотраслевых балансов можно успешно сравнивать экономическую структуру двух (или нескольких) стран.

Болгарии (НРБ) и Венгрия (ВНР) уже несколько лет располагают межотраслевыми балансами. Аналогичность общественного строя двух стран, почти тождественная величина их территории и населения и, не в последнюю очередь, схожесть, показывающаяся в их экономической развитости, побудили экономистов, чтобы при помощи довольно сложного инструмента — межотраслевого баланса — сопоставить народные хозяйства этих двух стран.

Для общей характеристики Болгарии и Венгрии могут послужить следующие данные:

Таблица 1

Территория и численность населения в 1965 г

	НРБ	ВНР
Территория в кв. км	110,911	93,030
Численность населения в тыс. чел.	8,220	10,148
Плотность населения в чел./кв. км	74	103
Доля городского населения в %	46,5	43,1
Доля сельского населения в %	53,5	56,9
Обработанная территория на душу населения в кв. км/чел.	0,71	0,69

Абсолютная сумма национального дохода после второй мировой войны в Болгарии возрастала быстрее, чем в Венгрии; в отношении же национального дохода на душу населения нет значительной разницы (рис. 1).

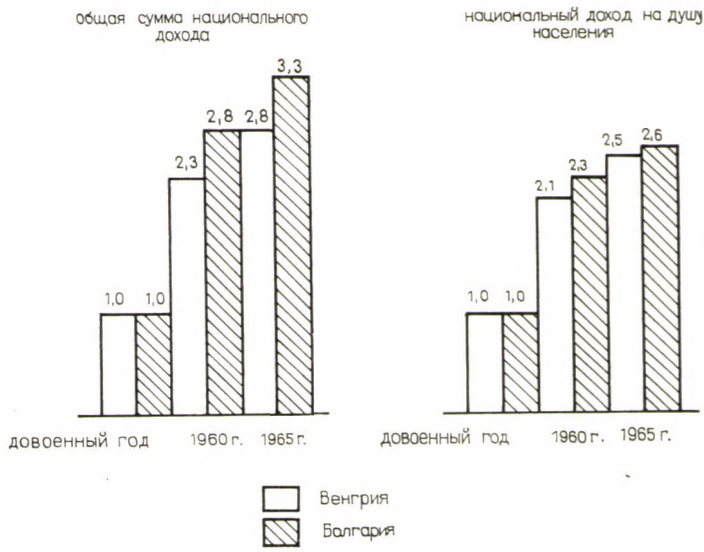

Рис. 1. Индекс объема национального дохода

Характерный для экономической развитости показатель национального дохода на душу населения в Венгрии в 1962 году был на 15% выше, чем в Болгарии.

Важнейшие соотношения занятости и их изменения характеризуются следующими данными:

	НРБ	НРБ	ВНР	ВНР
	1948	1965	1950	1965
Доля занятых в материальном производстве	95,7	89,2	83,8	83,4
Доля занятых в не материальной сфере	4,3	10,8	16,2	16,6
В рамках материального производства:				
в промышленности	8	29	23	39
в строительстве	2	8	4	7
в транспорте	2	6	5	8
в торговле	2	6	6	8
в сельском хозяйстве	86	51	62	38
В материальном производстве	100	100	100	100

Много аналогичности наблюдается и в изменении жизненного уровня в обеих странах, что иллюстрируется на рис. 2.

Основной предпосылкой сопоставительного анализа была тождественность межотраслевых балансов НРБ и ВНР по форме и содержанию. В основу сопоставления взяты балансы НРБ за 1963 год и ВНР за 1965 год. В балансах сфера материального производства была одинаково подразделена на 41 отрасль, в том числе на 33 промышленные. На основе обоих балансов расчеты производились странами в собственной валюте. Цель экспериментального сопоставления частью заключалась в исследовании того, насколько пригодны балансы, разработанные на основе различных валют (систем цен), для выполнения международных сопоставлений.

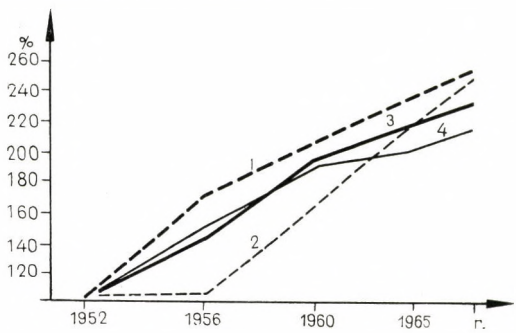

Рис. 2. Динамика реального дохода на одного человека 1952 = 100. 1. Крестьянство (ВНР); 2. Крестьянство (НРБ); 3. Рабочие и служащие (ВНР); 4. Рабочие и служащие (НРБ)

В имевшейся до сих пор практике международных сопоставлений, как правило, сложилось мнение, что стоимостные данные двух или нескольких стран сопоставимы лишь в том случае, если они исчисляются в той же валюте. Именно поэтому значительную часть работ по сопоставлению составляла сложная задача пересчета данных одной страны в валюту другой (или какой-либо третьей) страны. Задача такого характера решается, например, в рамках СЭВ, когда при расчетах национального дохода требуется сопоставление промышленной продукции. Существуют показатели, сопоставимые только в тождественной валюте. Имеются, однако, и такие возможности анализа, когда не обязательно проводить пересчеты цен, которые могут продлиться нередко 2—3 года.

Сопоставление имело одно важное и одно менее важное ограничение. Более важное из них вытекало из оценки в различных валютах. Его мы пытались обойти частью посредством соответствующих расчетов (например, нами в частности производились сопоставления на основании калькулятивных цен пропорциональных стоимости), частью же, подчеркивая только расхождения и сходства, не мотивируемые расхождениями в пропорциях цен.

Менее важным ограничением сопоставлений было то обстоятельство, что балансы относились не к одному и тому же году. Этот факт нам пришлось учесть в некоторых областях сопоставлений.

Важнейшие соотношения материального производства

Соотношения отраслей материального производства целесообразно изучить в первую очередь на основе стоимостных показателей. Однако сравнение экономической структуры на основе стоимостных показателей может несколько исказить расхождение в пропорциях цен. Значительные расхождения, однако, объясняются в свою очередь различиями в экономической структуре.

Таблица 2

Соотношения важнейших отраслей материального производства
(по фактическим ценам, в процентах)

Отрасли	Соотношения отраслей материального производства, рассчитанные на основании					
	валовой продукции		конечной продукции		чистой продукции	
	НРБ	ВНР	НРБ	ВНР	НРБ	ВНР
Промышленность	59,4	64,5	52,7	58,0	44,4	58,6
Строительство	8,2	9,6	10,7	13,1	6,9	10,0
Сельское хозяйство	22,4	15,9	23,6	15,3	33,0	18,3
Транспорт и связь	4,5	5,1	5,8	7,0	6,0	4,9
Торговля	3,8	3,6	5,0	4,9	7,1	5,2
Прочее	1,7	1,3	2,2	1,7	2,6	2,9
Итого:	100,0	100,0	100,0	100,0	100,0	100,0

а) «Продукция на сторону»

Основное расхождение между структурой экономики двух стран заключается в том, что в Венгрии доля промышленности и строительства гораздо выше (по всем показателям), чем в Болгарии, где зато существенно выше доля сельского хозяйства. Это различие в структуре предопределяет ряд дальнейших выводов.

Для подтверждения этого вывода вышеприведенные показатели были рассчитаны нами и по калькулятивным (пропорциональным стоимостям) ценам.

Данные, рассчитанные по калькулятивным ценам, — помимо подтверждения основных соотношений — указывают и на то обстоятельство, что в обеих странах относительно высоки промышленные и низки сельскохозяйственные цены. Таким образом, в действительных промышленных ценах пропорционально реализуется гораздо больше чистого дохода — а вследствие

Таблица 3

Соотношения основных отраслей материального производства
(по калькулятивным ценам, в процентах)

Отрасли	Соотношения важнейших отраслей материального производства, рассчитанные на основании					
	валовой продукции		конечной продукции отраслей		чистой продукции	
	НРБ	ВНР	НРБ	ВНР	НРБ	ВНР
Промышленность	54,1	56,7	47,5	50,1	31,1	42,5
Строительство	8,8	10,2	11,5	13,9	9,1	12,3
Сельское хозяйство	27,9	22,0	29,3	21,1	45,6	29,4
Транспорт и связь	4,3	6,1	5,4	8,2	5,9	7,8
Торговля	2,6	4,4	3,4	5,9	4,6	6,9
Прочее	2,3	0,6	2,9	0,8	3,7	1,1
Итого:	100,0	100,0	100,0	100,0	100,0	100,0

этого и национального дохода, — чем в сельскохозяйственных. Кроме того, оказалось, что в Венгрии такой эффект цен 1965 года наблюдается в большей мере, чем в Болгарии. В Болгарии доля сельского хозяйства по калькулятивным ценам и различным стоимостным показателям на 20—30% выше доли, рассчитанной по действительным ценам, в то время как в Венгрии это же расхождение в доле сельского хозяйства составляет 40—50%.

Таблица 4

Соотношения важнейших отраслей материального производства
(в процентах)

Отрасли	Соотношения важнейших отраслей материального производства рассчитанные на основании			
	числа занятых		брутто стоимости основных средств	
	НРБ	ВНР	НРБ	ВНР
Промышленность	27,4	40,0	52,7	52,1
Строительство	7,6	9,4	2,5	1,7
Сельское хозяйство	54,4	34,9	22,0	19,8
Транспорт и связь	5,0	6,9	18,4	22,5
Торговля	5,3	7,7	4,3	3,8
Прочее	0,3	1,1	0,1	0,1
Производственная сфера всего	100,0	100,0	100,0	100,0

Аналогичной представляется система цен обеих стран в том аспекте, что рассчитанные по действительным ценам соотношения несколько недооценивают роль строительства в народном хозяйстве. В Венгрии то же самое наблюдается и в отношении транспорта и связи.

Соотношения народнохозяйственных отраслей, рассчитанные на основе числа занятых и общей стоимости используемых (действующих) основных средств, несколько отличаются от вышеприведенного.

На основании числа занятых еще больше выявляется основное различие в экономической структуре двух стран. В обеих странах удельный вес сельского хозяйства представляется большим на основе числа занятых, чем на основе любого стоимостного показателя. Это обстоятельство в обеих странах указывает на то, что единица труда в промышленности производит в среднем больше стоимости, чем в сельском хозяйстве.

Иная картина получается в результате измерения соотношений на основе основных средств. На основании этого показателя доля транспорта и связи гораздо выше, так как эта отрасль является наиболее фондоемкой. Доля основных средств строительства и торговли выше в Болгарии, хотя согласно приведенным ранее показателям в некоторых случаях эти отрасли представля-

Таблица 5

Соотношения важнейших отраслей внутри промышленности
(по фактическим ценам в процентах)

Отрасли	Соотношения важнейших промышленных отраслей, рассчитанные на основании					
	валовой продукции		конечной продукции отраслей а)		чистой продукции	
	НРБ	ВНР	НРБ	ВНР	НРБ	ВНР
Горнорудная промышленность	3,8	5,7	4,6	6,4	5,5	8,2
Энергетическая промышленность	1,8	3,8	2,3	4,4	1,8	3,5
Металлургия	3,9	11,2	4,2	10,2	1,8	8,3
Машиностроение	13,4	23,0	14,7	22,1	16,5	22,2
Пром. строительных материалов	3,9	3,2	4,5	3,6	4,6	3,7
Химическая и резиновая пром.	5,1	9,7	6,0	11,2	6,0	9,7
Легкая пром.	31,0	23,8	26,8	21,4	34,9	30,1
Пищевая пром.	37,4	21,6	36,9	20,7	28,9	14,3
Итого:	100,0	100,0	100,0	100,0	100,0	100,0

а) «Продукция на сторону».

ли более высокую долю в Венгрии. Согласно нашим исследованиям это расхождение вызывается не различными пропорциями цен, а тем фактом, что эти отрасли оснащены относительно в большей степени в Болгарии, чем в Венгрии.

Отраслевая структура промышленности обеих стран находится в тесной взаимозависимости с вышеописанной основной экономической структурой их народных хозяйств. В обеих странах значительна доля промышленных отраслей, действующих на базе сельского хозяйства, причем она гораздо выше в Болгарии.

На базе сельского хозяйства работают пищевая и — в подавляющей мере — легкая промышленности. Эти две отрасли в Болгарии на основании всех показателей составляют приблизительно 2/3, а в Венгрии — около 40—50% промышленности. Металлургия, машиностроение и химическая промышленность, вместе взятые, в Венгрии составляют 40—42%, а в Болгарии — 24—25% промышленности. Хотя в Венгрии имеются неблагоприятные природные условия для горнорудной промышленности, все же удельный вес ее добывающей промышленности существенно выше, чем в Болгарии.

Таблица 6

Соотношения важнейших отраслей в промышленности
(по калькулятивным ценам, в процентах)

Отрасли	Соотношения важнейших отраслей промышленности, рассчитанные на основании					
	валовой продукции		конечной продукции отраслей а)		чистой продукции	
	НРБ	ВНР	НРБ	ВНР	НРБ	ВНР
Горнорудная промышленность	4,9	7,0	5,9	7,5	11,2	13,2
Энергетическая промышленность	1,7	3,6	2,2	4,1	1,4	2,3
Металлургия	4,7	9,9	5,0	8,5	3,0	6,5
Машиностроение	13,1	23,4	14,3	21,5	19,0	28,4
Промышленность стройматериалов	4,1	3,3	4,8	3,5	6,5	4,0
Химическая и резиновая пром.	4,0	7,6	4,7	8,5	3,2	5,1
Легкая пром.	29,3	22,1	25,2	18,8	37,9	31,1
Пищевая пром.	38,2	23,1	37,9	27,6	17,8	9,4
Итого:	100,0	100,0	100,0	100,0	100,0	100,0

а) «Продукция на сторону».

Расхождение в промышленной структуре двух стран аналогично и при его исчислении на основании калькулятивных цен. Таким образом, характерные для двух стран соотношения ясно выявляются и вопреки неодинаковым системам цен.

Структура конечного потребления

Конечное потребление отдельных продуктов, групп продукции в обеих странах, как правило, аналогично. Наблюдаемые структурные различия вытекают частью из доли продукции, производимой на экспорт, частью же из объема имеющихся в распоряжении продуктов (отечественных и импортных, вместе взятых).

Таблица 7

распределение отдельных компонентов конечного потребления по характеру продукции (в процентах)

Характер продукции по отраслям	Непроизводств. потребление		Капиталовложения и кап. ремонт		Экспорт		Конечное потребление всего	
	НРБ	ВНР	НРБ	ВНР	НРБ	ВНР	НРБ	ВНР
Горнорудная пр.	0,7	3,2	0,3	0,7	2,0	1,9	0,9	2,4
Энергетическая промышленность	0,7	1,9	0,1	0,5	—	0,0	0,4	1,1
Металлургия	0,0	0,2	0,2	1,6	3,8	12,3	1,0	3,3
Машиностроение	6,2	6,5	38,5	30,2	13,2	32,0	16,6	20,3
Промышленность стройматериалов	0,5	0,5	0,2	0,4	1,2	1,4	0,7	0,7
Химическая и резиновая пром.	3,6	4,8	0,2	0,5	2,9	7,9	2,9	4,7
Легкая пром.	20,6	21,9	0,9	2,7	15,5	18,4	15,3	16,4
Пищевая пром.	35,5	27,5	0,2	0,2	38,8	16,3	26,9	17,4
Социалистическая промышленность всего	67,8	66,5	40,6	36,8	77,4	90,2	64,7	66,3
Строительство	0,2	1,8	57,3	58,4	0,4	0,0	13,2	15,4
Сельское хозяйство	12,4	15,3	1,4	3,4	16,8	7,0	10,5	9,3
Транспорт и связь	6,0	6,5	0,7	0,9	4,0	1,9	4,0	3,8
Торговля	9,5	8,7	—	0,5	0,8	0,7	5,2	4,6
Прочая производственная деятельность	4,1	1,2	0,0	—	0,6	0,2	2,4	0,6
Производственная сфера итого:	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

Венгрия экспортирует существенно более высокую долю (37%) своей промышленной продукции, чем Болгария (29%). Внутри промышленности иную тенденцию показывают лишь три отрасли: в существенной степени — как по пропорции, так и по объему — пищевая промышленность, по пропорции в значительной мере — горнорудная промышленность и незначительно — металлургия.

Заслуживает упоминания и расхождение, вытекающее из географических условий, что в Болгарии на экспорт обращается большая доля транспорта (НРБ — 18,4%, ВНР — 11,5%). Это объясняется, в первую очередь, гораздо большим объемом судоходства.

На данные, отражающие отраслевую структуру (по характеру продукции) отдельных компонентов конечного потребления, влияет расхождение цен. Из нижеследующих данных, однако, складывается картина, согласно которой важнейшие соотношения в обеих странах тождественны, а расхождения не могут быть объяснены различными системами цен.

Доля промышленных продуктов в непроизводственном потреблении обеих стран одинакова. В том числе в Венгрии выше удельный вес продуктов горнорудной (вследствие природных условий), энергетической и химической промышленностей, и несколько выше доля машиностроительной продукции и продуктов легкой промышленности. В Болгарии выше доля продуктов пищевой промышленности. Это частью указывает на то, что в Венгрии выше доля товаров длительного пользования, в частности имеется более высокая степень оснащенности населения электробытовыми товарами. С другой стороны, однако, это указывает и на то, что в Болгарии — по сравнению с долей продуктов сельского хозяйства — продовольственные продукты потребляются после их промышленной обработки в большей мере, чем в Венгрии.

Структура экспорта двух стран различается в значительной мере. В Венгрии гораздо выше доля экспортируемых промышленных продуктов. Особенно хорошо видно это, если продукцию сельского хозяйства и пищевой промышленности учитывать вместе (см. рис. 3).

Если же рассматривать экспорт промышленных продуктов, учитывая и пищевую промышленность, то в обеих странах значительное большинство экспортируемых продуктов производится двумя отраслями: машиностроением и пищевой промышленностью. Однако их роль и доля не одинаковы в двух странах. В НРБ наиболее значительным является экспорт пищевой промышленности, составивший в 1963 году половину вывезенных промышленных продуктов. Машиностроительная и металлообрабатывающая промышленности занимают в экспорте НРБ второе место, однако их доля составляет всего лишь одну треть экспорта пищевой промышленности.

В экспорте ВНР самую большую роль составляет машиностроительная продукция. Половина экспортируемых товаров ВНР составляли продукты машиностроения и металлургии, вместе взятые. Из этого можно сделать

вывод, что в ВНР машиностроение и металлургия (вместе взятые) играли в экспорте ту же роль, что пищевая промышленность в НРБ. В экспорте ВНР второе место занимает пищевая промышленность, однако доля ее продуктов составляет всего лишь половину экспортируемой машиностроительной продукции.

Расхождение имеется между двумя странами и в отношении экспорта продукции химической и резиновой промышленностей. В экспорте ВНР ее доля в 2, 3 раза выше, чем в НРБ. При этом следует отметить, что при относительно более высокой доле промышленных продуктов в экспорте ВНР глав-

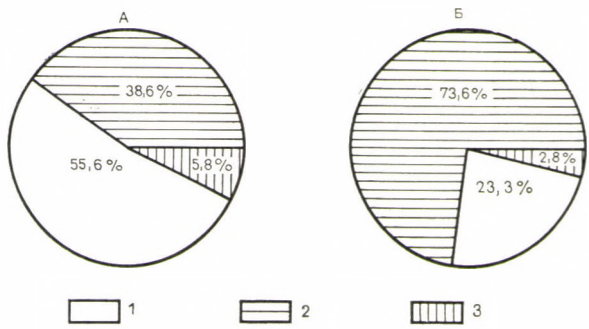

Рис. 3. Соотношение промышленных и сельскохозяйственных продуктов в экспорте
А Болгария; Б Венгрия
1 — сельскохозяйственные продукты (вместе с пищевой промышленностью) 2 — промышленные продукты (без пищевой промышленности) 3 — прочее

ную роль играют продукты отраслей, обрабатывающих минеральное сырье, производимое горнорудной промышленностью, в то время, как в НРБ преобладающую роль играют отрасли, сырье которых происходит из сельского и лесного хозяйств.

Характерно для расхождений между двумя странами и различие внутренней структуры сельскохозяйственного экспорта: в ВНР почти одинакова доля растениеводства и животноводства, а в НРБ доля растениеводства в пять раз превышала долю экспортируемых продуктов животноводства.

В результате сопоставления структуры экспорта двух стран можно сделать следующие выводы:

В ВНР большая часть экспорта происходит из промышленных отраслей, обрабатывающих минеральное сырье, материалы, происходящие из горнорудной промышленности. Большая часть экспорта происходила из ведущих отраслей современной промышленности — машиностроения, химической промышленности и металлургии — и выражала более развитую структуру промышленности.

Из расчетов вытекало и то, что экономика ВНР более тесно связана с экспортом, а посредством этого с международной торговлей, чем экономика НРБ. В 1965 году доля экспорта двух стран в национальном доходе составляла

в НРБ	30,3%
в ВНР	35,1%

В структуре импорта между двумя странами имеются расхождения, как правило, по характеру противоположные тому, что было установлено при сопоставлении структуры экспорта. В импорте НРБ доля промышленных продуктов выше, чем в ВНР. Зато сельскохозяйственные продукты (хотя их удельный вес в общем импорте обеих стран относительно низок) в импорте ВНР представляют в 2,5 раза более высокую долю, чем в НРБ. В структуре импорта НРБ доля продуктов металлообрабатывающей промышленности в полтора раза выше соответствующего показателя ВНР. В обеих странах имеется значительный импорт машиностроительной продукции, но в НРБ их импорт составлял 48% общего количества ввезенных промышленных продуктов (а вместе с импортом металла — 60%), в то время как в ВНР это соотношение составляло 35%, а вместе с металлургическими продуктами — 52%. Импортируемые продукты двух стран распределяются по основным направлениям использования следующим образом:

Таблица 8

Структура распределения импортируемых продуктов по целям потребления

	На производ. потребление	На конечное потребление			
		всего	в том числе		
			на непроизв. потребление	на капиталовложения	на изменение запасов итого
НРБ	49	51	18	25	8 100
ВНР	68	32	13	14	5 100

Согласно данным в ВНР большая доля импорта была использована производственным потреблением, в НРБ же сложилось обратное положение: несколько больше половины импорта было обращено непосредственно на конечное потребление, а почти половина на производственное потребление. Эти данные показывают, что производственные отрасли ВНР в относительно большей мере зависят от импорта, чем в НРБ.

Доля импорта не одинакова в двух балансах и внутри конечного потребления: в Болгарии как в производственном потреблении (7,7%), так и в сфере капиталовложений (25,4%) доля непосредственно используемого импорта выше, чем в Венгрии (соответственно 5,9% и 12,5%). Это вытекает, в

первую очередь, из различной структуры основных отраслей (промышленности и сельского хозяйства) двух стран. Так, например, гораздо большая машиностроительная промышленность Венгрии лучше может удовлетворить отечественные потребности сферы капитальных вложений, чем болгарское машиностроение.

Структура конечного потребления двух стран была нами сопоставлена и на основании соотношений стоимостных данных и числа занятых в производстве. В рассматриваемый период в производственной сфере в Болгарии работало 3,4 миллиона, а в Венгрии — 4,1 миллиона человек.

Таблица 9

Структура конечного потребления на основании фактических цен и занятых в производстве (в процентах)

	На основании фактических цен		На основании занятых в производстве	
	НРБ	ВНР	НРБ	ВНР
Непроизводственное потребление	52,0	48,9	55,5	56,8
Капитальные вложения	22,8	24,8	16,9	20,8
Экспорт	18,5	23,3	22,7	21,4
Изменение запасов	6,7	3,0	4,9	1,0
Итого	100,0	100,0	100,0	100,0

В обеих странах непроизводственное потребление обеспечивается одинаковой по существу долей рабочей силы. Зато значительные расхождения имеются в долях занятых, удовлетворяющих дальнейшие потребности. Особенно значительная разница наблюдается в отношении капитальных вложений и изменения запасов.

Одна из причин расхождения между данными по стоимости и по труду заключается в относительно низком в обеих странах уровне цен на продовольственные продукты. Причем в Венгрии он значительно ниже, чем в Болгарии. Противоположная тенденция наблюдается в отношении уровня цен на капитальные блага.

Разное соотношение экспорта в Болгарии мотивируется высокой потребностью в рабочей силе, связанной со значительным удельным весом сельскохозяйственной продукции и более низким уровнем сельскохозяйственных цен.

В Венгрии соотношение экспорта показывает противоположную тенденцию. Дело в том, что в венгерском экспорте высока доля промышленной продукции, имеющей относительно высокий уровень цен и в то же время удельную потребность в рабочей силе ниже средней (особенно по сравнению с сельским хозяйством).

На основании более детального анализа использования рабочей силы можно установить некоторые важные расхождения между хозяйствами двух стран. Так, например, расхождения имеются в долях, обеспечивающих снабжение продовольственными продуктами: в Болгарии в рассматриваемые годы 34,5%, а в Венгрии 31,5% всех занятых производили потребление продовольственных продуктов промышленного и сельскохозяйственного происхождения. Учитывая и то обстоятельство, что в отношении жизненного уровня населения двух стран имеется небольшое различие в пользу Венгрии, из расхождения в данных можно сделать вывод, что продовольственные продукты, покрывающие потребности населения, производятся в Венгрии с более высокой производительностью.

Соотношение затрат труда, использованное на непроизводственные цели в торговле и транспорте, является более высоким в Венгрии (9,0%), чем в Болгарии (7,6%). Это указывает на то, что т. н. инфраструктура играет в удовлетворении непроизводственного потребления несколько большую роль в Венгрии.

На расхождения в структуре экспорта стоит обратить внимание и со стороны соотношений занятых в производстве. В Болгарии 16,4% занятых в производственной сфере работает над изготовлением экспортируемой продукции пищевой промышленности и сельского хозяйства. Их доля в Венгрии составляет 9%. Доля занятых в производстве экспортируемой машиностроительной продукции составляет в Венгрии — 5,7%, в Болгарии же — 1,6%.

Сопоставление затрат на заработную плату и удельного использования основных средств

В целом складывается такое впечатление, что в стоимости, создаваемой в венгерской производственной сфере, реализуется большая доля чистого дохода, чем в Болгарии. На это указывают показатели следующей таблицы о содержании полной заработной платы, равной 62,1 левам и 51,9 форинтам. С точки зрения расхождений следует принять во внимание, что данные относятся к различным периодам. Учитывая общее развитие экономики НРБ, значение за 1965 год было приблизительно на 5,8% ниже, чем за 1963 год, и, таким образом, разница между показателями содержания заработной платы двух стран за 1965 год приблизительно в таком же соотношении меньше указанной в таблице.

Содержание полной заработной платы в стоимости продукции отдельных народнохозяйственных отраслей различно в двух странах. В промышленности и в сельском хозяйстве более низкими являются венгерские данные, а в торговле — болгарские. Из этого видно, что в Болгарии в торговле, а в Венгрии в промышленности реализуется более высокий чистый доход. На это

Таблица 10

Заработная плата на 100 лев и форинтов продукции, по отраслям народного хозяйства (в левах и форинтах)

Отрасли	прямая			полная		
	заработная плата на 100 лев и форинтов продукции					
	НРБ	ВНР	Индекс ВНР = 1,00	НРБ	ВНР	Индекс ВНР = 1,00
Промышленность	14,0	13,6	1,03	57,8	46,9	1,23
Строительство	29,7	26,5	1,12	69,1	54,9	1,26
Сельское хозяйство	54,8	38,2	1,43	80,0	71,8	1,11
Транспорт и связь	35,4	31,3	1,13	60,8	61,4	0,99
Торговля	31,9	39,3	0,81	44,2	62,9	0,70
Прочее	57,3	17,9	3,20	82,9	23,6	3,51
Итого	26,8	20,6	1,30	62,1	51,9	1,20

мы уже указывали и в других аспектах. Это же подтверждается и тем, что в то время как в НРБ торговое наложение содержало приблизительно 10% налога с оборота, в ВНР в них отрицательный налог с оборота (то есть дотация).

Данные следующей таблицы несколько детальнее представляют промышленность, показывая содержание заработной платы в продукции важнейших промышленных отраслей.

Таблица 11

Заработная плата на 100 лев и форинтов продукции в важнейших промышленных отраслях (в левах и форинтах)

Отрасли	прямая			полная		
	заработная плата на 100 лев и форинтов продукции					
	НРБ	ВНР	Индекс ВНР = 1,00	НРБ	ВНР	Индекс ВНР = 1,00
Горнорудная промышленность	41,8	31,4	1,39	73,7	59,8	1,23
Энергетическая промышленность	10,5	8,3	1,26	56,3	43,7	1,29
Металлургия	10,9	7,9	1,37	69,5	40,1	1,73
Машиностроение	19,8	16,8	1,18	57,5	46,3	1,24
Промышленность стройматериалов	23,7	17,2	1,38	60,3	43,1	1,40
Химическая и резиновая промышленность	8,6	7,2	1,19	46,3	38,0	1,22
Легкая пром.	17,2	17,8	0,97	54,3	42,9	1,27
Пищевая пром.	6,7	6,5	1,03	59,7	53,2	1,12
Промышленность всего	14,0	13,6	1,03	57,8	46,9	1,23

С точки зрения расхождений между двумя странами 8 промышленных отраслей можно подразделить на три группы. К первой группе относятся отрасли, в которых расхождение в содержании полной заработной платы не превышает 20—30%. Такими являются горнорудная, энергетическая, машиностроительная, химическая и легкая промышленности. И в продукции этих отраслей больше чистого дохода реализуется в Венгрии, чем в Болгарии. Учитывая, что сравниваются различные периоды, расхождение не превышает 10—20%. В этих отраслевых группах, однако, имеются некоторые отрасли, в которых наблюдаются большие расхождения.

Ко второй группе относятся промышленность строительных материалов и металлургия. В продукции этих двух отраслевых групп, особенно в металлургии, в Венгрии реализуется гораздо больше чистого дохода, чем в Болгарии. Это объясняется, в первую очередь, тем, что

— на металлургическую продукцию в Болгарии установлены относительно более низкие, а в Венгрии относительно более высокие цены;

— в Венгрии металлургия в несколько большей мере использует импорт, чем в Болгарии, и на приобретение импорта требуется относительно меньше затрат, чем на отечественное производство металлургического сырья в Болгарии;

— небольшую роль играет и расхождение в амортизационных отчислениях в металлургии двух стран.

Аналогичными причинами объясняется и расхождение в содержании полной заработной платы в промышленности строительных материалов двух стран.

К третьей группе относятся отрасли пищевой промышленности. В их продукции — даже с учетом различных соотношений цен — реализуется приблизительно одинаковый чистый доход и в Болгарии и в Венгрии. Это обстоятельство тем интереснее, что содержание полной заработной платы в сельскохозяйственной продукции, используемой пищевой промышленностью, выше в Болгарии, чем в Венгрии. Это кажущееся противоречивым явление объясняется следующим:

— В Венгрии очень незначительна доля тех отраслей пищевой промышленности, которыми прямо или косвенно используется сырье сельскохозяйственного происхождения. В Болгарии же такими являются рыболовство и добыча соли, хотя их доля в пищевой промышленности и невелика. Эти отрасли снабжаются сырьем не сельским хозяйством. Из этого следует, что в формировании содержания полной заработной платы в продукции пищевой промышленности Болгарии несколько меньшую роль играет сельское хозяйство, чем в Венгрии.

— Значительную роль играет то обстоятельство, что в венгерской пищевой промышленности используется больше импортного сырья, чем в Болгарии.

В валовой продукции пищевой промышленности прямое потребление импортных материалов составляет:

в Болгарии	2,8%
в Венгрии	6,8%

Это означает, что экспорт, за счет которого приобретается импортное сырье, используемое в ВНР в большей мере, требует меньших затрат заработной платы, чем отечественное производство одинакового объема сельскохозяйственной продукции.

Аналогично содержанию заработной платы в продукции нами были изучены и *величина используемых в производстве основных средств, а также их расхождения* в двух странах. На основании данных, исчисляемых по народнохозяйственным отраслям и в более детальном подразделении, представляется, что стоимость основных средств на единицу валовой продукции выше в венгерском народном хозяйстве, чем в Болгарии.

Таблица 12

Основные средства на миллион лев и форинтов продукции по отраслям народного хозяйства

Отрасли	прямая			полная		
	среднегодовая стоимость основных средств на миллион лев и форинтов продукции					
	НРБ	ВНР	Индекс ВНР = 1,00	НРБ	ВНР	Индекс ВНР = 1,00
Промышленность	0,52	0,79	0,66	1,45	2,37	0,61
Строительство	0,18	0,17	1,06	1,37	2,04	0,67
Сельское хозяйство	0,58	1,22	0,48	1,07	2,65	0,40
Транспорт и связь	2,41	4,28	0,56	3,13	5,89	0,53
Торговля	0,66	1,02	0,65	1,05	2,85	0,37
Прочее	0,04	0,10	0,40	0,47	0,44	1,07
Производственная сфера всего	0,58	0,98	0,59	1,42	2,50	0,57

На основании данных следует подчеркнуть, что в Болгарии содержание основных средств в представляющем больший вес сельском хозяйстве, то есть в сельскохозяйственной продукции выше, чем в Венгрии. Относительно (но незначительно) меньшее расхождение имеется в строительстве двух стран.

В важнейших промышленных отраслях эти данные представляются в следующем:

Таблица 13

Основные средства на миллион лев и форинтов продукции по отраслям народного хозяйства

Отрасли	прямая			полная		
	среднегодовая стоимость основных средств на миллион лев и форинтов продукции					
	НРБ	ВНР	Индекс ВНР = 1,00	НРБ	ВНР	Индекс ВНР = 1,00
Горнорудная промышлен.	2,23	1,85	1,21	3,48	3,51	0,99
Энергетическая промыш.	5,86	3,64	1,61	7,48	5,62	1,33
Металлургия	0,96	0,92	1,04	3,34	3,10	1,08
Машиностроение	0,44	0,58	0,76	1,65	2,36	0,70
Промышленность стройматериалов	0,78	1,27	0,61	2,05	2,83	0,72
Химическая и резиновая промышлен.	0,73	0,86	0,85	2,05	2,87	0,71
Легкая промыш.	0,30	0,43	0,70	1,43	1,64	0,87
Пищевая пром.	0,19	0,43	0,44	1,10	2,47	0,54
Промышленность всего	0,52	0,79	0,66	1,45	2,37	0,61

Отдельные промышленные отрасли имеют очень различные показатели полного использования основных средств. Это в значительной мере объясняется расхождениями в пропорциях цен. На это указывает, например, относительно высокий показатель прямого и полного использования основных средств в энергетической промышленности, в металлургии и в горнорудной промышленности в Болгарии. В этих отраслях, таким образом, оптовые цены были относительно низки в Болгарии и относительно высоки (или не настолько низки) в Венгрии.

В промышленности — в первую очередь, в пищевой — полное использование основных средств в Болгарии ниже, чем в Венгрии. Это объясняется частью более низкой непосредственной потребностью пищевой промышленности в основных средствах, частью же относительно высоким уровнем цен болгарской пищевой промышленности и, наконец, относительно более низкой оснащенностью болгарского сельского хозяйства основными средствами.

Ряд показателей, в частности и показатель используемых в производстве основных средств, был рассчитан нами на основании моделей двух типов. (В модели типа «А» отечественные и импортные материалы рассматриваются вместе, в модели типа «Б» — раздельно.)

Сопоставление показателей основных средств полного использования, которые были рассчитаны на основании балансов типа «А» и «Б», иллюстрирует эффективность внешней торговли двух стран с точки зрения «использования капитала». (В той мере, как общая стоимость основных средств представляет

используемый в производстве совокупный капитал.) С точки зрения использования капитала внешняя торговля обеих стран эффективна. Ибо действительное содержание основных средств в продукции — исчисленное на основании баланса типа «Б» — ниже того содержания основных средств, которое потребовалось бы, если бы и импортируемая продукция производилась ими самими. Второй случай отражают показатели, рассчитанные на основании баланса типа «А».

Таблица 14

Полное содержание основных средств в продукции в миллион лев и форинтов на основании балансов типа «А» и «Б»
(миллион лев и форинтов)

Отрасли	Болгария		Венгрия	
	на основании балансов типа			
	«А»	«Б»	«А»	«Б»
Промышленность	1,64	1,45	2,45	2,37
Строительство	1,61	1,37	2,10	2,04
Сельское хозяйство	1,11	1,07	2,68	2,65
Транспорт и связь	3,28	3,13	5,87	5,89
Торговля	1,11	1,05	2,85	2,85
Прочее	0,51	0,47	0,46	0,44
Всего	1,59	1,42	2,56	2,50

В Болгарии как в целом, так и в деталях использование сравнительных выгод с точки зрения использования капитала представляется более выгодным, чем в Венгрии. Причина этого заключается в том, что в болгарском экспорте высока доля продуктов сельскохозяйственного происхождения, удельная фондоемкость которых сравнительно низка в болгарском народном хозяйстве. Дело в том, что в этом случае производится обмен сельскохозяйственных продуктов, требующих низкого удельного использования основных средств, на промышленную продукцию, требующую использования больших объемов основных средств.

И в Венгрии использование капитала с точки зрения внешней торговли является благоприятным, однако не в такой мере, как в Болгарии. Это объясняется тем, что удельное содержание основных средств в сельскохозяйственной и промышленной продукции гораздо более сходно, чем в Болгарии.

COMPARISON BETWEEN SOME IMPORTANT DOMAINS OF THE BULGARIAN AND HUNGARIAN NATIONAL ECONOMY

A. RÁCZ

Both for Bulgaria and Hungary, input-output tables have been available for several years now. The similar character of the social system, the almost equal territory and population of the two countries and, last but not least, the similarity of their development levels have enabled a comparison of economic structures on the basis of input-output tables.

Comparison has been based on the Bulgarian input-output table for 1963 and on the Hungarian one for 1965, which had been rendered comparable as regards both form and contents. The aim of the experimental analysis was to find out, how the tables, drawn up in different currencies and price systems, can be used for international comparisons.

The comparison gives a clear idea of the difference between the main proportions in material production. In Hungary the shares of industry and construction are much higher (68.6 per cent of national income), than in Bulgaria (51.3 per cent). In Bulgaria the share of agriculture is higher (33 per cent) than in Hungary (18.3 per cent). The difference appears also on basis of calculative (theoretical) prices. This structural difference will determine many further findings — e.g. that the same difference shows also in the calculations based on employment or on the value of fixed assets. The same applies to structural differences within industry: in Bulgaria the share of industrial branches based on agriculture is much higher (60 to 70 per cent) than in Hungary (40 to 50 per cent). There is an important structural difference between the agricultures of the two countries. In Hungary, the share of animal husbandry is higher than in Bulgaria.

The structural character as outlined above is reflected also in the structure of the components of final use. Hungary exports industrial products at a higher rate than Bulgaria (37 per cent and 29 per cent, respectively). Within exports, industrial products are prevalent in Hungary and agricultural products in Bulgaria. It may be stated, in general, that Hungary is more relying on international trade than Bulgaria. The import structure of the two countries is also clearly different: in Bulgaria the greater part of imports serves directly final use, whereas in Hungary they mainly go into productive consumption.

Finally, let us survey the indices of wage-costs and fixed-asset contents as calculated on the basis of the input-output tables. It appears that in Hungary, a larger proportion of net social income is realized in the value produced in the productive sphere. There are many similarities, too, in the two countries, first of all as regards price proportions. In both countries the prices of agricultural products are comparatively low and those of industrial products comparatively high.

Fixed-asset contents, the state of supply with fixed assets is generally more favourable in Hungary than in Bulgaria, the differences are, however, varying in degree and proportion in the individual sectors.

REVIEWS

A. Deák

AN INTERNATIONAL CONFERENCE ON THE PROBLEMS OF SOCIALIST ECONOMY

In September 1969 an International Economic Seminary was held at Balatonfüred, jointly organized by the Karl Marx University of Economics, the Hungarian Economic Association and the CESES (Centro Studi e Ricerche su Problemi Economico-Sociali). Some 50 economists from Eastern and Western Europe took part in the three-day conference. Three opening speeches of debates, and over 40 contributions were heard.

The discussion was introduced by *Attila Madarasi*, Hungarian Deputy Minister of Finance, with a paper "*Centralization and decentralization in investment decisions*". He analysed the system of planning and decision under different control mechanisms, based mainly on Hungarian experiences.

He started from the point that socialist economies have, on account of the social ownership of the means of production, ample possibility for an efficient planning of the allocation of resources. He indicated as main tasks of national planning concerning investments the following:

— to work out the optimum directions and proportions in the structural development of the national economy, taking into consideration efficiency and the desirable regional development aims, and,

— to co-ordinate the volume of investments and the equilibrium conditions of the national economy, such as capacities of the building and the engineering industries, taking into account also the possibilities of conversion through foreign trade.

Investment decisions are divided into central decisions and those on company level, according to the persons entitled to decision-making. A central decision may be comprehensive and of general force, having influence on the decisions of companies without directly determining individual investment projects. The two kinds of decisions are, therefore, not always "equal". A basic condition of planned development is the dominance of central decision, for several reasons: the desirable proportions between accumulation and consumption can be assured better this way; in infrastructural branches central decision is natural; enterprises on their own cannot be entrusted with exclusive decisions regarding distribution of resources among the larger sections of national economy, such as industry, agriculture, transport and trade.

An exaggerated centralization may be, however, a source of serious losses, on the one hand because enterprises lose their independence, elasticity and efficiency even in such investment activities, where they necessarily possess better information and ability than the central organs, and this brings about in several cases uneconomic results; on the other hand, because in such a case the demands for investment are not limited by well-defined economic requirements on the part of productive units, only the central decision must be "fought for". Therefore, many demands are formulated forecasting results

somewhat "made up", part of which remains but a "promise". The lecturer considered as the "art" of economic control the determination of the optimum of centralization and decentralization in given circumstances.

In Hungary, up to 1968 investment decisions were over-centralized. As a result of the reform of economic control, the spheres of decision have been modified. The investments that play an essential part in the development of national economy and require comprehensive information as well as to rise above partial interests, are decided centrally, but other investments, which can be judged better on the enterprises' level, will come into the scope of the enterprises' decisions.

The lecturer gave the outlines of the Hungarian investment system, which has been transformed with a view to fulfil the above-mentioned requirements; new productive projects of basic importance in the national economy, the large infrastructural investments (individual or combined) are subject to central decision and their financing is, fully or partially, included in the budget. The enterprises decide themselves on their investments and finance them from their own means. An important part of the investments are financed through bank-credits, in a way that the overall amount of investment credits and the allocation of the amount among the branches of national economy (partly among aims) are outlined in the national economic plan, but within the given limits, the bank will grant credits to the enterprises which comply with stricter conditions.

Finally, the lecturer gave a positive appraisal of the still short period following the introduction of the reform.

In the course of the discussion many questions and opinions were heard, mainly about the role of the national economic plan, the preference-system of central decisions, the relations between the planning of investments and the methods of optimization, about the contradictions between short- and long-range interests in enterprise decisions, the role of profit in individual income and in development activity, the enterprises' possibilities to obtain information, about the role of interest, and some practical experience of Hungarian enterprises in their investment activities.

The second lecture introducing the discussion also claimed great interest; it was held by *Gregory Grossmann*, Professor at California University, under the title "*Reforms and money*". Reviewing the development of economic systems in the socialist countries the lecturer found that there was a general tendency towards decentralization in the spheres of decision-making, and that the market, money-categories and profit were obtaining important economic roles and, that considerable efforts were made to distribute resources and to use them in an efficient way, and to further rationalize foreign trade. All these phenomena necessitate a constant re-evaluation and settling of the policy of currencies and of finances.

The lecturer analysed money, as the vehicle of the right for decision-making of the owner. As a consequence, the necessity of a change in the role of money becomes evident in the case of important changes in the spheres of decision-making. In the system of centralized control, money has mainly a control function. With expanding decentralization, money becomes active, promotes economic efficiency, if other conditions work also in this direction. In the opinion of the lecturer, the necessary conditions were still missing in socialist countries, i.e.:

— a greater sensitivity on the part of enterprises for the flow of money, profit and losses;

— a less automatic supply of credits, more differentiating financially;

— convertibility of the financial means of companies into goods, work, and foreign trade.

The lecturer gave the exact meaning of these conditions, emphasized their importance and called attention to the disadvantage of their neglect.

Those contributing to the discussion criticized the scepticism of the lecturer. They took their position in respect of the formulation of these conditions, and the interpretation of their existence. They commented on the theoretical and practical questions of fighting the dangers of inflation, on the problems of the price-system, the importance of full employment, and on the necessity of controlling prices and incomes.

The third lecture introducing the discussion was held under the title "*Fluctuation in the rate of growth in socialist countries after the war*" by *Professor A. Bajt*, director of the Economic Institute of the Law Faculty of the Ljubljana University.

In his study, the professor summed up the results of measuring the intensity of fluctuation in the rate of growth in individual socialist countries, and went on to compare these results with the intensity of fluctuation of growth in some capitalist countries. He stated that

— in socialist countries, between the years 1950 and 1965 the fluctuations were highest, as a rule, in the field of agriculture, investments, and the building industry; intensity of the fluctuation differs in each socialist country examined;

— fluctuation of agriculture is dependent mainly on the weather, that of investment on the development strategy of the planning agencies;

— in many capitalist countries fluctuation is lower than in some socialist countries;

— intensity of fluctuation shows, generally, a decreasing tendency.

Analysing the causes of fluctuations, the lecturer polemized with the views expressed by several other economists. In his opinion, fluctuations of economic growth originate in the first place in the fluctuation of investments, caused, in his opinion, by the "strained" plans and by the deficiencies of planning. He suggested two solutions to the problems: increasing the efficiency of investments and slowing down of the rate of investments.

The lecturer went on to give a detailed analysis of the "short" cycles, based on data on Yugoslavia.

In the course of the discussion following the lecture, some speakers questioned the applicability of Professor Bajt's method of examination to measuring fluctuation, others challenged the well-foundedness of the causes of fluctuations.

The international conference gave an opportunity to the participants to express their views. The timeliness of the subjects, and the opening speeches prepared with the greatest care aroused great interest and activity. The many-sidedness of these subjects of great significance prevented a still more thorough and detailed discussion. Further research work and discussions are needed to reconciliate views on these important questions of economics.

J. WILCSEK

ON THE INSTITUTE OF FINANCIAL RESEARCH

The Institute was formed on the 1st of January 1968, from the Department of Financial Research of the Ministry of Finance, with the purpose to become the basis of financial research work. During the first two years, working in relatively poor conditions because of difficulties in organizational activities, the Institute published, upon a basis of half-year plans, eight volumes of studies, partly theoretical, partly informative and reference works.

The main task of the Institute consists in assisting the Ministry of Finance in their work. Its objective is to carry on scientific research the results of which can provide a better foundation for the practical work of the financial apparatus. It is outside the Institute's task to handle theoretical affairs, necessarily accompanying the operative work of the financial organs. The Institute deals with questions which the apparatus has no time to investigate and which must be solved scientifically, for future prospects.

The Institute has a three-year workplan, centering on the following main spheres:

1) Examination of the Hungarian financial system; financial balances, the budget, and its connection with the credit system. Under the conditions of the new economic mechanism the problems related to the financial system and to the budget present themselves, in many respects, in quite a new way. New tasks and changing relations are characteristic of the situation and long-range research work is needed to reveal them. It will be sufficient to quote here just one subject: the evaluation, contents, effects, reasons and consequences of a deficit or surplus in the budget can as yet not be considered as unequivocally clarified.

2) Complex examination of financial regulators; consistency of the control system, effects of the financial regulators strengthening or neutralizing each other in the interrelations of the system; financial regulators, and policies of development, production and selling. The best possible evolving of the reform of economic management requires a thorough examination of the complicated interrelations and real effects of the financial regulators, in order that possible further development may be based upon scientific findings. Some versions of solution, much disputed today, can be clarified only by such extensive research work, because the modification of one regulator will affect the other regulators, too. In the field of these examinations the Institute should concentrate mainly on the laws of income policy and distribution, on the relation between the efficiency of production and interestedness, and on the financial methods of promoting development of technics and engineering.

3. Monetary questions. With the role of money growing and with the market mechanism increasingly utilized, it is useful, even inevitable, to start investigating the monetary questions. The ever growing importance of the stability of currency, convertibility, transferability and monetary questions in the international division of labour necessitates the widening of research work in these fields and its co-ordination among the socialist countries.

4) It is the task of the Institute to follow with attention and evaluate constantly the changes in the financial system of socialist and other countries.

The Institute endeavours to establish friendly relations with similar institutions in socialist countries and organizes the co-operation with them in accordance with the decisions of the Standing Committee of Finance and Currencies of the CMEA.

The Institute of Financial Research strives to build up close relations with the institutes of the Hungarian Academy of Sciences dealing with economic subjects, as well as with institutes of a similar character working under the auspices of other organs. These relations will enable, beside the co-ordination of scientific work, the raising of working standards since regular contacts between researchers and scientists working at different institutes, their discussions and their participation in evaluating the results of completed projects will certainly be of great mutual assistance.

The Institue of Financial Research will, even after its present development, remain a small-scale organization. The Institute tries to expand its field of research by relying on universities (first of all on the Karl Marx University of Economics), and on specialists working at other places who can be drawn into the research work. Research work is organized on a team, instead of departmental basis and it is not planned to set up special sections. The only exception to this will be, presumably, the group dealing with international relations and documentation.

OBITUARY

GYULA HEVESI (1890–1970)

On 25th February 1970, in his 80th year of age, died Academician Gyula Hevesi, member of the Department for Economics and Law of the Hungarian Academy of Sciences, former Vice-President of the Academy, Chairman of the Committee for Industrial Economics of the Hungarian Academy of Sciences.

Academician Hevesi devoted his whole life to social and scientific progress. He was born in 1890 in Ungvár (today Uzhgorod). In 1912 he graduated at the Polytechnical University of Budapest as chemical engineer. As a highly talented engineer, he was the inventor of essential innovations especially in the field of incandescent lamp production. His patents were used in Hungary as well as in Italy and the Soviet Union. But simultaneously he had a very strong interest in social and economic problems, too. This led him to organize the world's first socialist engineer organization. As a founder of the Communist Party of Hungary he played an important role in 1919, in the Hungarian Republic of Councils. Together with Eugen Varga he was People's Commissaire of Social Production and in this capacity he led the socialist reorganization of industry. After the defeat of this regime, he had to emigrate. He spent several years in Austria, Italy and Germany and from the late twenties on he lived for two decades in the Soviet Union. He was deeply involved there in the industrial organization efforst of the first Five-Year Plan. He was among those who drafted and carried into effect the system of continuous work schedule for the Soviet industry, generally adopted in the years 1929—1932. He was the initiator of the foundation of the Technico-Economic Information Center which was aimed at spreading management know-how among the leaders of hundreds of new plants.

After the liberation of Hungary from the fascist regime he returned to his native country. Although near to sixty, he worked again with the vigour of a youngster, which he combined with the wisdom of mature age. First he lead the Patent Office, later became one of the leading personalities of the reorganized Hungarian Academy of Sciences. He was involved in teaching too: for a period as reader at the University of Economics, where he taught industrial economics and held for many years lectures in the post-graduate courses for engineers. Between 1961 and 1969 he was Director of the Research Group for Industrial Economics which was founded on his initiative. His merits as organizer of scientific activities were honoured by several high state medals and he won the Kossuth-Prize, too.

As a highly qualified engineer he was among those who rejected the faith in almighty technology and technocracy and always pointed out the importance of economic and social factors and environment for technical progress. In a wide-spread study regarding the *utilization of fixed assets* — directed by him in the framework of his Research Group —, beside technical and economic aspects, he paid great attention to social and labour problems as well. His studies in this field are pioneering. He contributed with his analysis of industrial policy pursued by the Hungarian Republic of Councils ("Social Production") even to economic history. His highly interesting memoire "An Engineer in the Revolution" is a valuable source for social and political historians.

The sudden death of Hevesi, who until his last days was an active member of the Hungarian Academy of Sciences, is a sad loss not only for the technical sciences but also for the economic science and for the rank of Hungarian economists who preserve his memory and great example as a man of science and social progress.

BOOK REVIEWS

VAJDA, I.: *Internationale Arbeitsteilung und Wirtschaftsreform*. Budapest, 1969. Akadémiai K. 249 S.

Nach dem Tode von Imre Vajda erschien in Betreuung des Akademie-Verlags eine Sammelausgabe seiner wichtigeren Artikel.

Unsere Zeitschrift hat sich mit der Würdigung des Lebens von Imre Vajda, mit der Darlegung seines Wirkens bereits befasst. Dieser Sammelband erschliesst ebenfalls die Hauptrichtungen seiner Tätigkeit: die Untersuchung der wichtigeren Zusammenhänge der internationalen Arbeitsteilung und des Wirtschaftswachstums. Auch dieser Sammelband bezeugt, dass Imre Vajda auf dem Gebiet der Wissenschaft seine theoretischen und praktischen Kenntnisse, sowie seine Erfahrungen erfolgreich vereinigen konnte.

Imre Vajda war auch ein ausgezeichneter Redner, unermüdlich bereiste er die Welt, um auch über die einheimischen Foren hinaus seine Ansichten in Vorträgen darzustellen, die Ergebnisse und Probleme der sozialistischen Welt bekanntzugeben, die Beziehungen zwischen Ost und West zu pflegen, die in der Weltwirtschaft vor sich gehenden Veränderungen zu analysieren.

Das vorliegende Sammelwerk enthält 15 Studien, einzelne Artikel oder Vorträge Imre Vajdas.

Die Studien umfassen die Zeitspanne zwischen den Jahren 1963 und 1968. Die Mehrzahl der Studien befasst sich mit der Entwicklung der internationalen Arbeitsteilung, mit den in der Weltwirtschaft erfolgten Veränderungen, mit den Wirtschaftsbeziehungen zwischen Ost und West.

Die technische Entwicklung ist der Motor des Wirtschaftswachstums. Ihre Schnelligkeit beeinflusst die Effektivität der Produktion.

In unserem Zeitalter — im Zeitalter der technischen und wissenschaftlichen Revolution — besteht zwischen der technischen Entwicklung und der internationalen Arbeitsteilung ein engerer Zusammenhang als in den früheren Epochen. Die Möglichkeit zur Anwendung der Forschung, der Entwicklung und der Technik in weitesten Kreisen und das dazu notwendige Kapital, qualifizierte Arbeitskräfte usw. stehen voll und ganz nur in zwei Ländern zur Verfügung: in der Sowjetunion und in den Vereinigten Staaten.

Im Zeitalter der wissenschaftlich-technischen Revolution sind die kleinen und mittelgrossen Länder auf sich selbst gestellt nicht imstande das Weltniveau der technischen Entwicklung in einem breiten Spektrum zu erreichen. Auch in einzelnen Zweigen, bei wichtigeren Produktenarten können sie nur mit gemeinsamer Kraftanstrengung vorwärtskommen, in dem Fall, wenn sie ihre Anstrengungen entsprechend auf diese Zweige, Produktenarten konzentrieren. Je grösser die Kluft zwischen den rückständigen und den technisch entwickelten Ländern, desto mehr ist es notwendig, dass die letzteren zur Überbrückung dieser Kluft Hilfe leisten. Bei der Entwicklung der eigenen Forschungs-

basis muss in den kleineren und mittleren Ländern die Konzentration der sich auf die wichtigsten Themen richtenden, wissenschaftlichen Forschungs-, Planungs- und Konstruktionsarbeiten erhöht werden.

Der Verfasser war einer der aktiven Teilnehmer, die sich an der Ausgestaltung der ungarischen Wirtschaftsreform betätigten; dies widerspiegelt sich in seinen im vorliegenden Band erschienenen Schriften. Er wies durch kritische Analysen die Überholtheit des früheren Wirtschaftsmechanismus aus, legte seine Anschauungen dar, denen gemäss sich die Vorteile der Planwirtschaft viel besser ausprägen, wenn die Kategorien des organisierten Marktes besser ausgenützt, und die materielle Interessiertheit der Werktätigen lebhafter gestaltet werden, um die durch den Plan aufgestellten Ziele zu erreichen.

Eine kürzere Rezension ermöglicht die Darlegung der 15 Studien und die Analyse ihrer Probleme nur in einem sehr beschränkten Masse, wir müssen uns also mit der Hervorhebung einiger Hauptfragen begnügen.

Die erste Studie gibt sozusagen den Grundton des ganzen Bandes an. In dieser Studie analysiert Vajda die Zusammenhänge des Wirtschaftswachstums und der internationalen Arbeitsteilung, stellt die Gestaltung des Umfangs des Exports und Imports im Verhältnis zur Produktion der einzelnen Länder und damit verbunden, die Vertiefung der internationalen Arbeitsteilung in den letzten Jahrzehnten dar.

Imre Vajda gibt eine kurze Skizze über die internationale Arbeitsteilung zwischen den RGW-Ländern, und setzt fort: »Das heranreifende neue internationale sozialistische System wird eine Integration darstellen, mit allen bekannten und bewährten Vorteilen, jedoch auch mit allen ihren Grenzen.«

Die ganze Tätigkeit Imre Vajdas wird durch die letzten Zeilen der Studie charakterisiert.

»Vordringlichste Aufgabe des ausgehenden 20. Jahrhunderts ist eine rationellere Verteilung der verfügbaren Kraftquellen, zugleich aber auch die grösstmögliche Steigerung der Ergiebigkeit dieser Kraftquellen. Entwicklungshilfe, Stärkung der diesem Ziel dienenden internationalen Institutionen, Abrüstung, planmässige, weltweite Steigerung der internationalen Arbeitsteilung — das dürfte die Geschichte den heute lebenden Generationen zur Aufgabe machen.«

Die Studie mit dem Titel »Probleme des Ost—West-Handels« war ein Vortrag, den der Verfasser auf der im Jahre 1968 in Montreal veranstalteten Weltkonferenz der Internationalen Ökonomischen Gesellschaft gehalten hatte. In diesem Vortrag summieren sich die theoretischen und praktischen Fragen der Wirtschaftsbeziehungen zwischen den beiden Systemen. Er skizziert die in der Welt erfolgte politische und wirtschaftliche Entwicklung, weist nach, dass die gegenseitigen Vorwürfe die Entwicklung nicht vorwärtsbringen und man in erster Linie die Wege und Methoden zur Förderung des Fortschritts suchen und entwickeln sollte.

Die Warenzusammensetzung des Ost—West-Handels analysierend weist er darauf hin, dass diese Struktur den rückständigen, unentwickelten Handel widerspiegelt, und die Entwicklung des Handels zwischen den beiden Systemen und die strukturellen Änderungen miteinander zusammenhängen, eine Wechselwirkung aufeinander haben.

Der Verfasser setzt sich für die Weiterentwicklung der Unternehmenskooperationen ein, die die in den RGW-Ländern eingeführten Reformen in einem das bisherige bedeutend übersteigenden Masse ermöglichen und notwendig machen, anderenteils für die kapitalistischen Unternehmen einen bleibenden und sich verbreitenden Markt, eine indirekte Kapazitätsausweitung als Folge haben.

Die Studie »Integration, Wirtschaftsunion und Nationalstaat« war seine an der Ungarischen Akademie der Wissenschaften 1968 gehaltene Antrittsrede. In dieser wies der Verfasser auf die Erscheinungen des von neuem auftretenden

Nationalismus hin, analysierte den Begriff und den wirtschaftlichen Inhalt der Integration, den sich ändernden Inhalt des Begriffs »Souveränität«.

Ich habe nur mit einer einzigen Behauptung dieser vorzüglichen Studie polemisiert und halte meine Meinung auch heute aufrecht. Nach dem Verfasser muss die politische Union der Wirtschaftsunion vorangehen. Meiner Ansicht nach muss eine gewisse politische Übereinstimmung bestehen, dabei kann die Wirtschaftsunion der politischen Union vorausgehen.

In dieser Studie bezeichnete der Verfasser auch die Hauptrichtungen der Entwicklung der sozialistischen Integration, indem er aus den bisherigen Erfahrungen anderer Integrationen und des RGW Nutzen zog.

Die Endstudie untersucht die Theorien des sozialistischen Aussenhandels und des kapitalistischen Aussenhandels. Darin demonstriert der Autor die Umstände, im Rahmen derer Ricardo seine Lehre von den komparativen Kosten formulierte, skizziert die realen Werte und Fehler dieser Lehre. »Heute — weist der Verfasser darauf hin — entstehen und vergehen komparative Vorteile als Folge von Umständen, die die gesellschaftlichen und Besitzverhältnisse produzieren und reproduzieren.« Unter den Nachfolgern Ricardos hebt er die Tätigkeit Haberlers hervor und führt mit ihm eine interessante Polemie.

Der Verfasser widmet in seiner Studie der Gestaltung der Konzentration des internationalen Handels ein gesondertes Kapitel und gibt die diesbezüglichen Werke und Angaben der einzelnen Verfasser bekannt.

Im Laufe der Erörterung der prinzipiellen Fragen des sozialistischen Aussenhandels verwirft er die dogmatischen Ansichten, nach denen die Lehre der komparativen Kosten in keinerlei Beziehungen in der sozialistischen Aussenwirtschaft angewendet werden kann.

Es ist notwendig, die Probleme der Nachfrageelastizität auch im sozialistischen Aussenhandel zu studieren — schreibt der Verfasser.

Er zeigt die Gestaltung der terms of trade in der Relation der entwickelten Länder, der Entwicklungsländer und der sozialistischen Länder. »Die terms of trade — weist der Verfasser darauf hin — können im Kapitalismus . . . nicht für alle Teilnehmer gleich günstig sein, und sie sind es auch nicht.« Die Untersuchung der terms of trade ist auch im Handel zwischen den sozialistischen Ländern notwendig. In dieser Beziehung überwertete der Verfasser ein wenig die Fluktuation der sozialistischen Preise, er nahm an, dass die sich der Nachfrage und dem Angebot viel elastischer anpassenden Preise bald in Gültigkeit treten.

Der Verfasser verwirft sowohl in dieser Studie als auch im ganzen Band jene dogmatischen Anschauungen, die die Entwicklung des sozialistischen Handels hindern, bemüht sich, die Richtlinien der — den marxistischen Anschauungen entsprechenden — sozialistischen internationalen Arbeitsteilung zu finden und auszudrücken, die bisherigen Erfahrungen zu verallgemeinern und den Weg der Weiterentwicklung zu bezeichnen.

Dieser Studienband enthält nur einige wichtigere, in der Zeitspanne von 1963 bis 1968 erschienene Studien, aber auch dies gibt ein gewisses Bild über die weitverzweigte Tätigkeit Imre Vajdas. Auch in diesen Studien weicht Vajda — wie in seinem ganzen Lebenswerk — den sogenannten heiklen Themen nicht aus, er kritisiert auf eine schöpferische Art das Überholte, die begangenen Fehler. Imre Vajda war einer der aktivsten Teilnehmer an der die Wirtschaftsreform begründenden Arbeit. Im Zusammenhang mit dieser Tätigkeit verfasste er mehrere, auch in diesem Band vorhandene Studien, wie z. B. »Der Markt in der Planung; Wirtschaftswachstum in Ungarn« usw.

Die Publikation des Studienbandes in deutscher Sprache trägt dazu bei, die Anschauungen eines bekannten Ökonomen über die Entwicklung der Weltwirtschaft,

über die Probleme der sozialistischen Weltwirtschaft, über die Fragen des Wirtschaftswachstums Ungarns, bekannt zu machen.

T. Kiss

Meznerics, I.: *Banking Business in Socialist Economy with Special Regard to East—West Trade.* Leyden — Budapest, 1968. Sijthoff — Akadémiai Kiadó, pp. 364.

Although the main subject of this work is the *legal* framework of banking business in CMEA countries, with a special emphasis on the Hungarian aspects, it is of interest also for economists, as its coverage is, in fact, much wider. The author, Head of the Legal Department of the National Bank of Hungary and holder of the Chair of Finance at the Szeged University, offers a deep insight into the working of the monetary system in the planned economies of Eastern Europe as seen by an expert "insider".

The volume gives a large coverage to the various banking transactions, an analysis of the functions of the banking system, both prior to and after the recent reforms, with special emphasis on the considerable changes which the new economic mechanism in the different countries has brought in the field of banking. The foreign reader's interest will certainly be captivated by a detailed description and a balanced evaluation of the International Bank for Economic Co-operation set up by the CMEA countries in 1963 and its relation to the banks of the CMEA member countries. The "special regard to East–West trade" has made it necessary to analyse the legal material and practice of the capitalist countries and to give a critical appraisal of the Hungarian legislation with respect to international economic relations, both "de lege lata" and "de lege ferenda".

The book is divided into four parts. Part I deals with the general aspects and development of banking transactions, giving a well-selected international bibliography of the subject. In the course of describing the sources of the law relating to banking in socialist economies, the author makes a point of the fact that the legal basis lies mainly in the domain of administrative law. At the same time, recent developments in Hungary are gradually bringing civil law rules into the forefront. As to transactions with foreign (especially capitalist) countries, rules emerging from the requirements of a socialist economy cannot be applied; hence, in the absence of appropriate domestic legislation, contracts will necessarily refer to laws to be applied in case of a dispute which may prove harmful from the viewpoint of the socialist partner. Here the author stresses the significance of the 1963 Czechoslovak law on international commercial relations, regulating such types of contracts not ruled upon in socialist domestic legislation. This type of law enables the partners to agree on the application of the socialist country's law to international commercial transactions.

Part II, accounting for nearly half of the book, describes and assesses in great detail the types of banking transactions that the CMEA countries carry out with foreign, predominantly non-socialist countries. The business transactions are classified into three groups, those connected with credit, those relating to payments, and those concerning foreign exchange and gold operations. The author emphasizes that, though banks are playing an important and growing part in international trade, laws regulating banking transactions are rather scarce in the legislation of capitalist countries. The legal basis is mostly provided either by rules issued by the banks themselves or, in some cases, by international agreements. Here the author gives not only a full analysis of the legal aspects from the point of view of both the domestic client and the banks, as well as a full description of the various types of business, but also makes comparisons with rules, usance and judiciary practice in the Western countries and calls

for an international legislation regarding the most important types of international banking transactions.

In Part III, the role and functions of the banking system in socialist economies are discussed. This part offers a most interesting insight into the development of both economic policy and methods of planning and control in the European socialist countries as seen from the central watch-tower of a banker. The discussion starts with the exposition of the model developed in the U.S.S.R. during the thirties and adopted, with slight alterations, by the Eastern European countries during the fifties. This model, for wich George Garvy of the Federal Reserve Bank of New York coined the word "monobank-system", has been part and parcel of the administrative machinery of the State. The banking system was one of the instruments to implement a plan formulated in physical terms and broken down to individual enterprises. In judging the credit demands of the economic units, the decisive criterion was whether the tasks for the accomplishment of which the funds were required figured in the plan of the enterprise. All items figuring in the plan were financed practically automatically, both as regards current production and the required investments. Under such circumstances, the principal function of the banks was to check the execution of the plan and to notify the superior organs of any departure from the plan, so that these should be able to take the necessary measures. The basic shortcoming of that system was that it required from the banks nothing more than merely a meticulous following of instructions and, in effect, did not stimulate them to seek out possibilities for increasing the efficiency of the credit granted.

However, with the advent of reforms of the system of economic planning and control in most of the socialist countries, the banking system has been subjected to marked changes and significant modifications. Since the Hungarian reform has been far reaching and since — after the experience of its two-years' operation — it may be qualified successful, Mr. Meznerics' very full description of the changes in the Hungarian banking system introduced in January, 1968 is of special interest.

The essence of the changes is the role assigned to profits as a criterion of distributing rewards and channelling investments, coupled with the availability of financial (internal or credit) resources for the enterprises. The short-term financing undertaken by the National Bank of Hungary is no longer tied to the various types of transactions but can now be undertaken within a much more flexible framework — considering the total requirements for short-term funds of the individual enterprise creditworthy (i.e. making profits, meeting regularly its obligations, able to sell its products, etc.). Moreover, financing of investment which was an almost exclusive prerogative of the budget can now be provided by the banking system, too. An interest rate policy aimed at the optimum allocation of resources has been formulated. The broad framework of the activities carried out by the banking system is constructed in accordance with the Governments' economic policy, and more specifically, credit-policy.

Part IV deals with the way in which financial operations are carried out among the socialist countries. The frank appraisal of the Bank for International Economic Co-operation features its essential merits and shortcomings. The IBEC operates as a technical agency to facilitate clearance of payments arising mostly from trade among CMEA countries. To attain this goal it is authorized to effect multilateral clearing in transferable roubles; advance credits for and financing foreign trade and other transactions of member countries; solicit for accept from the members and other countries deposits in transferable roubles, convertible and other currencies, and gold, and perform various

financial operations with these funds; finance the construction, reconstruction, and operation of joint industrial projects and other enterprises within CMEA (though for the latter function a new, international investment bank is beeing now created). The results of the IBEC are inevitably influenced by the environment in which it operates. Several aspects of this environment are particularly relevant to an appraisal of the problem that CMEA itself (and not only IBEC) is confronting in its efforts to achieve multilateralism of trade settlements. The most significant one among those is the problem of price formation in intra-CMEA trade. Work toward devising a transition to prices which would more closely reflect the regional costs of production and transportation is in process. This will enhance the possibilities for a meaningful international comparison of comparative advantages and for decisions to be taken on a more intensive specialization and division of labour within the CMEA. Another problem that affects the bank's operations is the member countries' established practice to follow bilateral instead of multilateral patterns in negotiating trade agreements. Even though multilateral clearing through the IBEC makes possible a greater volume of trade than bilateral clearing, the cumbersome method of concluding bilateral trade agreements prevents the potential increase from being fully realized. Still another problem that is directly connected with the bank's operations is the insufficient differentiation of interest rates charged by the IBEC. The main shortcoming here is that credits are extended without interest or at a relatively low rate of interest and with no regard to the length of time the credits are used. This does not provide sufficient incentive to repay outstanding credits on time. Finally, intra-CMEA trade, and thus the bank's operations, are hampered by the transferable rouble not being convertible. Hungary proposed as far back as 1958 that the rouble used in CMEA trade should be made convertible. In October 1963, this concept was incorporated in the agreement establishing the Bank. Much work is done by eminent economists in the various CMEA countries in order to achieve a feasible implementation of this concept.

Undoubtedly, Mr. Meznerics' book is a valuable contribution not only to international literature on banking law, but also to the economic theory of banking in socialist societies, especially under the conditions of the new systems of economic management and with emphasis on economic relations between countries with different social systems.

T. BÁCSKAI

IHRIG, K. u. a.: *A termelőszövetkezetek tagsűrűségének gazdasági következményei.* (Wirtschaftliche Folgen der Mitgliederdichte der Produktionsgenossenschaften.) Budapest, 1968. Akadémiai Kiadó, 229 S.

Die Betriebswirtschaft der Produktionsgenossenschaften erstarkt unter den Umständen des Funktionierens des neuen Wirtschaftsmechanismus zunehmend. Damit im Zusammenhang lenkt der Verfasser der einleitenden Studie, Professor K. Ihrig, die Aufmerksamkeit auf jenes aktuelle Problem, demnach die einzelnen Genossenschaften, ja sogar die gesamte Landwirtschaft, einen grösseren Erfolg erreichen könnten, wenn es möglich wäre, mit einer geringeren Anzahl von Arbeitskräften als der heutigen zu wirtschaften, da über einen 'kritischen Punkt' hinaus der Zwang zur Beschäftigung einer das Optimum überschreitenden Anzahl von Arbeitskräften pro Flächeneinheit den Betriebserfolg verringert.

Die disproportionale Mitgliederdichte bringt infolge des »Intensivierungsmechanismus« eine nachteilige Wirkung hervor. Die Genossenschaften wenden nämlich — zwecks Beschäftigung der Mitglieder, bzw. Erreichung des maximalen jährlichen Bruttoeinkommens pro Arbeitskraft — überhöhte zusätzliche Arbeit und Mittel

auf. Diese ergeben aber ein abnehmendes Mehrprodukt und verringern dadurch den im Durchschnitt der gesamten Aufwendung genommenen, also auf je einen Forint der Geldanlage entfallenden Gewinn. Die Genossenschaften erzielen also das jährliche Maximum des Bruttoeinkommens auf Kosten des Verzichts auf das höchste Nettoeinkommen (Gewinn). Diejenigen mit einer proportionellen Mitgliederdichte können es sich erlauben, ein Maximum des Nettoeinkommens (Betriebsgewinns) anzustreben und den zusätzlichen Aufwand mit abnehmendem Ertrag zu unterlassen, ohne das maximale Mitgliedeinkommen zu verringern. Die Genossenschaften mit einer höheren Mitgliederdichte müssen aber — infolge dieser weiteren Intensivierung, zwecks Beschäftigung der Mitglieder bzw. Vermehrung des Mitgliedeinkommens — auf den maximalen Gewinn verzichten. Auf diese Weise verteilen sich die Genossenschaften in zwei Gruppen: auf solche mit einem Netto- und auf solche mit einem Bruttoeinkommeninteresse.

Es ist schwer, die ungünstige Lage der Genossenschaften mit einer zu grossen Mitgliederdichte zu verbessern, da innerhalb der Landwirtschaft die Arbeitskraft immobil ist und die Mitgliedschaft nicht die Möglichkeit hat dort zu arbeiten, wo man ihrer Arbeit mehr bedürfte, wo sie mit angemessener Arbeit das möglichst höchste Einkommen erreichen könnte. Diese Immobilität kennzeichnet bis zu einem bestimmten Grad die Landwirtschaft überhaupt in jedem Gesellschaftssystem und Land, trotzdem ist es nicht richtig, sie als eine Gegebenheit zu behandeln und von ihren negativen Folgen abzusehen.

Die Beschäftigung der überflüssigen Arbeitskraft in den Nebenbetriebszweigen löst die Probleme nicht restlos. Derzeit werden mit dem Fortschritt der Spezialisierung nicht nur die Produktion der weniger vorteilhaften Produkte, sondern auch die Verrichtung von wenig effizienter Betriebsvorgänge zunehmend spezialisierten Unternehmen anvertraut. Wenn die Genossenschaft ihre Mitglieder nicht durch ihre landwirtschaftliche Tätigkeit erhalten kann, ist es unrichtig von einem »guten« Betrieb zu sprechen. Es wäre besser, eine gewerbliche Beschäftigung des Arbeitskräfteüberschusses in selbständigen Betrieben mit wirtschaftlicher Rechnungsführung zu ermöglichen. In jeder Unternehmung ist nämlich das Nettoeinkommen ein unentbehrliches Leitprinzip und eine Kennziffer, die das Gesamtergebnis der aufgewendeten Produktionskräfte ausdrückt und dann am günstigsten sein kann, wenn sie in einem technisch optimalen Verhältnis zueinander stehen.

Es müsste mit weiteren statistischen und ökonomischen Methoden das Vorhandensein eines »Intensivierungsmechanismus« im Landwirtschaftsbetrieb, aber besonders in Genossenschaften mit grosser Mitgliederdichte untersucht werden. Sollte sich die Richtigkeit obiger Behauptungen erweisen, wäre ein Umdenken in der landwirtschaftlichen Betriebslehre sehr angebracht.

Das Buch enthält auch die Stellungnahme derjenigen, die die hier kurz dargestellten Gedanken an einer Konferenz besprochen haben. Die Diskussionsteilnehmer — Béla Csendes, Tibor Faragó, Iván Gönczi, József Jankó, Ferenc Laczó, János László, István Molnár, Lóránd Nagy jun., Gábor Szabó und Ferenc Vági — analysieren, manchmal mit verschiedenen Gedankengängen und abweichenden Feststellungen, mit Hilfe logischer Argumente bzw. zahlenmässiger Beispiele oder statistischer Angaben die Zusammenhänge zwischen der Mitgliederdichte und der Produktionseffizienz in den Genossenschaften. Sie weisen darauf hin, dass es tatsächlich notwendig ist, zu untersuchen, ob in einzelnen Landesteilen, bzw. Betrieben die Zusammensetzung der Produktionskräfte optimal ist und damit die aus dem Gesichtspunkt des Betriebes und der Volkswirtschaft erfolgreichste Bewirtschaftung ermöglicht. Die Besorgnisse des Verfassers wegen des Zusammenhanges

der auf das Bruttoeinkommen bezüglichen Interessen der Mitglieder mit ihrer irrationellen Dichte, erachtet aber die Mehrzahl der Diskussionsteilnehmer als übertrieben.

K. FORGÁCS

BURGER-GIMES, A.: *A mezőgazdaság szerepe a népgazdaság növekedésében.* (The role of agriculture in economic growth.) Budapest, 1969. Kossuth Könyvkiadó, pp. 395.

Up to the present Hungarian economists have only touched in their publications upon the relations between the development of agriculture and the growth of national economy. No scientific work has been published so far in Hungary which would reveal the comprehensive interrelations of this problem. As a consequence, neither the role of agriculture in the national economy nor the desirable development proportions of the main branches within the national economy have so far been fully clarified.

In her book, Dr. Burger-Gimes aims at a critical treatment of the international literature on growth theory and at studying the historical tendencies of economic growth. Moreover she attempts, successfully, to determine the situation and the future development tendencies of Hungarian agriculture, coming to conclusions which may interest also the agricultural policy-makers.

In Chapter I, the author states that the economists of the most advanced countries would consider the efficient organization of the processes of technical development and production as the motive power of economic growth. In modern growth theories agriculture, as a rule, has no part, since its importance in over-all production is generally declining, therefore it is not regarded as a factor which could considerably affect economic growth. In advanced countries it is characteristic that agricultural development should be supported by other branches of the national economy. "*This is, unfortunately, not the case in this country.* Development of our industry is still very much dependent on agricultural sources, however, the wanted surplus of these sources can be obtained only if the industry will supply sufficient means for the development of agriculture" (p. 21). This means that our industry is in a stage of development where it ought to be supported by agriculture which can, however, not be realized unless agriculture is supported by industry. It is here that the author sees the contradiction in our development.

In Chapter II entitled "Industrialization and agriculture" Dr. Burger-Gimes defines the criteria of industrialization and continues with a critical treatment of the theoretical disputes on the question, how long may a country be considered as industrializing and at which point as industrialized. The process is taking place or has taken place in a different way in every country and in capitalist conditions it has always been concomitant with a ruthless exploitation of the peasantry. In our country it is the corn export which gave the first impulse to industrialization. It is true that agriculture was the source of our industrialization, but the semi-feudal social conditions had also checked the development of industry.

No absolute standard for the degree of industrialization can be found. However, the degree of industrialization can be relatively well defined by the share of industry in national income, and even better by per capita national income, since in the latter also the standard of productivity is expressed. The author points out that the importance of agriculture in the national economy varies with the degree of industrialization: it is low in advanced countries, and may be determinant in less advanced countries. Where industry already exists, the rate and extent of further development may depend on the role of agriculture. The role of agriculture is that it provides labour, capital, foreign currency, and market for the industry, supplies food to the population and, at a certain stage

of development, it may be the mover of the development of industry. From the author's comments on the above-mentioned subject I would stress here only one conclusion, which is essential and may be taken for the main point of the study, namely the following: *agriculture can only play its part in the development of national economy and, within that, in the progress of industry, if it keeps up pace with the development of industry.*

An extensive part of the study is devoted to the role of agriculture in Hungarian industrialization following the Liberation (Chapter III). Agriculture was an important source of the process of industrialization. Had our economic policy developed in a more favourable way, agriculture could have given even more to the industry. The author strongly criticizes the system of compulsory natural deliveries to the state, which never helped advancement. She criticizes in the same way the premature social reorganization, and the neglect of utilizing the reserves of small-scale farming.

The author proceeds (Chapter IV) to generalize the international experiences connected with some of the main features of agricultural production. The first of these is the decreasing share of agriculture in producing national income. In this country it was not only the fast industrializing — which is to be appreciated — that had its part in this but, first of all in the fifties, also the stagnation of agricultural production. The second main feature is the flow of labour from agriculture to industry. In the initial stage of industrialization this flow may be explained by a hidden, potential labour shortage, on a higher stage of development by the increase in agricultural productivity. In this case the point is not only that labour is supplied to industry, but also that this labour produces much more there than in agriculture. The author would confine the grounds for the flow of labour into industry to the difference between agricultural and industrial income. This is, undoubtedly, the most important reason, but not the exclusive one. Other reasons — mainly social and cultural — are well known which, even in case of equality of income, make peasantry undertake non-agricultural work in advanced countries. The third essential feature of agricultural production is a growing demand for farm implements, and the relatively low efficiency of the latter.

Chapter V contains the theoretical conclusions which economic policy may draw from the preceding analyses. Even in advanced countries where agriculture has a relatively small part in national economy, consumption and increase of foreign trade make serious demands on agricultural production and these cannot be met without an active support from industry. The author ranges Hungary, very convincingly, among the medium-developed countries, as regards both the present stage of development of industry and that of agriculture. It is characteristic of such a country that national economy is obliged to support agriculture at the price of grave sacrifices, since the medium stage of development is the most capital-intensive phase of agricultural growth. The reason for this is that by this time the mobilizable inner reserves have usually been used up. More and more industrial implements are needed in agriculture, therefore "decisions of agricultural policy must be preceded by decisions of industrial development policy" (p. 139). The author's proposal is to build up a large agricultural machine and chemical industry as well as an industry to process agricultural products, and in connection with these developments, increased co-operation of the socialist countries may be desirable.

The general tendency of manpower utilization, which is prevailing also in Hungary, is a diminution of labour force in agriculture and an increase of labour force in industrial branches producing agricultural machinery as well as in the branches processing and selling agricultural products. Our future economic policy

is to strengthen these tendencies. Any effort taken to forcefully keep back agricultural labour is harmful. It goes without saying that in socialist countries the problem posed by the flow of labour into industry can be partially solved by increasing the industrial activities of socialist farms and by a policy of industrial location.

In Chapter VII, treating the subject of connection between agricultural production and land, the author stresses the importance of the growth of regional productivity because, as a rule, the overall agricultural production of the country grows in proportion to the latter.

Agricultural production is a highly machinery-intensive branch of the national economy (Chapter VIII). The use of implements varies according to the stage of development of production. It is the author's merit to have outlined the historical tendencies of demand for farming implements and to prove that Hungarian agriculture is now in the most capital-intensive phase. She analyses the major motives of demand for implements: buildings, plantations, biological character, etc., and points out the efficiency of the individual implements. In this way she comes to the conclusion that "an important rise of the standard of agricultural production is to be expected, in the first place, from the employment of chemicals" (p. 233). Nor can other tools be neglected. The general condition of reaching the up-to-date standard is a sufficient supply of implements and material.

The author treats the problem of agricultural prices and incomes in three chapters (IX—XI). She considers it a world-wide phenomenon that price level and, consequently, profitableness in agriculture should be lower than in other branches. The main objective reason for this is that agricultural production costs grow at a quicker rate than profits. As a consequence of the rapid rise in costs, agricultural incomes are unfavourable even if the prices increase more than in industry, i.e. if temporarily, as compared to some earlier period, an industrial gap is created.

Thoroughly analysing the historical changes in interestedness in yields, the author presents the requirements of small-scale and large-scale production as regards the price level. She comes to the conclusion that "the price-system developed in the conditions of small-scale production is not suitable for large-scale production . . . *Prices to suit the conditions of large-scale production must be such in which costs are compensated and which ensure a proportionate profitableness in relation to each product*" (pp. 254, 255). Our present price-system, however, has all the characteristics of the conditions of small-scale production. The price increases of the past years have brought the agricultural price level closer to the ideal one but, because of the expectable growth of production costs we must be aware that prices will become more unfavourable even than they are today. It is essential to balance the differences of the industrial and agricultural price level in a way that the agricultural plants can cover also the costs of the means of accumulation. In view of this it is right to calculate agricultural prices (accounting also for appropriate natural deliveries) taking into consideration the marginal costs.

The theoretical questions of marginal cost and the practical problems of calculating it are discussed in detail in the study. Several methods of calculation are suggested. The most directly applicable method is, in the author's view, to calculate for the various plants the average cost of production on the soil categories judged as the worst on the basis of the net revenue in gold-crown terms.

The question of a suitable price type for socialist large-scale farms is also discussed in the study. The most suitable, in the author's opinion, is the production price (the price based on marginal value is the type fitting the conditions of small-scale production), this being the price

which may lead to a profitableness in adequate proportion to inputs and investments. Among the means of production land must be taken into account. Price must be an incentive to better utilization of the capacity of land. A long-range plan must aim at rendering profitable also the farms producing in natural conditions wich are below the average.

The last (XII) Chapter of the book deals with the demands of consumption, foreign trade and industry on agricultural production as well as with the effect of these factors on the production structure and their prospective tendencies.

B. FAZEKAS

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Rezső NYERS, see Vol. 4, No. 2.

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VOL. XXXVII (2) MÉXICO, D. F., ABRIL — JUNIO DE 1970 NÚM. 146

Artículos:

Osvaldo Sunkel,	*Reforma universitaria y subdesarrollo y dependencia*
Arturo Israel,	*Teoría del subdesarrollo y dependencia externa.*
Ricardo French-Davis,	*Dependencia, subdesarrollo y política cambiaria.*
Pedro F. Paz,	*Dependencia financiera y desnacionalización de la industria interna.*
Oscar Muñoz,	*El proceso de desarrollo industrial de una economìa primario-exportadora.*
Roberto Jordán Pando,	*El control de la natalidad como estrategia política.*
Héctor Malavé Mata,	*Aproximación a los conceptos de estuctura, superestructura y sistema.*
Juan Carlos de Pablo,	*La frontera de possibilidades de producción cuando existen bienes intermedios.*
Sylvester Damus,	*La elasticidad de sustitución de factores en la Argentina: Comentario sobre un trabajo de Luisa Montuschi.*

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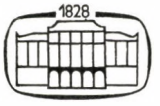

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CONTENTS

И. Фришш: Ленинские принципы планирования 147

B. CSIKÓS-NAGY: Major Problems of Improving the Hungarian Economic Mechanism 159

J. DRECIN: I. HETÉNYI — Growth Rate and Major Proportions in the Fourth Hungarian Five-year Plan (1971—1975) 173

J. HONT: Major Tendencies in the Development of Hungarian Agriculture and Food Industry 193

T. KISS: Integration of CMEA Countries' National Markets 209

REVIEWS

M. SÁGI: Institute of Economics of the Hungarian Academy of Sciences 225

J. BOGNÁR: On the British—Hungarian Economic Colloquium 232

BOOK REVIEWS

M. DOBB: Welfare Economics and the Economics of Socialism (A. GELEI)..... 237

Mrs. K. FALUS SZIKRA: Employment, Productivity and Economic Growth (É. EHRLICH) 240

T. I. BEREND—GY. RÁNKI: Economic development in Central East Europe in the 19th and 20th centuries (GY. ENYEDI) 243

Economic problems of agricultural development (L. BETHLENDI) 245

OBITUARY

KÁROLY IHRIG (1892—1970) 249

Acta Oeconomica Academiae Scientiarum Hungaricae, Tomus 5 (3), pp. 147—158 (1970)

И. ФРИШШ

ЛЕНИНСКИЕ ПРИНЦИПЫ ПЛАНИРОВАНИЯ

Статья представляет собой текст доклада, прочитанного на научной сессии, посвященной 100-летию со дня рождения В. И. Ленина, организованной АН СССР и Секретариатом СЭВ в апреле 1970 года в Москве. Автор рассматривает в ней ленинские идеи народнохозяйственного планирования, отмечая, что они, хотя многие из них и претворились в жизнь в социалистических странах, и сегодня содержат актуальные указания и задачи, ожидающие своего решения.

В этом году мы празднуем столетие со дня рождения В. И. Ленина. В создании современного мира никто не сыграл такой роли, как он. Это особенно относится к мировой социалистической системе. Деятельность и идеология В. И. Ленина оказали воздействие не только на создание социалистической системы: идеи ленинизма и в настоящее время определяют образ мышления сотен миллионов людей и ежедневно влияют на дальнейшее развитие мировой системы социализма и всего мира. Поэтому тему настоящей научной конференции «Мировая социалистическая система — воплощение идей ленинизма» не следует толковать так, что идеи Ленина будто бы нашли свое законченное воплощение в данной системе. Это невозможно уже хотя бы и потому, что основной идеей В. И. Ленина является коммунизм. Но в той части мира, где в настоящее время господствует социалистический строй, трудящиеся создали основу, на которой будет создан коммунизм. Будет создан потому, что нынешнюю систему неуклонно движут вперед к коммунизму саморазвитие, развертывание внутренних противоречий и движение общественных сил. Это наряду с прочим подтверждает вся история экономического развития мировой социалистической системы, в том числе и те экономические реформы, которые в настоящее время осуществляются в каждой из стран-членов СЭВ.

Гениальный ум В. И. Ленина нашел приложение в ряде аспектов теоретической и практической работы. Одна из его наиболее характерных особенностей заключается в том, что он на основании исключительно многостороннего изучения конкретных явлений и их познания всегда оказывался способным открыть и постичь важнейшие, воздействующие решающим, определяющим образом на весь процесс, взаимосвязи, одновременно исследовать все взаимно определяющие друг друга факторы, не упуская при этом из виду ни одного из решающих.

Казалось бы, что мог сказать В. И. Ленин о планировании? Ведь он умер почти полвека назад, и ему пришлось увидеть только первые годы Со-

ветской власти, когда были гражданская война, иностранная интервенция, голод и непомерные трудности. Мы знаем, что планирование развернулось поистине только после его кончины, осуществление первого пятилетнего плана началось в 1928 году. Однако с какой поразительной дальновидностью, с каким многосторонним и глубоким подходом В. И. Ленин сформулировал и выдвинул на передний план важнейшие задачи, выходящие далеко за пределы значения повседневной хозяйственной практики. Поэтому высказывания В. И. Ленина по вопросам планирования представляют собою не только исторический интерес, но имеют большое актуальное значение и в наши дни.

Характерно, что В. И. Ленин в отчетный доклад Центрального Комитета VII *экстренному* съезду РКП (б), т. е. первому съезду Коммунистической партии после победы Великой Октябрьской социалистической революции, проходившему с 6 по 8 марта 1918 года в петроградском Таврическом дворце, включил следующий абзац: «Организация учета, контроль над крупнейшими предприятиями, превращение всего государственного экономического механизма в единую крупную машину, в хозяйственный организм, работающий так, чтобы сотни миллионов людей руководились одним планом, — вот та гигантская организационная задача, которая легла на наши плечи».[1]

Это произошло в то время, когда в течение короткого исторического периода казалось, что вооруженная борьба за власть закончилась и что можно приступить к мирному строительству. В. И. Ленин тогда сразу ставит вопрос *единого плана, направляющего труд сотен миллионов людей*, выдвигает эту гигантскую *организационную* задачу. Непосредственно после этого в своей замечательной статье «Об очередных задачах Советской власти» он многосторонне анализирует некоторые основные принципы хозяйственного строительства и устанавливает, что «выдвигается необходимо на первый план коренная задача создания высшего, чем капитализм, общественного уклада, именно: повышение производительности труда, а в связи с этим (и для этого) его высшая организация».[2]

На первый взгляд может показаться, что речь идет о чем-то совершенно ином, чем в абзаце, взятом из отчетного доклада на VII съезде. В одном говорится о плане, в другом — о производительности труда. В действительности же речь идет не только о тесно связанных между собою вещах, но, по сути дела, об одном и том же. Повышение производительности труда следует обеспечить в первую очередь посредством планомерного распределения производительных сил, а высшая организация представляет собой сам план и его осуществление. И далее: «Подъем производительности труда требует, прежде

[1] В. И. Ленин: Полн. собр. соч., т. 36, стр. 7.
[2] Там же, стр. 187.

всего, обеспечения материальной основы крупной индустрии: развития производства топлива, железа, машиностроения, химический промышленности».[3]

Здесь, следовательно, речь идет о развитии крупной промышленности и это, очевидно, надлежит обеспечить посредством того, чтобы «сотни миллионов людей руководились одним планом». Но В. И. Ленин говорит не просто о крупной промышленности, а об обеспечении материальной основы крупной индустрии. В качестве этой основы он приводит производство топлива, железа, машиностроение и химическую промышленность. Эта установка содержит в себе зародыш двух дальнейших мыслей. Во-первых, выдвижение на первый план некоторых отраслей производства, их преимущественное развитие. Во-вторых, это имеет особенное значение с точки зрения производительности труда, поскольку мы имеем дело с формированием развития передовых отраслей, обеспечивающих быстрый прогресс. Наряду с этим в качестве дальнейшего условия повышения производительности труда В. И. Ленин ставит подъем культурного уровня населения, без которого, естественно, недостижима «высшая организация труда». Эти два требования В. И. Ленин и впоследствии всегда тесно увязывал друг с другом.

Примерно в тот же период написан «Набросок плана научно-технических работ», который ясно показывает, что В. И. Ленин в разработке плана усматривал крупную научную задачу, отводил в составлении плана соответствующую роль представителям науки, в данном случае Академии наук. Уже в январе 1918 года он вел переговоры с Академией наук, а 12 апреля Совет Народных Комиссаров под председательством В. И. Ленина принял постановление, согласно которому Академии наук надо поручить решение проблемы наиболее рационального использования производительных сил страны. Вот соответствующая цитата из «Набросков»:

«Академии наук, начавшей систематическое изучение и обследование естественных производительных сил России, следует немедленно дать от Высшего Совета Народного Хозяйства поручение образовать ряд комиссий из специалистов для возможно более быстрого составления плана реорганизации промышленности и экономического подъема России».[4]

Значение научного обоснования плана Ленин подчеркивает в своем труде «О «левом» ребячестве и мелкобуржуазности» (опубликованном в газете «Правда» за 9, 10 и 11 мая 1918 г.):

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[3] Там же, стр. 188.
[4] Там же, стр. 228.
[5] Там же, стр. 300.

Здесь совершенно правильно параллельно приводятся, с одной стороны, наивысший уровень развития науки и техники и, с другой стороны, государственная организация, планомерно направляющая деятельность десятков миллионов людей. Деятельность десятков миллионов людей следует планомерно направлять таким образом, — это одна из важнейших задач плана, — чтобы в производстве применялась основывающаяся на последнем слове новейшей науки крупнопромышленная техника, поскольку так можно обеспечить высокий уровень производительности труда.

На смену мирной передышке пришло новое обострение международной обстановки в конце мая 1918 года. Началось новое наступление дальневосточных контрреволюционных сил против Советской власти. После разгрома всех контрреволюционных сил В. И. Ленин в январе 1920 года вновь ставит на повестку дня вопрос о плане. В письме к Глебу Максимилиановичу *Кржижановскому*, ставшему вскоре по предложению Ленина руководителем Государственной комиссии по электрификации России, т. е. ГОЭЛРО, он писал:

«. . . Статью получил и прочел. Великолепно . . . Нельзя ли добавить *план* не технический . . . а политический или государственный, т. е. задание пролетариату? . . . Через 10 (20) лет сделаем Россию «электрической» . . . цодобный «план» — повторяю, не технический, а государственный . . . надо дать сейчас, чтобы наглядно, популярно, для массы увлечь ясной и яркой (вполне *научной* в основе) перспективой: за работу-де, и в 10—20 лет мы Россию всю, и промышленную и земледельческую, сделаем *электрической* . . . надо увлечь *массу* рабочих и сознательных крестьян *великой* программой на 10—20 лет».[6]

Здесь, таким образом, были заложены основы плана ГОЭЛРО. Заодно мы встречаемся также и с новыми характерными чертами плана. План должен быть политическим, или государственным, он должен увлечь массу рабочих и сознательных крестьян ясной и яркой перспективой и великой программой; он должен быть полностью научным и направленным на создание наиболее современных основ как в промышленности, так и в сельском хозяйстве.

План ГОЭЛРО был принят на первой сессии Всероссийского Центрального Исполнительного Комитета VII-го созыва 2 февраля 1920 года по предложению В. И. Ленина, оглашенному в отчете о работе ВЦИК и Совнаркома:

«Я надеюсь, что ЦИК примет ту резолюцию, которая ставит от имени ЦИК задачу ВСНХ и Народному комиссариату земледелия разработать . . . при содействии представителей науки и техники широкий и полный план электрификации России. Мы должны показать крестьянам, что организация промышленности на современной высшей технической базе, на базе электри-

[6] В. И. Ленин: Полн. собр. соч., т. 40, стр. 62—63.

фикации . . . даст возможность культурно поднять деревню, победить даже в самых глухих углах отсталость, темноту, болезни и одичание».[7]

Я цитирую именно этот отрывок из речи В. И. Ленина потому, что он наиболее наглядно показывает то, что с самого начала разработка всего плана ГОЭЛРО была его путеводной звездой, — подъем всей страны, в том числе отсталой, темной, неграмотной деревни, на базе современной промышленности и опирающегося на нее современного, электрифицированного сельского хозяйства.

Вскоре после этого на проходившем с 29 марта по 5 апреля IX съезде РКП (б), в отчетном докладе Центрального Комитета, мы встречаемся с фразой, на которую следует обратить особое внимание. В заключительной части отчетного доклада Ленин похвально отзывается о вышедшей в связи со съездом брошюре (автор Сергей Иванович *Гусев)*. В. И. Ленин считает, что «это — лучшая вещь, потому что в ней в центре внимания поставлен основной хозяйственный план восстановления промышленности и производства всей страны, потому что в ней основному хозяйственному плану подчинено все».[8]

С этой мыслью, а именно, что основному хозяйственному плану надо подчинить все, мы встретимся и в будущем.

Назначенная Комиссия в течение поразительно короткого времени, всего лишь за несколько месяцев, проделала такую работу, которая и сегодня, 50 лет спустя, вызывает у нас чувство восхищения и признания. Над составлением плана в рамках различных подкомиссий работало более 180 специалистов, ученых, инженеров, агрономов, статистиков, которые еще до конца года представили его на рассмотрение заседавшего в Москве с 22 по 29 декабря VIII Всероссийского съезда Советов рабочих, крестьянских и казачьих депутатов. Съезд на основе доклада Кржижановского принял план электрификации страны и первый перспективный план Советского государства. В. И. Ленин в отчете о деятельности Совета Народных Комиссаров дал на съезде высокую оценку плану и отметил его важное значение.

«Все планы отдельных отраслей производства должны быть строго координированы, связаны и вместе составлять тот единый хозяйственный план, в котором мы так нуждаемся»,[9] — говорил он наряду с прочим.

Эта мысль органически связана с принципом, согласно которому все следует подчинить основному плану. Одним требованием является строгое соблюдение принципа согласованности плана, а вторым — необходимость наличия основной концепции. Строгая координация планов различных отраслей производства в условиях современных, исключительно сложных экономик и сама по себе является чрезвычайно трудной задачей. Работы, направленные на развитие и совершенствование планирования, в своей

[7] Там же, стр. 108—109.
[8] Там же, стр. 257.
[9] В. И. Ленин: Полн. собр. соч., т. 42, стр. 154.

значительной части посвящены этой проблеме, начиная со времени появления литературы на тему планирования. Важным этапом на пути решения настоящей проблемы была созданная в Советском Союзе балансовая система. Дальнейший прогресс уже в течение последних лет представляли собой разработка и многостороннее применение межотраслевых балансов, а также внедрение в практику планирования различных других математических инструментов и расчетных методов. Нельзя утверждать, что согласованность наших планов во всех случаях является полностью обеспеченной, но теперь мы уже располагаем такими научными инструментами, при помощи которых можно получить вполне удовлетворительное приближение требуемой согласованности и соответственно обеспечить нужный контроль. Однако разработке единой концепции плана мы до сих пор уделяли недостаточно внимания.

Там же, т. е. на VIII съезде Советов, В. И. Ленин назвал план *второй программой* партии, указав вместе с тем и на то, что план следует постоянно совершенствовать и что он в этом отношении отличается от партийной программы:

«На мой взгляд, это — наша вторая программа партии. У нас есть программа партии . . . Она должна превратиться в программу нашего хозяйственного строительства . . . говоря о восстановлении земледелия, промышленности и транспорта, об их гармоническом соединении, не можем не говорить о широком хозяйственном плане . . . конечно, это будет план, принятый только в порядке первого приближения. Эта программа партии не будет так неизменна, как наша настоящая программа, подлежащая изменению только на съездах партии. Нет, эта программа каждый день, в каждой мастерской, в каждой волости будет улучшаться, разрабатываться, совершенствоваться и видоизменяться. Она нам нужна, как первый набросок, который перед всей Россией встанет, как великий хозяйтвенный план, рассчитанный не меньше чем на десять лет и показывающий, как перевести Россию на настоящую хозяйственную базу, необходимую для коммунизма».[10]

Как видно, речь идет не только о том, что план является еще только наброском, приближением, подлежащим совершенствованию, но и о том, что план каждый день, на каждом предприятии и районе, следовательно, на основе ежедневной практики трудящихся масс, надлежит улучшать, развивать, совершенствовать.

В. И. Ленин уже за месяц до съезда в произнесенной им 21 ноября на Московской губернской конференции РКП(б) речи сформулировал ставший впоследствии знаменитым лозунг: «Коммунизм — это есть Советская власть плюс электрификация всей страны». Он повторяет это высказывание также и в своем заключительном слове на съезде, перечисляя при этом несколько новых

[10] Там же, стр. 157—158.

характерных особенностей плана: «Коммунизм — это есть Советская власть плюс электрификация всей страны ... Только тогда, когда страна будет электрифицирована, когда под промышленность, сельское хозяйство и транспорт будет подведена техническая база современной крупной промышленности, только тогда мы победим окончательно ... Разработан план, который на долгий период лет ... дает нам расчет материальный и финансовый. Этот план указывает, сколько миллионов бочек цемента и сколько миллионов кирпичей нужно нам для проведения электрификации ... Но нужно знать и помнить, что провести электрификацию нельзя, когда у нас есть безграмотные ... Кроме грамоты нужны культурные, сознательные, образованные трудящиеся».[11]

Таким образом, план является уже конкретной материальной и заодно финансовой программой. Снова получает подтверждение его взаимосвязь с программой культурного подъема, которая, следовательно, во всех отношениях, в том числе и в материальном, должна составлять ограническую часть плана.

Конечно, В. И. Ленин не считал, что вопрос плана исчерпывается резолюцией, принятой съездом. Он требовал дальнейшей работы над планом в соответствии с высказанными им на съезде мыслями об его дальнейшем улучшении и совершенствовании. В своей статье «Об едином хозяйственном плане», опубликованной 22 февраля 1921 года в «Правде», Ленин подвергает строгой критике вышедшие до тех пор статьи и материалы о плане за пустоту, формализм и бюрократические черты. Коммунисты должны по-иному относиться к плану: «... надо взяться за изучение ... плана и за исправление его на основании указаний практического опыта и на основании более детального изучения. ... Необходимо ... связать научный план электрификации с текущими практическими планами и их действительным осуществлением».[12]

Примерно три месяца спустя В. И. Ленин снова занимается вопросом единого государственного плана. Он возвращается к этому вопросу в письме *Кржижановскому*, направляя письмо в президиум Госплана, поскольку этот орган был тогда уже создан для полной разработки и осуществления контроля над выполнением плана ГОЭЛРО. Ниже приводятся две первые фразы упомянутого письма:

«Единого государственного плана хозяйства у нас пока почти еще не чувствуется. Преобладает стремление «поднять» все и вся, все отрасли хозяйства, даже все предприятия, оставшиеся по наследству от капитализма».[13]

В дальнейшем В. И. Ленин указывает, каким образом следовало бы Госплану разработать основы народнохозяйственного плана на предстоящий период. Он считает, что в качестве исходного пункта надо было бы

[11] Там же, стр. 159—161.
[12] Там же, стр. 344.
[13] В. И. Ленин: Полн. собр. соч., т. 43, стр. 260.

принять снабжение продовольствием, поскольку оно представляет собой корень целого ряда трудностей. Он высказывает мысль, что народнохозяйственный план следовало бы разработать в трех вариантах, принимая за основу три различных варианта количества зерна, поступающего в распоряжение государства, не забывая перед распределением образовать запасы на случай войны, нарушения железнодорожного транспорта и т. д.

На второе место В. И. Ленин ставит топливо. Здесь он тоже считает необходимой разработку различных вариантов. Надо принять во внимание различные возможности в снабжении транспорта, армии, населения и промышленности. После конкретной постановки вопроса Ленин указывает, что сначала следовало бы разработать план в течение краткого периода времени по крайней мере в общих чертах, в первом приближении, а потом его постепенно улучшать и уточнять.

Эти ленинские указания имеют исключительно важное значение и в наши дни. Стремление «поднять все и вся, все отрасли хозяйства» и поныне встречается в нашей практике планирования. Конечно, формы сегодня являются иными, но нетрудно установить, что ошибка, по сути дела, повторяется. В наши дни отдельные ведомства, планирующие относительно независимо друг от друга (а таких ведомств немало), стремятся обеспечить себе максимально возможную долю народнохозяйственных ресурсов. Из этих разработанных более или менее независимо друг от друга планов впоследствии составляется сводный народнохозяйственный план. Мы у нас в Венгрии в этом случае говорим о ведомственном подходе к планированию. Сущность этого метода не изменяется и в том случае, если вместо отдельных ведомств план разрабатывают более или менее независимо друг от друга компетентные отделы плановой комиссии.

В чем заключается разница между ленинским подходом и упомянутой практикой? В том, что В. И. Ленин определяет решающие, основные задачи и требует подчинить все их решению. Именно это и является одной из самых существенных черт единого государственного плана. Это то, что он высказал по поводу брошюры Гусева: «Основному хозяйственному плану подчинено все». В противоположность этому при наличии практики ведомственного подхода упомянутый выше принцип обычно не проводится, да и не может проводиться, в жизнь. Каждое, или по крайней мере почти каждое, ведомство при помощи весьма убедительных аргументов может доказать, что именно сфера его деятельности заслуживает особого внимания.

Между тем этот вопрос, а именно, вопрос правильного распределения ресурсов народного хозяйства, является решающим вопросом планирования. От его решения во многом зависит динамика роста производительности труда. Еще раз подчеркнем одно из важнейших положений В. И. Ленина: «Подъем производительности труда требует, прежде всего, обеспечения материальной основы крупной индустрии».

Только если мы сумеем выбрать те области производства, которым принадлежит решающая роль с точки зрения повышения производительности труда, — здесь следует иметь в виду также и снабжение населения, — и только если мы обеспечим приоритет установленных на этой основе задач, мы сможем рассчитывать на благоприятную динамику роста производительности труда. Я могу добавить, что ведомственный подход и по иным причинам мешает росту производительности труда и реализации принципа эффективности. Если план не имеет основы, которой подчинено все остальное, возникает стремление включить в план больше заданий, чем это позволяют имеющиеся в распоряжении ресурсы. В результате этого возникает опасность нарушения согласованности плана, происходит дробление средств, затягиваются сроки осуществления капиталовложений, замедляется технический прогресс, все эти обстоятельства оказывают неблагоприятное воздействие на производительность труда.

Еще один важный урок этого письма Владимира Ильича. На первый взгляд может показаться *удивительным*, что Ленин *начинает* перечисление самых важных задач единого государственного плана с обеспечения *хлебом*. Ведь только недавно во время дискуссии о плане ГОЭЛРО речь шла о восстановлении и поднятии земледелия, промышленности и транспорта, об электрификации всей страны, о повышении производительности труда, о культурном подъеме деревни. А теперь на первом плане — хлеб. Нет ли здесь какого-то противоречия?

Это не только не противоречит ленинскому представлению о едином государственном плане, а выражает одну из характерных черт этого представления. В указании В. И. Ленина отражается не только *бедствие России* в тот момент, но и та основная истина, что все слова и фразы о повышении производительности труда, о подъеме производства, о поднятии культуры останутся пустыми словами и фразами даже и в случае некоторых успехов в деле материального производства; они *не соответствуют ленинским идеям* и целям социалистического государственного плана, *если не совпадают с удовлетворением элементарных нужд населения.*

Исключительное значение имеют еще две мысли, содержащиеся в письме Кржижановскому. Согласно первой, В. И. Ленин предлагает разработку планов в нескольких вариантах. Значение этого предложения очевидно с точки зрения защиты партии, правительства и народа от внезапных потрясений. Тесно связанная с первой, вторая мысль указывает на необходимость создания запасов на случай наступления неблагоприятных событий. Обе эти мысли уже давно относятся к числу основных принципов планирования, но, несмотря на это, нельзя сказать, что мы всегда в должной мере соблюдаем их.

Наконец, я хотел бы остановиться еще на одном исключительно важном указании Ленина. Из последних двух цитированных документов статья в

«Правде» появилась в феврале 1921 года, письмо было написано всего лишь три месяца спустя. Но в эти три месяца в экономической политике советского государства начали происходить изменения всемирно-исторического значения. От военного коммунизма произошел переход к НЭПу, к новой экономической политике. Вместо непосредственного продуктообмена, оказавшегося невозможным, перешли к купле-продаже товаров, к восстановлению рынка, к торговле, конечно: к торговле и рынку, котролируемым социалистическим государством.

16 ноября 1921 года Ленин пишет *Кржижановскому* по поводу подготавливаемой им брошюры «Хозяйственные проблемы РСФСР и работы Государственной общеплановой комиссии (Госплана)»: «Почти в каждую главу можно . . . добавить страничку-другую о том, что новая экономическая политика *не меняет* единого государственного хозяйственного плана и *не выходит* из его рамок, а меняет *подход* к его осуществлению».[14]

Мы видели, что для Ленина единый план, которым руководствуется деятельность сотен миллионов людей — это решающая, неотъемлемая часть социалистической экономики. Теперь мы видим, что товарно-денежные отношения, рынок, по Ленину не противоречат единому государственному плану, не выходят из его рамок, хотя требуют иного подхода к осуществлению плана.

Подводя итоги, я еще раз вкратце перечислю приведенные в моем докладе указания В. И. Ленина относительно планирования:

1. Социалистическую экономику в целом должен направлять единый государственный план, охватывающий деятельность десятков миллионов людей.

2. План должен быть полностью обоснованным в научном отношении.

3. План должен увлечь массы ясной и яркой перспективой, показать пролетариату его задачи.

4. План должен обеспечить достижение максимально высокого уровня производительности труда, в связи с чем

5. в плане необходимо предусмотреть перимущественное развитие наиболее передовых отраслей промышленности и наиболее современной крупной индустрии на базе новейших достижений науки и техники.

6. План должен обеспечить удовлетворение насущных интересов масс и подъем культурного уровня населения.

7. План должен обеспечить материальный подъем всей страны.

8. План следует считать партийной программой строительства социалистической экономики.

9. Во всех предприятиях и организациях, работающих по плану, на основании повседневного практического опыта трудящихся план следует улучшать, развивать и совершенствовать.

[14] В. И. Ленин: Полн. собр. соч., т. 54, стр. 101.

10. План целесообразно составлять в различных вариантах, чтобы быть в состоянии преодолеть такие неожиданные события в экономической жизни, которые могут возникнуть под влиянием факторов, независимых от наших усилий в области планового ведения хозяйства.

11. В плане следует предусмотреть создание соответствующих запасов, чтобы быть готовым преодолеть любые эксцессы в экономической жизни страны.

12. Чтобы действительно быть единым государственным планом, план должен обеспечить строгую координацию планов отдельных хозяйственных отраслей и заодно содержать концепцию основных и важнейших задач, которым надо подчинить все остальное.

13. Рыночно-товарно-денежные отношения, контролируемые социалистическим государством не меняют функции, значения и характера единого государственного плана, но их надо учитывать при подготовке и осуществлении плана.

Несомненно, что социалистические страны в ходе своего развития самым серьезным образом руководствовались ленинскими указаниями и благодаря этому добились крупных успехов. Однако мы все же не можем сказать, что все социалистические страны уже полностью применили в своей практике все ленинские указания.

Ленинские принципы планирования и поныне сохранили свою актуальность, характер ориентира и руководства к действию.

Пусть столетний юбилей со дня рождения нашего великого учителя явится новым стимулом к еще более верному и последовательному соблюдению ленинских принципов.

LENINIAN PRINCIPLES OF PLANNING

I. Friss

This paper was prepared originally for the scientific session organized by the Academy of Sciences of the U. S. S. R. and the Secretariat of the Council for Mutual Economic Assistance in Moscow, on the occasion of the Lenin centenary.

The author attempted to summarize Lenin's ideas on economic planning, emphasizing that they proved right and are valid even nowadays. These principles are summed up hereunder:

1. The socialist economy as a whole should be directed by a comprehensive, unique state plan involving the activity of the working millions.

2. The plan should be completely scientifically founded.

3. The plan should seize upon the masses with its understandable and clear perspectives and point out the proletariate its task.

4. The plan should ensure raising the labour productivity to the highest level, to this end:

5. the plan should ensure emphasized development of the most progressive industrial branches as well as the most up-to-date large-scale industry on the basis of the latest results of science and technology.

6. The plan should ensure the raising of the cultural level of the population.

7. The plan should ensure satisfaction of the needs of the population of vital importance as well as the material progress of the whole nation.

8. The plan should be treated as the party program of the economic building of socialism.

9. Everywhere, where it is applied, the plan should be constantly corrected, improved and developed on the basis of the everyday experience of the masses.

10. It is expedient to prepare the plan in different variants in order to allow for all sort of changes in the economic situation that may occur under the effect of factors beyond our control.

11. In the plan, it is necessary to provide for satisfactory reserves in order to prepare for all possible changes in the economic situation.

12. In order to be a uniform state plan, the plan should strictly co-ordinate the plans of the various industrial branches and, at the same time, it should have a basic conception including the most important tasks, and all the rest should be subordinated to this one.

13. The state-controlled market commodity and financial relations do not change the role, task and character of the plan, but these should be kept in view during its preparation. Undoubtedly, the socialist countries have observed these Leninian principles during their development and all have made great progress on this way. Still, we are not in a position to state that all socialist countries have already put all principles into practice. So, the Leninian principles of planning have kept their actuality as well as their features of showing the right way and guiding our activity.

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B. Csikós-Nagy

MAJOR PROBLEMS OF IMPROVING THE HUNGARIAN ECONOMIC MECHANISM

The article treats the results achieved since the introduction of the new economic mechanism and some problems of its further improvement. One of the major conditions of improvement is to bring about a rational behaviour of the enterprises. Much has been done to this end, but the present financial and price regulators bring about the market relations between enterprises by restricting economic efficiency. The creation of a more rational valuation system is one of the major tasks before us. The author stresses that in regulating the market, financial regulators have the most important role and, therefore, the monetary system must be improved. Finally, a few conclusions are drawn for economic planning and operative control.

Hungary's economic situation

In the wake of the 1968 economic reform, *positive changes* are taking place in the Hungarian economy. In the period between 1960 and 1966, the country's national income rose by 5.2 per cent on annual average. The preparations for the reform during 1967 accelerated development: between 1967 and 1969 the annual rise in national income attained 6.2 per cent. This came about with a faster growth rate than before in agriculture and a slower one in industry. The yearly rise in industrial production dropped from 7.7 per cent between 1960 and 1966 to 6 per cent in the period of 1967 to 1969. The rate of growth in agricultural production increased during the same period from 2.7 to 3.7 per cent. This fact points, among other things, to the differences in the effect of the economic reform in the short and the long run.

In *agriculture* in general, and in plant cultivation in particular, the policy of narrow-minded directives has been abandoned as early as 1957. The decisive turn in this respect came with the abolition of compulsory deliveries of agricultural produce in 1957. In that year, Hungary introduced a system of contractual and free procurement based on a new price policy. On the basis of this price policy, the socialist reorganization of agriculture could be carried out without any setback in production and, once the productive cooperatives had been set on an economically solid footing, agriculture could start upon the path of more intensive development. The favourable results achieved in the late sixties were due to a notable rise in average yields, to new areas being put to fruit cultivation and to the introduction of large-scale poultry breeding. However, cattle and pig breeding were still lagging behind the general development in agriculture. The agrarian policy launched

in 1957 could not make its effect felt in these two branches to a sufficient degree, since the restrictive policy regarding trade in fodder, livestock and meat continued in force even after 1957. This system hindered the development of productive forces in the sixties. In 1968, the problem was still unresolved. Free trade in fodder was permitted only in 1970 and this, together with some complementary measures, allowed Hungary to progress with great strides on the path of the intensive development of animal husbandry.

While the new economic policy introduced in 1957 created new and more favourable conditions for *industrial production* too, a decisive turn was brought about by the 1968 economic reform only. It was the reform which restored the equilibrium between the processes of production and realisation; it was the reform which compelled the enterprises to subject modernization of production and of products to competitiveness and the pattern of production to the principle of adjusting to demand. Such major transformation can, however, hardly take place without a relapse in the rate of economic growth. No doubt, industrial production between 1960 and 1966 rose on annual average by 7.7 per cent, but part of this increment went into inventories and a considerable part of the production was unsaleable. To remedy this situation, the state planning organs wanted to brake the excessive dynamics of industrial production already at that time, but the self-centered drive towards higher indices of production and productivity brought these intentions of economic policy to failure.

The *structural transformation* which followed in the wake of the economic reform rendered Hungary's economy *more balanced*. This found its expression in the reduced disequilibrium of national and international finances. While Hungary's trade with the socialist countries had been well balanced even before, the purchase of goods indispensable for economic progress and available only from the capitalist markets could not be financed out of the export returns. The deficit in the balance of payments with the capitalist countries had become a crucial problem which has only now been satisfactorily solved. It has been proved that under balanced conditions of international division of labour, with satisfactory yields in agriculture and with the normal absorbing capacity of world markets Hungary is capable of organising socio-economic progress relying on her own resources.

No sacrifices were involved in bringing about a well balanced international division of labour. This has been achieved with the ample available reserves which, it is hoped, the economic reform will help to mobilize even more efficiently. Not only has domestic consumption not diminished, it did even rise at a substantial rate. Consumption and the living standards of the population adapt themselves better than before to the requirements of economic dynamics and the pace of development approximates the optimum conditions which characterized the period between 1957 and 1960.

All these changes took place with *the stability of the domestic currency kept intact.* The consumer price level remained unchanged in 1968 and rose by a mere 1.5 per cent in 1969. The fact that the new system of economic control succeeded to ensure planned development in wages and prices cannot be overestimated, since in those socialist countries where the regulation of wages had been relegated to the enterprises' competence without creating an economic equilibrium first, the harmful phenomena of the price-wage spiral did not fail to appear. Hungary has evaded this hazard. This fact greatly contributed to the international appreciation of the reform.

It is, therefore, justified to state that the 1968 Hungarian economic reform *has been successful.* This proves that we have succeeded in applying the laws of socialist development to the special conditions prevailing in Hungarian economy. Beside the positive changes brought by the reform of economic control and management, there are still difficulties of earlier origin which have come now to the surface. Let us only remember the slowing trend in the dynamics of productivity performance, the tense labour situation, the disturbances in material and commodity supply, the speculative price raising tendencies. These have been already discussed by the Central Committee of the HSWP, the Government and Parliament. It is thus unnecessary to deal with them here in detail. What is more interesting, however, is how these problems are related to the strengthening and improving of the new system of economic control.

Nevertheless, the problem of the planned development of the Hungarian economy is still far from being completely solved.

Whereas Hungary needs a regular 5 to 6 per cent rate of increase in national income to meet the tasks of social development in a satisfactory manner, the average 6.2 per cent increase over the years 1967—1969 was not realized at a uniform rate: there was a 9 per cent rise in 1967 and a yearly 5 per cent increase in the subsequent two years. This is why the acceleration of economic growth has become one of the main tasks of the economic reform. Though this is a comprehensive problem of economic policy, the transformation of the system of economic control was stimulated by the realization that narrow-minded dirigism hampers and discourages social initiative and that its abolition would open up the road of faster and more efficient progress. In this respect, the reform must justify itself in the seventies. Therefore, the structural shift in favour of agriculture can be regarded as positive only under Hungary's special conditions and only for a transitory period. An annual rise of 6 per cent or so in the national income requires further intensive development in agriculture; this, however, is inconceivable without a powerful rate of industrialization. While we could easily attain a rate of industrial increase of at least 7 to 8 per cent a year under the previous policy, the national income gained in such a way could not be fully utilized.

These are the requirements to be kept in view when improving the new system of economic control. Their discussion is highly topical since the planning of the fourth five-year plan for 1971—1975 is under way and in its framework the regulators must be also worked out.

Problems of rational enterprise behaviour

Hungary's system of economic control rests on the *dual hypothesis* that, on the one hand, there can be no purposeful economic development without government planning and planned control and, on the other hand, no rational economic organization is conceivable without the operation and checking function of the market mechanism. It was in the interest of rational enterprise behaviour that we restored the earlier disrupted unity of the production and selling processes, increased enterprise autonomy and placed enterprise activity on the basis of interest in profits, risk-taking and responsibility. Enterprises are increasingly oriented by market value judgements. We must, however, be aware of the fact that the market signals exert their effects in a valuation system where the corrective role of financial and price regulators is considerable. In this respect, taxation of the factors of production and of profits, the import duties serving protection of production, export subsidies and the producer price mechanism are of particular importance. For the time being, the financial and price regulators establish the market connections among enterprises by effectively restricting economic efficiency.

Taxation of the factors of production started already under the former economic mechanism. A 25 per cent wage tax was introduced as early as 1959. According to recently performed calculations, if social (fringe) benefits were fully accounted for, we would arrive at a rate of 40—45 per cent. This would correspond to the replacement cost of labour power. A 5 per cent charge on assets was introduced in 1964. It is to be paid on the gross value of fixed assets, projected to their real (net) value it would mean a burden of more than 7 per cent. In consideration of these, it is with some justification that the problem of disproportionate taxation of the factors of production arises. It could be briefly formulated as follows: Labour is cheap for the enterprises and technology is expensive. It is more advantageous to use live labour instead of mechanizing production. With such taxation practice the cost pattern works, in the final analysis, against intensive development. The channelling into the budget of 40 per cent of the amortization allowance from enterprises makes the situation even more precarious.

The system of *profit taxation* as introduced in 1968 may be criticized on account of its unfavourable effect on labour management. When the state levies progressive taxes on average wage increases it may seem advantageous to the enterprise to boost the staff in lower wage brackets. As a matter of

fact, in this way wages can be raised without running up against progressive taxation. With the modification of taxation introduced in 1970, the tax burden on average wages has been eased. Changes in staff numbers also modify taxes. But the regulation of profits cannot be considered as satisfactory even in the modified variant.

From the point of view of modifying market signals, it is the financial regulators serving the protection of production and the official restrictions on market price movements that are of determining character. Important steps have been made towards bringing the prices under market control. As a general rule, the regulators secure reaction to foreign trade price movements. Market effects reach the enterprises by the intermediary of a more flexible price mechanism than before. But the autarkic character of the producer price mechanism has substantially remained. True, the scope of official pricing conforming to domestic production conditions has been considerably narrowed but the role of autarkic official pricing has been taken over — though with a change in methods — by customs duties and complementary taxes in the case of commodity imports and by the differentiated budgetary subsidies in that of exports.

In the knowledge of all that, it may seem obvious that in order to ensure greater economic efficiency, a *more rational system of valuation* must be created than the present one. Undoubtedly, this is one of the main lines along which our economic mechanism should be improved. At present, this is the basic problem of rational enterprise behaviour. But even those who agree with this, may hold widely different opinions about the ways and methods of creating a more rational valuation system than the present one. The most complicated problems arise in connection with the taxation of factors of production and of enterprise profits.

As regards the *proportionate taxation of factors of production*, three concepts have emerged, namely, raising wage taxes, reducing the charge on assets, and introducing simultaneously both measures.

The idea to raise the wage tax from 25 to 40—45 per cent emerged already during the debates preliminary to the price reform. But it was proved mathematically that in a consistent price system a uniform rise in the tax on wages for each and every productive branch with unchanged relative prices would only raise the price level. In other words, in a consistent price system the tax on wages is neutral from the viewpoint of the relative evaluation of the productive factors. If we raise the tax on wages uniformly in every branch, through the interdependences of costs and prices the original ratio of live labour costs to capital value gets finally restored. The situation would be different with a reduction of the charge on capital, because this would involve the revaluation of live labour as well, and the new cost pattern would be more in harmony with the requirements of intensive development. It seems,

therefore, that taxing of the factors of production can be purposefully made more proportionate by reducing the charge on capital employed. This can be done either by reducing the rate from 5 per cent to 3 per cent or — and this is more correct in principle — by keeping the 5 per cent rate and shifting from the basis of gross value to that of net value.

With this solution, the industrial producer price level would diminish by a few per cent, which is also desirable since the present level is somewhat higher than the one expected in the course of the 1968 price reform. This also plays a role in that with the present foreign exchange coefficients exports have to be too extensively subsidized.

Whatever solution we may choose, any measure amounting to a new *general revision of prices* should by all means be avoided. If the function of price is simply one of an accounting unit, then a given price system may be changed into a new one. But if the price has a real economic function, any measure of price policy can be based only on the critical analysis of existing prices. In this case only individual prices should be changed, those which do not fulfil any longer their function properly. There is another thing which should be taken into consideration. The industrial price revisions carried out hitherto have raised the price level by 2—5 per cent, with price increases showing a wide dispersion by branches and products. Every price revision causes — at least temporarily — a budget deficit, creates money reserves in enterprises and reduces, at the same time, the efficiency of the state's economic organizational activity. It was not before the second half of 1969 that the situation emerging in the wake of the 1968 price reform could be fully mastered and it is only now that the enterprises begin to consider in their decisions the established valuation system as a realistic basis. This is why emphasis should be laid on a solution which eliminates the disproportions in the taxation of the factors of production not by introducing a new system of producer prices but by improving the existing one. And particular care must be taken lest such a measure compel us to restore the system of official pricing. This would amount to renouncing to the positive elements of the system of producer prices.

The question of changes conforming to the spirit of the new mechanism arose most acutely in connection with profit taxation. *Every system of economic control has constant and changing elements.* The order of the economic regulators and their changes are determined in every system of economic control by the internal logics of the system. The logics of planned market regulation radically differs from that of the plan mechanism of instructions.

Under the mechanism characterised by plan instructions, the realization process is separated from the production process; the state prescribes the volume of production and also takes the risk of producing; realization is thus secured for the enterprise. What is turned out as use value, can be

accounted for as a result of production at accounting prices even if part of the products cannot be realized or not at the official prices. Thus, here the constant element for the enterprise is the *security of realization*. Since market conditions would, as a rule, change, the state neutralizes the changes by continuously changing the financial regulators. This is solved by means of operative financial planning, the collection of profits originating in enterprises and the meeting of losses out of the budget.

The logic of planned market regulation is precisely the opposite: here the production and realization processes are synthetized into a uniform production process. The risk of economic decisions is divided between the state and the enterprises according to the division of competence. It follows that, as a rule, the effect of changes in market conditions on the enterprise cannot be neutralized. The market mechanism must act as a check on enterprise activity. This raises definite requirements in respect of the financial regulators, and their *changeable and relatively stable elements* must be sharply distinguished from one another.

It is in the nature of things that all that is *transitory* is liable to change, and such elements may be found in abundance in the financial mechanism. These are the preferences built into the mechanism in the form of exceptional taxation, production and export subsidies, and price subsidies. We are thinking here mainly of the elimination of the preferences which had been applied not on the basis of some theoretical consideration but in the interest of smooth transition to some desirable pattern of production or consumption. Modifications of this kind occurred not only in 1970 but already in 1969, and it is desirable that the scope of exceptions restricting economic efficiency should continue to be essentially narrowed down in the period 1971—1975. Such changes are certainly in conformity with the mechanism and, as regards the *way* in which the changes are brought about, the only requirement is to observe the realistic possibilities of changes in structure and the rythm of economic processes.

Further, the financial regulators *cannot be stable as regards their quantitative measure*. In a dynamic economy this would be impossible. But a relative stability may be required from *profit taxation* which determines material incentive. What must be challenged is not so much change itself, since, as a matter of fact, there may arise situations where the mechanism of profit tax cannot fulfil its function. This is why we can speak only of *relative stability*. But we must give up the routine adopted under the mechanism of plan instructions which would continuously rearrange the financial relations between the budget and the enterprises with the aim of imparting "justice". In the past two years the *concrete system of profit interestedness* has been in the centre of discussions. It is, therefore, not unnecessary to point out that the substance of transition from the mechanism of direct wage regulation and

enterprise profit collection to indirect wage regulation and to the mechanism of profit taxation consists in *stable regulation*. The tax on profits is meant to express precisely that the enterprises can take long-term decisions under the conditions of a known mechanism, and that, accordingly, the consequences of the decision will not be made doubtful by later regulations. Those who believe that the profit tax can be operative only if its forms are continually changed, are, in fact, opposed to the category of profit tax itself, since the motives that may justify this procedure can be better served by the mechanism of direct wage regulation and profit withdrawal. But a return to the latter would again disrupt the unity between the processes of production and realization.

But what are the possibilities of choice in working out incentives concerning the future interests of *enterprises?*

1. A choice may be made *between interest in gross income and interest in profit* (net income). This subject has already been removed from the agenda. Interest in gross income is incompatible with the requirements of the scientific-technical revolution being characteristic of simple commodity production.

2. Another alternative is *between the classical form of interest in profit and its modified form combined with indirect wage control.* In the former case the State imposes taxes on the profits and leaves the management of the net profit to the enterprises. In the latter case, the State limits the possibilities of the enterprises to convert profits into wages. *The classical form of profit-interestedness is, naturally, the more inflation-sensitive mechanism of the two.* The conditions of supply and demand in Hungary are not likely to permit the introduction of such a mechanism even in the first half of the seventies, although in principle, this system of taxation would ensure the most rational attitude on the part of the enterprises.

3. We may choose from *among the different variants of interest in profit modified by indirect wage control.* Many such variants have been elaborated in Hungary, but each proved to entail negative effects, because by solving certain questions they gave rise to new problems. This is why emphasis must be laid on stability, the more so as this is the only way to provide an adequate foundation for long-term enterprise decisions concerning development, co-operation, foreign trade, etc. as well as for risk and responsibility-taking, i.e., the ensuring of long-term interests.

Development of the monetary system

Those responsible for the operation of an economic mechanism and its development must have a fairly definite idea of the ideal type of model. As a matter of fact, there is nothing to guide us in decisions on economic policy. Up to the present, we have not been successful in evolving a realistic, un-

equivocal and comprehensive economic model in which planned market regulations based on the norms of socialist society can ensure the highest possible degree of economic efficiency.

What is it that can be said with complete certainty? *Firstly,* that our aim is to strengthen socialist productive relations. *Secondly,* that in our socialist economy, government planning and economic control based on planning are objective necessities. *Thirdly,* that we intend to establish state control of the economy in the framework of a system of market mechanism.

Our socialist state must fully utilize every possibility and opportunity offered by financial policy, price and income policy and production and distribution policy. Thus, Hungarian economic policy applies simultaneously the indirect and direct, financial and non-financial regulators in a co-ordinated system. The essential thing is that *emphasis is placed on the planned regulation of the market and not on its elimination.* Therefore, wherever there is a possibility to choose,

— indirect regulators are preferred to direct ones;

— financial regulators are preferred to non-financial ones, and

— if financial policy does not provide a satisfactory solution, the means of price and income policy should be used first with the physical regulators of production and distribution reserved as a last resort.

If all this is true, then it is the improvement of the monetary system of the national economy that should be regarded as the central problem in the further development of the Hungarian economic control system. As a matter of fact, the efficiency of monetary policy depends in the final analysis on the role of money in regulating economic processes. If money is an actual means of payment, then its effect is general, and financial regulators can be applied in a wide sphere. A developed monetary system presupposes conditions under which

— there is an organic link between *wages* and economic efficiency (the elements of distribution according to the work done are better enforced);

— *taxes* are not a primary means of price formation but act directly on the re-distribution of incomes (the turnover tax is reduced in importance and direct tax comes into prominence);

— *prices* are extensively controlled by the market (the elements of competitive price system are asserting themselves);

— the utilization of *social capital* is not confined to the field where it is created (a freer flow of means and money funds);

— *competition* is unfolding up to the limits of economic rationality (eliminating the still existing bureaucratic elements of monopolistic organization, government restrictions on foreign trade diminish accordingly);

— the *forint* becomes a trading currency (with powerful elements of convertibility).

All these elements are already more or less characteristic of the Hungarian economic mechanism and their role should further increase in the seventies. In other words, the 1968 economic reform may be the starting point of the creation of a convertible forint.

Up to the present day, the convertibility of the forint has not been included among the objectives of Hungarian economic policy. No currency reform can be proclaimed until its preconditions are not ensured, or, rather, until its possibility cannot be envisaged with a reasonable degree of certainty. Nevertheless, Hungary's views on socialist economic integration clearly indicate the aims of the country's economic policy. Are we at all capable of converting the forint into a trading currency without the convertibility of the transferable rouble used in the CMEA as an accounting unit? This is rather unlikely.

No country can have a trading currency unless it forms part of the international economy *on a monetary basis*. Two thirds of Hungary's foreign trade is transacted with the CMEA countries where the present system of cooperation is not of the monetary type, and only one third with the area outside CMEA, where the division of labour is monetary in character. The structure (export potential) of the Hungarian economy is adjusted primarily to the requirements of the CMEA markets. In these markets we can carry on a foreign trade policy which permits the *accumulation of monetary reserves*. In our relations with countries outside the CMEA area, even with strict import restrictions and currency limitations imposed on Hungarian citizens, we must make considerable efforts to preserve the balance of payments. This is, among other things, the motive underlying our endeavours to bring about an advanced monetary system in CMEA and this explains why we regard the latter a crucial criterion of the forint's convertibility.

Now we must concentrate on strengthening *the factors which act towards convertibility of the forint*. It is with this end in view that we should revise the categories of wages, taxes, prices, capital and monopoly. In respect of these categories, we have to face complicated problems arising at the points where they are connected with the *living conditions of the population*. Hungary's economic policy is ruled by the socialist norms of society. These find their expression in a living standard policy which embraces employment and wage policies, social benefits and consumer price policy. Standard-of-living policy upsets in a peculiar manner the organic relationship between production and consumption by weakening the monetary system of the economy. This comes to expression, among other things, in the facts that it is not the labour requirement of production which regulates *employment*, it is not performance which regulates *wages*, and it is not the cost of production which regulates *consumer prices*. These tendencies may become characteristic to a higher or lower degree through the enforcement of living standard policy. Hungary's

former living standard policy had, in a rather biassed way, preferred the members of society as *consumers* in the first place, and not as participants in the production process. The negative effects of this policy upon the efficient utilization and development of productive forces are well known to us, but we need at least another decade until this most complex problem can be mastered.

The *principal elements* of a living standard policy enabling a more adequate assertion of the criterion of economic efficiency may be summed up as follows:

1. Industrialization based on improved labour productivity along with making the enterprises responsible for a more rational management of labour.

2. Greater differentiation in wages along with restricting the centrally financed general fringe benefits to the needs belonging to the sphere of basic social care.

3. The creation of an organic relationship between producer and consumer prices along with narrowing down the sphere of budgetary price subsidies to wherever they express deliberate state preferences in respect of consumption.

4. Restriction of the income-redistributing function of the turnover tax by substantially increasing the number of tax-exempt products and a more narrow differentiation in turnover tax rates.

5. The introduction of income tax in a wider field.

Some new features of the government control of the economy

From the experience of the past few years some conclusions may be drawn regarding national economic planning, operative government control and the shaping of social consciousness.

It should be clear to anyone that the control system cannot be determined in an abstract manner if the government control of the market is purposefully established. *The regulators can be operated only in a way which is consistent with the plan.* It follows that the task can be solved only in a complex manner and under the direction of the National Planning Office. This is why the regulators have been built into the comprehensive system of national economic planning. This work is now practically carried on in the framework of long-term planning for the period of 1971—85 on the one hand, and medium-term planning for 1971—75, the fourth five-year plan, on the other. Looking at the problem from this angle, the improvement of the economic mechanism in the first half of the seventies will be decided mainly by how the fourth five-year plan determines the tasks of economic growth and structural transformation, the proportion between consumption and accumulation, the international and internal market equilibrium of the national economy. But let

it be added that the regulators to be determined in agreement with the objectives of the national economy control at the same time the objectives themselves. If, in the interest of realizing the tasks set in the plan, direct measures must be applied in a wider sphere, this fact constitutes, at the same time, a critique of planning. As a matter of fact, in such cases the problem consists in that the possibilities of the economy are not satisfactorily taken into account in planning. Is it necessary to control the plan objectives in this manner? The answer must be emphatically in the affirmative. Earlier, there was a tendency in planning to handle planned development as a category distinct from national economic equilibrium. This was made possible precisely by the restrictions applied in great number under the old system of economic control and this had led to the spread of short-sighted dirigism and made shortage economy a rule. Only now can it be clearly seen how persistent this problem actually is; it can be mastered only gradually by purposeful economic policies. This is one of the reasons why planning as interpreted in this way cannot be considered as the internal problem of the planning apparatus. This system of planning assumes broad cooperation between the institutions of economic administration which is now being increasingly realized in practice. It can be seen that planning has grown into a vast task claiming the contribution of society, where scientific discussions are not only possible but necessary as well.

Changes may be observed also in the approach to *operative* government control. The hypothesis of *instructions only or incentives only* can be followed in practice with increasing difficulty. Reducing activity to these two alternatives extremely diminishes the efficiency of economic policy — as has been experienced in practice. This concept attributes powers to government instructions on the one hand and to economic regulators on the other, which they do not actually possess. From this, two dangers may arise. Either we extend the scope of control by instructions to an ever wider field, thereby reviving the vicious circle in which we revolved under the mechanism of plan-instructions and whose negative features are only too well known. Or, in an effort to solve everything through incentives, we continuously change the regulators and thus impair their efficacy.

Fortunately, diversified forms of operative government control are emerging, which *indicate new types of relationships between the government organs and the enterprises*, and which can be hardly dispensed with if control is to be based mainly on economic measures. What we have in mind here is indeed a proper flow of information between the macro and the micro spheres, in the final analysis a system of relationship between economic organizations which is capable of bringing about a harmonization of social and enterprise interests by means of advising, consultations, etc. without affecting the various spheres of decision. An operative control thus interpreted

requires not only superior qualification but also an understanding of the characteristic difference between *instruction and influence*. The characteristic difference consists in the fact that the established system of responsibility and risk-taking must not change.

The *demand raised by society* on economic policy has immensely grown and so have the *standards* by which the processes taking place in the national economy are measured. *We have to act, to prepare our* decisions and answer the requirements of operative work in a highly critical social environment. Those shaping present-day economic policy can no longer take up the comfortable strategic position afforded earlier by the legally binding force of the approved plan. Economic policy must justify itself in the real processes of life and must be made acceptable also to society.

It must be clearly seen that much more has been done in recent years to put economic development on a planned and balanced basis than is for the time being perceived by social consciousness.

Let us look at the *supply of goods*. For more than two decades, the regularly recurring shortages of meat, construction materials, passenger cars and some other consumer goods had been quite typical. Numerous goods and services were in short supply or not available at all. In the wake of the 1968 reform, commodity supply has much improved but a complete solution of the related problems will still take a few years. Meat is an important export item and passenger cars are not produced in this country. Domestic supply of both commodities is influenced also by foreign exchange problems. The supply of materials for private construction has become chronically poor because of the extreme preference given to government building activity. Minor products and services were left outside the industrial production pattern. The opinion was widely held that the reform would solve these problems at a single stroke. We have not succeeded in making it clear that an economic structure centered on production goods cannot be changed overnight to raise consumption to an equal rank.

Or, let us take the *price mechanism*. Earlier, the system of fixed prices was criticized because of the concealed price rises. The criticism was justified because with unchanged prices the quality of old products had been allowed to deteriorate and new industrial goods were frequently turned out at a higher price. It was in this manner that the economic law was asserting itself which acts in the case of imbalances always towards raising prices. Now, on the other hand, there are some who would point out the advantages of fixed prices, forgetting how the earlier rigid prices, which were detached from life, had hindered production and narrowed down the choice of goods. Earlier, living-standard policy would start from the principle of a stable price level and compensate society only for the official price increases. Today, however, on the one hand, price level measurement gauges in a more precise manner

the actual price movements and, on the other hand, income regulation is continuously taking into account the rising trend of prices.

There are also other factors indicating that those formulating economic policy must play a role also in *shaping social consciousness*. The socialist norms of social progress are now alive in our society in the form as it was possible to apply them in practice in a centrally administered economy. What constitutes the gravest dilemma in this respect is undoubtedly the *social expectations abstracted from performance*, or, in other words, the judging of living conditions independently of the state of the productive forces. There is a growing tendency to criticize our economic policy from the point of view of the "consumer society". Some people are inclined to judge our economic conditions by the standard of industrial societies where per capita national income has a long time ago already exceeded the 1000 dollar mark, although for Hungary the objective of attaining this goal can be set only for the 1970's. Social claims would, of course, always run ahead of the possibilities; a realistic social attitude is, however, equally indispensable. Without strengthening the latter, our economic policy cannot be completely successful.

ВАЖНЕЙШИЕ ВОПРОСЫ РАЗВИТИЯ НАШЕГО ХОЗЯЙСТВЕННОГО МЕХАНИЗМА

Б. ЧИКОШ–НАДЬ

В статье излагаются результаты, достигнутые со времени введения нового хозяйственного механизма, и некоторые вопросы его дальнейшего совершенствования. В 1967—1969 годах среднегодовой рост национального дохода в 6,2% происходил при ускорившемся развитии сельского хозяйства и несколько замедленном промышленном росте. Структурные изменения, происшедшие в результате реформы, привели к улучшению равновесия венгерского народного хозяйства, на что, в частности, указывает и более благоприятное формирование сальдо платежного баланса. Автор очень положительным результатом считает то обстоятельство, что в рассматриваемый период удалось обеспечить соответствующую плану динамику цен и заработной платы.

Одним из важных условий нашего дальнейшего развития является осуществление рационального поведения предприятий. В интересах этого было восстановлено единство процессов производства и реализации, повышена самостоятельность предприятий, при сохранении корректирующей роли финансовых и ценовых регуляторов. В этом отношении особое значение имеет налогообложение факторов производства и прибыли, а также пошлины, взимаемые с импорта, и субвенционирование экспорта. Сегодня, однако, финансовые и ценовые регуляторы формируют рыночные связи предприятий при значительном ограничении экономической эффективности, и поэтому необходимо создать более рациональную систему оценок. Это — один из основных вопросов совершенствования хозяйственного механизма в Венгрии. Затем автор рассматривает в статье проблемы планомерного регулирования рынка. Он, в частности, подчеркивает: речь идет о планомерном регулировании рынка, а не о его исключении. В этом регулировании наиболее важная роль принадлежит финансовым рычагам, в силу чего другая центральная задача реформы хозяйственного механизма — это совершенствование монетарной системы венгерского народного хозяйства.

Наконец, автор делает выводы относительно народнохозяйственного планирования, оперативного государственного управления и формирования общественного сознания, указывая: за прошедшие годы в деле перевода хозяйственного развития на более планомерные и сбалансированные основы было сделано гораздо больше, чем это отражается в настоящий момент в общественном сознании.

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GROWTH RATE AND MAJOR PROPORTIONS IN THE FOURTH HUNGARIAN FIVE-YEAR PLAN (1971—1975)

The authors analyse the fourth five-year plan. They point out that the third and the fourth plans are partly similar in their objectives but also distinctly new features emerge in the fourth. Such are, among other things, the increased emphasis on balanced growth, modernization of the product pattern, increased reliance on incentive income policy, emphasis on residential construction, balanced labour situation coupled with greater mobility, greater initiative in international economic cooperation, etc.

The Council of Ministers has recently discussed the fourth five-year plan of the Hungarian economy prepared by the National Planning Office and decided to submit it for approval to the National Assembly. The major objectives of economic policy are outlined as follows:

1. The profitability of production and trade must be increased by a more active participation in the international division of labour, higher labour productivity and improved technologies, further by raising the standards of organization and management. By accelerating the transformation of the product pattern and with the aid of selective development policies, international competitiveness of production must be enhanced, more efficient satisfaction of domestic needs brought about and a dynamic development of the economy ensured. Economic policy must, accordingly, tend to ensure that

a) the increase in labour productivity is accelerated, while efforts are made — with due consideration to demographical developments — to secure an adequate rate of employment on the national economic level;

b) the use of the investment funds secures the means necessary for increasing competitiveness and technical modernization;

c) in developing international economic relations, such foreign trade targets are set as will secure a dynamic and more efficient development of production cooperation and commodity trade with the socialist countries, first of all with the Soviet Union, while the conditions of improving the balance of payments are ensured by an accelerated development of the production pattern and a dynamic increase in exports to capitalist countries.

2. On the basis of increased efficiency and competitiveness, and by improving the system of wages, it must be ensured that a greater part of the increment of national income than before goes into private consumption. In addition to concentrating resources to the most important tasks of social

policy, living standard policies must pay greater attention to raising real wages. It must be attained that the rise in real wages becomes a more determinant element than hitherto in raising living standards. Accordingly, when working out the plan proposal, it should be endeavoured that

a) the growth rate in accumulation does not exceed that in national income with a slower growth in stocks resulting in a greater share of fixed capital investment within accumulation;

b) greater harmony between demand and supply in the consumer and producer markets as well as in investment activity is brought about and economic development strengthened also by tendencies promoting stability of the price level;

c) the allocation of investment funds provides a foundation for significant development in the fields of government-financed residential construction and public utilities, while in the productive sphere greater attention than hitherto is paid to investments serving the direct and indirect satisfaction of private consumer needs. Taking into account the productive forces and development possibilities of the economy the directives of the fourth five-year plan envisage the following growth rates in the major development indicators:

	Annual compound rate of growth, per cent	Total growth index 1970—1975 1970=100
National income	5,5—6,0	130—134
of which: contribution of industry	6,7—6,9	137—139
Consumption	5,2—5,5	129—130
Accumulation	5,4—5,9	130—133
Industrial production	5,7—6,0	132—134
Construction, enterprises and cooperatives	8,0—9,0	147—154
Agricultural production (1971—75/1966—70)	2,8—3,0	114—116
Investment, socialist sector (1971—75/1966—70)	6,2—6,5	135—137

The rate of growth

Rapid economic development is one of the major interests of our society and, at the same time, the one formulated in the most general terms. However, this social interest finds an imperfect expression in the comprehensive indicators used in practice, since they generally characterize *growth*, and may assume a favourable value even when processes contradictory to the objectives of economic policy (e.g. foreign exchange problem, unwarranted growth in inventories, growth at the expense of living standards, etc.) appear in the economy.

Therefore, development can be examined only on the basis of *a combinative evaluation of several indicators* — nor can this be a simple mathematical combination. This fact should be pointed out here only to indicate that when characterizing concepts of economic policy with the aid of an important synthetic indicator — the growth index of national income — we are not led by the intention to simplify the problem.

For 1971—1975 the plan concept reckons with a *5,5—6 per cent annual average growth in national income*. This growth rate was estimated on the basis of the hypotheses formulated at the beginning of the work, taking into account the resources and conditions of realization as well as certain basic requirements of economic policy, such as the equilibrium of employment, relative stability of the price level, perceptible growth in incomes, stable foreign payments position, etc.

According to our investigations, the estimates do not one-sidedly exhaust all possibilities for quantitative *growth;* they provide, however, a satisfactory basis for living standard policies and secure more favourable conditions for the transformation of the product pattern as well as for strengthening budgetary and balance-of-payments equilibrium. The planning of a substantially higher rate of growth in the qualitative factors would involve considerable risks.

The envisaged growth rate corresponds approximately to that attained in the average of the past 17 years. The target can, nevertheless, not be considered as a mechanical extrapolation of the earlier rate either from the quantitative or from the qualitative point of view.

As regards the quantitative aspect, i.e. the volume of national income, this has increased over the 17 years preceding 1967 at an average annual rate of 5,5 per cent. Examining the most characteristic trend line computed for the period, we find that the *annual increment* is increasing, while the *annual rate of growth* is somewhat declining. Extrapolating this trend, we will find that the value obtained for 1975 is 3 per cent lower than the draft plan target. Using an exponential function based on data of the years 1960—67, the result arrived at will be 7 per cent lower than the draft plan target.

Analysing from several aspects the possibilities of accelerating growth (calculations of this type were among those performed with the aid of a programing model) it has turned out that a higher rate of growth than that of the plan concept could be attained only if production became more efficient than assumed and, what is most important, if also export capacity were greater than expected on the basis of detailed calculations. But this possibility did not seem realistic enough to be safely reckoned with. It was, however, not excluded either, subject to the condition that in a later stage of planning the following requirements can be satisfied:

1. Further acceleration of economic growth must not detrimentally affect the country's capitalist balance-of-payments position nor act towards

increasing short-term indebtedness during the fifth five-year plan period; 2. quicker growth does not result in active balances which cannot be mobilized; 3. in the case of quicker growth, productivity rises at a higher rate than calculated in the plan concept; 4. greater production does not lead to a shift in the planned proportions between consumption and accumulation in favour of accumulation; 5. quicker growth does not weaken, even transitorily, the internal financial equilibrium.

The satisfaction of these requirements is an indispensable criterion for a development exceeding the growth rate envisaged in the plan concept to result in advantages to society.

Considerable changes as against former trends were deemed expedient when working out the targets for the consumption and accumulation funds of national income. As a matter of fact, according to the 1950—1967 trend lines, the average growth rate of national income was more than 8 per cent p.a. Maintaining this tendency during the period of the fourth five-year plan did not seem expedient since, according to our analysis, this tendency also played a role in the occasional deterioration of the international balance-of-payments situation as well as in the unbalanced state of the investment market. Therefore, it was thought justified to plan for the period of the fourth five-year plan an *identical rate of growth* for both consumption and accumulation. This is an important change in tendencies as against past processes, but it should be noted that this directive of economic policy had been already set for the third five-year plan.

The 30 per cent growth of the consumption fund allows for a rise of about 25—27 per cent in real income and for one of some 16—18 per cent in real wages (assuming a rise of approximately 5 per cent p.a. in industrial labour productivity). At the same time, within the volume of accumulation the concept reckons with a dynamic growth in investments (nearly 6 per cent on annual average), because the growth in inventory formation will slow down.

In the final analysis, the provisions of the plan concept secure the *favourable* growth rates attained during the third five-year plan in consumption, real wages, net industrial output, construction and agricultural production. At the same time, they reduce the growth rate of accumulation. Consumption rises above the long-term trend value, without increasing its share in national income at the expense of accumulation.

Employment and investment policy

According to the calculations of the Planning Office, *the sources of labour will meet the demand for labour* in the period of the fourth five-year plan; with an efficient management labour resources cannot become a brake on an even quicker development than planned. The main problem of manpower

policy is to *harmonize the long-term requirements of full employment and an efficient, intensive development of industry.*

We believe the principle of economic policy to be still valid, according to which those demanding employment should be ensured the possibility of work according to their qualification and capacity. However, quick technical and economic progress changes the pattern of the economy and, consequently, the pattern of demand for labour by area, branch and industry. We must look for methods which promote the adaptation of labour supply to structural changes in the demand for labour.

Structural changes in employment occur partly through changes in jobs by those working — also on their own initiative — and partly by school-leavers' taking jobs in accordance with the new structure. In the case of rapid changes in structure, the first type of change occurs amidst frictions and contradictions. Therefore, movements of some people between two jobs will be more or less inevitable. These cannot be considered as unemployed if their number is low and their re-employment takes but short time. In contrast with these concepts, the policy aimed at full employment was up to now governed by the following viewpoints:

— In satisfying claims for employment, social considerations were allowed to play a greater role in the productive sectors than justified from the point of view of society. Also a part of employment due to excessive protectionism must be counted under this heading.

— The socially useful mobility of labour was not promoted and in some cases rather hindered. (This could not be remedied by the rationalization campaigns aimed at the reduction of clerical staff.)

As a result, full employment is not coupled with an *equilibrium* situation and there exists a labour shortage today which is not justified otherwise by the volume of social production or the development level of the productive forces. Adequate employment in the period of the fourth five-year plan should be provided for with a view to a *balanced* situation. It is, thus, a fundamental requirement that

— income and wage regulation should stimulate a more economic use of manpower and promote socially useful movements of labour;

— the social and political atmosphere regarding employment policy should enable to lay off inadequate or redundant labour;

— enterprises should be responsible for observing the requirements of economic rationality also in employment policy, but also a system of social care must be established which undertakes the re-employment of those temporarily out of work in a planned and organized manner and which takes care of them on behalf of society (labour exchanges, replacement aid).

In the following five-year plan period the justified growth in employment is about *100 000 less* than expected in the current plan period. According

to the present targets of the fourth five-years pla — assuming a rather moderate growth in productivity — employment in the non-agricultural branches will grow by about 340 000 (against 400 000 in the third five-year plan); agricultural employment is expected to decrease by about 150 000.

The number needed to *replace* those leaving work will already decline between 1971—1976: there will be a sharp decline in retirement and the demand for labour will no longer be augmented under the effect of the special child care aid introduced in 1968.* At the same time, the number of school-leavers will approach the present high level also in the next five-year period.

It follows from the above that, with the given assumptions, there is an essential difference between the two periods under review as regards the labour situation: in the current five-year period the *total* demand of the economy for *new* manpower (increase in employment plus replacement) exceeds the number of school-leavers by about 150 000, while in the next plan period the total demand for new manpower will be about 150 000 lower than the number of school-leavers.

We cannot expect either industry or construction to solve this potential contradiction. It would not be wise to cut back the planned growth of industrial labour productivity.

Lately it has repeatedly been proposed, as an expedient solution, to "leave" the surplus of labour appearing mainly in the countryside in agricultural employment and let thus the number of agricultural labour decrease to a smaller extent than hitherto planned for. However, we are not in a position to hinder the migration of agricultural manpower by administrative measures. Our standpoint is that the economic regulators for large-scale agricultural farms should be established on the basis of manpower necessary for production.

In the so-called "tertiary" sector (transport, trade, education, health and other services, etc.) employment is lower today than would be justified in consideration of our economic development level based on international comparison. Experience also indicates that in these branches there is ample room to increase employment. On the other hand, it may be argued that a considerable part of these branches belongs to the scope of the budget and expansion of employment there would, therefore, directly affect the state budget. In spite of this not unjustified anxiety we are of the opinion that in the next years it will be expedient to promote a considerable rise in employment in the *tertiary* branches. Within rational limits, the expansion of jobs is justified, in our opinion, even at the expense of the budget. This is even more desirable in trade, catering and in all economic service branches. Should the service branches prove unable to absorb the surplus manpower,

* Mothers obtain a monthly 600 Forints for 30 months after birth. — *Ed. note.*

also such employment policy seems expedient which secures, to the extent required by *political stability*, also productive employment *outside the large-scale units* of industry and agriculture. (What we have in mind here is small-scale handicrafts, complementary activities of agricultural cooperatives, part-time work performed at home, auxiliary plants of trading companies, and, in a certain sphere, communal and cooperative industries.) Experience has shown that these have always found a wide range of sufficiently lucrative activities to engage in. The idea now is that these units should not be restricted in their activities, provided that their products are saleable.

When establishing the investment estimates of the plan concept, attempts were made to satisfy a few general requirements. These are the following:

1. *The volume of investments* should be in harmony with the principles relating to the distribution of national income. The construction and engineering background is planned in consideration of the requirements of a balanced investment market.

Beyond the viewpoints surveyed in connection with the distribution of national income, we have been led also by these considerations when setting the growth rate of investments at an *annual 6,3 per cent*. Accordingly, the limit of investments in the socialist sector of the economy has been set at Ft 480 thousand million — calculated at 1968 prices.

Besides, this estimate has been based on the concept of priority development of the *building industry*. In the state-owned building industry production is to rise by 8—9 per cent p.a. (Within that, government-financed residential construction will rise by 15 per cent on annual average.)

2. In the investment estimates, also *private investments* have been taken into consideration. Their growth is to be promoted by material and financial measures. (For 1971—1975, private investment is estimated at Ft 52—56 thousand million.)

3. The major proportions of investment allocation are worked out, in consideration of the claims of the branches, on the basis of results arrived at in *the analysis of long-term trends.*

In our opinion, it is justified to mark out certain points of emphasis when allocating investments among the branches of the economy. Concretely, those are determined by technical-material and financial possibilities and by the economic calculations concerning the interrelations between investment and production. Here, the main considerations were the following:

a) It is an important task to increase *residential construction*, especially multi-level building in towns. 56 thousand million forints have been provided for this purpose in the state investment plan, double the amount spent under the third five-year plan for this purpose. This amount enables the building of about 185 000 government-owned and cooperative flats. (This is complemented by 215 000 privately built homes.) The program calls also for large-scale

development of public utilities, water plants and sewage systems (communal investments).

b) In estimating the volume of agricultural investments, great attention had to be paid, over and above the many special problems of the development directives to the changes of socio-political character. In particular, the situation of animal raising in the household plots had to be considered, where substantial constructions are required, some of which still form part of the cost of socialist reorganization. Of the most important objectives of production policy, the necessity of the gradual creation of conditions for a *satisfactory meat supply* to meet solvent demand should be emphasized.

c) As regards industry, the amount of about Ft 23 thousand millions allocated to the development of *electric energy* production and that of about Ft 22 thousand millions envisaged for *mining* (mainly bauxite mining and hydrocarbon extraction, while investment into coal is to be reduced) is considered as a minimum investment expenditure determined by general development which can be safely planned.

For the realization of the priority development tasks and for the creation of reserves, about one third of the investment sum mentioned is needed. Allocation of the remaining 280 thousand million took place partly in consideration of the amortization requirements and partly in view of the estimated growth in production.

It is a rather sensitive point to plan the investment projects of the *manufacturing industries*. The directives take into account the fact that the investment requirements of these branches are influenced by changing *market effects* and that there the possibilities of *self-financing* are greater. The economic effects of investment decisions on concrete projects can as yet not be reliably evaluated; therefore, in spite of detailed calculations, only a global estimate of about 115—120 thousand million forints figures in the investment provisions. The allocation of resources by branches and programs can be planned safely only in a later stage.

It should be noted that the investment demands raised by the manufacturing branches are much higher than the global estimate. However, according to economic calculations, the estimate is well founded (provided that investment activity is efficient), securing as it does the adequate replacement of fixed assets and not following the downward trend in the fixed-capital intensity of production.

The harmony between allocation of investments by branches and the objectives of living standard policy in the plan concept, is an important requirement of the investment policy of the fourth five-year plan. If the proposals of the plan concept are realized, the following approximate ratios can be expected to emerge as regards the proportions of certain investments aimed at improving the living conditions of the population, which can be centrally surveyed.

Table 1

Distribution of investments

	percentages		
	1961—65	1966—70	1971—75
Total investment allocations on the economy-wide level	100,0	100,0	100,0
of which: government-financed residential construction	7,3	6,6	10,1
communal water supply, sewage, social and cultural allocations	5,3	6,6	6,1
light and food industries	7,1	7,7	7,9
private investments	13,7	10,9	11,1
	33,4	31,4	35,2

Structural changes

In the final analysis, the economic growth envisaged may be considered as safely founded from the point of view of the labour situation and the volume of investments, provided that the efficiency requirements will be met.

The necessity of *structural* changes in the economy has for a long time now been accepted as a fact in this country. At the same time, it has also become clear from the analysis performed in recent years that structural changes strictly belong to the constraint system of the rate of economic growth.

When planning structural changes, on the one hand the concrete relationship with the *actual* growth and allocation objectives of the plan period must be clarified and, on the other hand, the laws of long-range economic development — which follows mainly in the wake of social and technical progress — must be assessed.

Changes in structure affect not only the spheres of production and distribution but also employment, vocational training, incomes, geographical location, etc. Here, however, we wish to concentrate the attention on production and realization.

The structural problems arising in the spheres of production and distribution will be treated from the viewpoint of *the rate of economic growth.*

a) *Structural tendencies deriving from the objectives of national income distribution*

The fact that we wish to increase the consumption fund essentially at the same rate as national income actually means that both in production and foreign trade developments must be ensured that will serve consumption better than was the case in the past.

The question now arises whether the fixing of an identical growth rate for consumption and accumulation may be considered as a step toward changing the pattern of production in favour of consumer goods. As compared to the past, it can. This question is not quite identical with the problem of the *production ratio* between Departments I and II.

The production ratio in question is, as a matter of fact, influenced not only by the ratio of consumption and accumulation, but also by foreign trade. Increased import of consumer goods is really aimed at, particularly in respect

Table 2

Trends in national income, consumption and accumulation

(index numbers)

Period	National income	Consumption fund	Accumulation fund	Investment, total
1968/1950	273	241	419	328
1968/1960	154	143	167	167
1968/1965	123	117	147	133
1975/1970	130—314	129—130	130—133	131—133

of such goods in which domestic production is not competitive or offers only a narrow choice. Nor can the export of consumer goods be neglected which must be maintained in the interest of importing producer goods. In the final analysis, however, changes in the structure of the economy must be founded — according to our calculations — on the dynamic development of the domestic capacities producing intermediary and finished products for consumption.

Theoretically, it is conceivable to secure the material bases of consumption by a large-scale expansion of production in Department I, and by converting the surplus products into consumer goods through foreign trade. This road will, however, not be possible to follow in the near future, and this for two reasons. *A)* The light and food industries as well as agriculture export a relatively *large part* of their products at competitive prices to capitalist markets and their development will, therefore, be necessary even if we intend quickly to boost the exports of heavy industry. *B)* In the trade with socialist countries — accounting for about 65—70 per cent of the total — the increase in the export of some consumer goods is used to pay for raw material imports. *This means that a structural change that would result in converting producer goods into consumer goods cannot be realized in the plan period.*

It must be pointed out that while consumption is to rise on annual average by 5,5 per cent, this should not result in a one-sided orientation

towards the light and food industries. The demand for consumer goods other than food and clothing is expected to rise by an annual 8 per cent and that for vehicles, mass products, technical and chemical goods by 10 per cent. All this requires also the development of the heavy industries, not to speak of the growing demand for chemical and packing products to which the development of the food and textile industries will give rise.

From the objectives of the concepts regarding the allocation of national income yet another development orientation follows. This affects the structure of the accumulation fund. According to the plan concept, the growth rate in stockpiling must decrease and this should be coupled with efficient investment activity. However, the low building capacity also puts a brake on efficient investment activity. Thus, the creation of adequate money funds by reducing the growth in stocks would be useless if their efficient utilization were to become doubtful, owing to bottlenecks in *construction*. This fact motivates the decision that the development of the building trade must be accelerated. (The combined level of investment in the building material industry and in construction is to rise by nearly 50 per cent.)

Is it a correct policy, with investment activity growing only moderately, to develop building capacities rapidly instead of accelerating modernization and investment in machinery that would be required by an intensive development policy? The question will, in our opinion, be decided not by the investment data, but only by the concrete composition of the industrial investment program.

Unequivocal emphasis on machinery investments is justified mainly in the manufacturing industries and in construction. The share of these branches in total investment is, however, only 35 per cent. In some 65 per cent of all investments, intensive development and social requirements continue to justify *building-intensive* development (housing, roads, water construction etc.); quicker growth of *machinery* investments is a requirement only *in some fields* (instruments for research institutes, mechanization of trade). Modern trends come to expression frequently in a greater proportion of engineering work in construction; this, however, represents rather a demand for more expensive building on a larger scale.

Harmonization of building capacity with demand is considered also an important *efficiency* problem, since under present conditions the shortening of construction time constitutes an important tool of increasing investment efficiency.

In actual practice the danger persists that manufacturing will endeavour to solve its problems by means of new construction, increasing thus further the disequilibrium in the investment market. To forestall this remains one of the major tasks of planning and control. Here, we only wanted to call attention to the fact that the substance and the importance of the problem

cannot be judged by the global data. (In manufacturing and construction, the building ratio of investments is on average about 33 per cent, and these industries account only for 20 per cent of total investments.)

In the course of the plan calculations the opinion has emerged that in producing consumer goods it is a fundamental problem whether the enterprises can be drawn into the transformation process of economic structure deemed correct by central authority. The tools to be used to achieve this may be

a) restricting in a rational manner the interest in exports to socialist countries, by reducing state subsidies;

b) increasing the interest in the production of modern consumer goods by better concentration of the limited state resources to the production of raw materials necessary for this purpose;

c) stimulating the production and imports of consumer goods by government credits;

d) restricting the systems of income formation where inefficient activities may also create large development funds.

All that is, of course, only seemingly so simple. Actually, the *existing* production pattern is affected not only by modifying forces but also by those working in the direction of conservation — particularly because some producers can easily sell their products in the socialist and domestic markets. If the economic environment is such that the export of producer goods to socialist countries pays better to the enterprises than an increase of capitalist exports or domestic sales, they will use resources to develop such a pattern. If the economic background is particularly favourable for expanding the capacity of finished products, it cannot be expected that enterprises should use their resources to develop the production of basic materials, semi-finished goods or spare parts. If the production pattern continues to be shaped by an exaggerated level of investment and productive consumption (material use), as was the case up to now, it is only natural that the existing production pattern will restrict the enforcement of the consumption objectives of economic policy. It will be expedient to consider these viewpoints in the course of improving the system of control (regulators).

b) *Structure-shaping effects of the possibilities of international cooperation in the fourth five-year plan period*

From among the interrelations between foreign trade and the national economic plan only the problems affecting the principal proportions will be dealt with. In planning we may consider it as a rule that the intensity of participation in the international division of labour will grow as a consequence of technical progress and more diversified domestic needs. As regards its

measure, we have set the growth of *foreign trade* in the fourth five-year plan — relying on analyses of the external and internal conditions — at an annual 8 per cent with the socialist countries and at about 6 per cent with the non-socialist countries. These targets may seem to be low; they have been set in conformity with the constraints and balance-of-payments requirements existing now in imports from socialist countries and exports to capitalist countries. In view of the many uncertainties to be experienced in assessing these problems, these targets are still liable to change. Investigations hitherto have, at any rate, sufficiently demonstrated the limitations of raw-material and agricultural imports from *socialist* countries. The possibility of machinery imports is limited by the restricted supply from socialist countries, by the above outlined features of the investment plan and by the fact that economic conditions make the domestic production of machinery profitable even under not quite up-to-date technical conditions, and hamper the clear judgement of the possibilities of machinery trade.

Thus, our foreign trade possibilities will have the following major effects on the structure of production:

— The strong structural endeavours of the socialist countries (their aiming at balanced machinery deliveries) and the simultaneous factors working in the direction of dynamically boosting imports from capitalist countries will lead to a situation where the production of the engineering industries can be no longer raised at the expense of a growing positive balance of machinery trade.

— The growth of the light industries, and particularly of the clothing industry, will be considerably affected on both international markets by the realistic possibilities of increasing exports. This type of export may become an increasingly important means of procuring raw materials.

— Our efforts at moderating imports from capitalist countries continue to favour the development of a modern chemical industry.

— In the next few years, the situation in the international market of metallurgical products will greatly favour the increased production of processed metallurgical goods.

— Further lasting growth in agricultural and food exports must be reckoned with in both relations.

In the engineering industries, growing international competition will promote structural transformation and on the market of some products the growing willingness of CMEA countries to cooperate will have a similar effect (by creating more competitive capacities).

We have intensively investigated, to what extent is the growth rate influenced by various combinations of the shares of the industrial branches in foreign trade. Some conclusions may be drawn in this respect from the

programming calculations performed in the course of working out the directives.*

From various programs the tendency has emerged that a possible stronger expansion of marketing possibilities might enable the growth of exports in some groups of products and a certain regrouping of exports between dollar and rouble relations. This change in the pattern of foreign trade — where the estimates of sales to capitalist countries were raised by about 20 per cent on average and the possibilities of socialist trade were judged as being somewhat narrower — would enable to raise the level of consumption by about 3—4 per cent. (It must be noted that the calculations were performed for 23 aggregate sectors of the economy and thus the effect of changes in the internal structure of some branches — presumably offering further possibilities — could not be assessed by the calculations.)

The calculations have also shown that — with the specific material and investment costs taken into account in the plan — a quicker growth rate of national income would greatly increase demand for investments and a major part of the increment of national income would be realized in accumulation. Without the certainty that specific material and investments costs continue to decrease considerably, there is a great risk that the unconditional objective of a higher growth rate in national income would frustrate the realization of our objectives in respect of structural transformation.

Greater expansion of marketing possibilities would affect the pattern of exports by branches in the following manner:

In the case of a policy aimed at maximizing consumption it would be expedient to expand within exports to socialist countries those of medicaments, pharmaceuticals and machinery, and reduce those of foodstuffs. A reduction of clothing exports cannot be proposed on the basis of the programs. In the dollar relations, on the other hand, the exports of all branches would grow except those of the chemical industry (exclusive of pharmaceuticals) and textile clothing.

Further calculations served to analyse the relation and mutual effects of orientations in economic policy aimed at the improvement of the dollar balance of payments and raising the level of consumption.

From the calculations performed we have drawn the conclusion that a fundamental change may be expected not from structural changes (within realistic limits) in the production and distribution pattern by branches, but from an efficient transformation of the product pattern and a *more efficient investment activity.*

* In the course of programming, more than 50 variants were examined. From among these there are some 10 which can be evaluated from the point of view of this paper. As regards the method of programming, see: *Zs. Újlaki:* Application of an aggregate programming model in preparing the fourth five-year plan. Acta Oeconomica, 1970. No. 1—2.

c) *Changes in the pattern of production and technical progress*

In addition to the changes outlined above, there exist in respect of the changes in the structure of production certain objectives of planning which are clearly delimited and formulated for a longer term and which relate to branches or to products of decisive character and there are endeavours — mainly in respect of product pattern — which cannot be delimited in national economic planning, and are formulated only as general requirements. These changes are generally requirements *dictated by technical progress* which affect primarily — but not exclusively — the structure of the heavy industry.

Central planning makes endeavours to estimate changes on the industrial *branch level* with sufficient exactitude. As regards changes in the *product pattern*, only some guesses can be made, since their concrete realization depends on enterprise decision.

The four major fields where structural development appears in the form of clearly delimited and concrete *development activity* (mainly in government investment policy) are

— the modernization program of the energy system;

— the development projects aimed at bringing about a healthier and more harmonious relationship between industrial and agricultural production;

— the quicker development of the chemical industry than of industry as a whole, within that the increasing of the production of substitutes for natural materials with up-to-date technologies;

— the complex development of domestic raw material production in a way to achieve a higher grade of utilization by means of gradually developing suitable processing capacities (e.g. bauxite — alumina — aluminium processing; oil refining — oil derivatives — chemical utilization, etc.).

Development of the *product pattern* has been dealt with by central planning only at certain points. (E.g. the vehicle development program, development of the aluminium and the building material industries, etc.) However, outside of these fields, which can be surveyed from the centre, the product pattern is strongly influenced by enterprise decisions which may be guided by *directives* of the national economic plan and influenced at a later stage by applying preferences.

For the development of the product pattern it is of decisive importance to use in future a greater part of resources to raise the technical level of *existing* productive capacities.

Even if the *directions* of developing the product pattern are more or less formulated, the *speed* and effects of transformation may be the subject of lively discussions. If the problem is examined merely from the change aspect, it is understandable that everybody should claim a greater share of the resources and everybody should think of great and rapid changes, etc.

National economic planning necessarily discloses, however, from the aspect of the global process, the circumstances that restrict the rapidity of transformation, as well as the limitations of resources and realization. In such cases it frequently occurs that, turning logic upside down, the plans of national economic proportions themselves are blamed for the limited character of resources, though, as a matter of fact, their limits depend *on economic activities*, rather than on the planners.

The branch planners consider the limits revealed in the course of working out the plan concept to be exaggerated, while the "central planners" believe that a quicker change in structure must come to expression in *increasing efficiency*. From this point of view, the stagnation or a moderately declining tendency of the capital/output ratio in manufacturing and a growth rate in productivity per man-hour not exceeding the present one constitute, as a matter of fact, already concessions to the branches. Further investment demands on their part amount to a negation of the major principles underlying the concept. Though the debate is still going on, it may be safely stated that accepting the sum total of the particular claims on resources would be tantamount to rendering the economic plan completely *unrealistic*.

It is open to question, whether, in the given situation, an economic policy promoting maximum quantitative growth, and a mechanism and development plan "set" to serve the latter would bring about a favourable development of the product pattern. According to some opinions, the answer is in the affirmative, since a quicker growth rate will also enable the formation of more substantial material (incentive and development) funds. According to other opinions, more moderate estimates may, on the whole, promote the unfolding of technical competition and the endeavours at structural changes since the pressure of circumstances will usually be more effective than preferences.

Our own opinion tends towards the latter concept. We believe that efficient development is primarily characterized not by maximum utilization of all existing resources, but by the rate of development of progressive products and product groups which carry structural changes and can be unequivocally qualified as advantageous as compared to general development. Investigating this aspect, we will find that in the calculations of the plan concept an accelerated rate of change in these fields is envisaged.

According to our calculations, one million forint increment of national income in the fourth five-year plan requires the production and input of the following quantities (in parantheses, the corresponding data of the third five-year plan):

Energy		
Electric energy production	77 thousand kWh	(52)
Electric energy consumption	96 thousand kWh	(70)
Crude oil consumption	33 tons	(25)
Natural gas consumption	35 cu. m.	(27)
Structural materials		
Aluminium consumption	880 kg	(670)
Aluminium semi-finished production	683 kg	(590)
Consumption of plastics	1391 kg	(1315)
Cement production	24.4 tons	(8.4)
Other products characterizing chemization		
Fertilizer production	6770 kg	(6180)
Synthetic fibres production	134 kg	(42)
Synthetic fibres consumption	223 kg	(90)

Of course, these data aimed at improving material input may be subject to modification, but they indicate that specific inputs of these progressive products are growing. This is a sign of a healthy change in structure.

In engineering industry, 30 per cent of investments serve modernization, 14 per cent creation of new capacities for the production of spare parts, fittings and tools and 33 per cent serve selective development. (According to the data of the Ministry for Metallurgy and Engineering.)

Changes in the product pattern are significant. E.g. in the machine building and mechanical equipment sub-branch, the production of material-moving machinery, chemical and food processing equipment, agricultural machines and ball bearings will grow at a rate above average. In vehicle production, the share of motor trains and ships will be reduced. In the telecommunication and vacuum-technical branch the production of integrated circuits, transmission technical and microwave equipment will greatly increase. In precision engineering, the share in production of computer-technical products will rise from 10 per cent in 1970 to 30 per cent in 1975.

As can be seen, growth in most areas expressing modern tendencies is favourable in comparison to general development. The data also illustrate the point that increased consumption-orientation is not contradictory to the requirement that heavy industry should be developed in a selective manner. An unbroken and even very dynamic development is reckoned with in energetics. In other branches of heavy industry development must be more *differentiated* than hitherto. As against the prevailing practice of building a large number of new plants and workshops which are, however, of medium standard and rather inefficient, the main concern will be to create the conditions for quicker technical development. In *some branches* this will require

machinery replacements which may seem decentralized from the national economic point of view but frequently concentrated from the individual plant aspect; in other branches, however, the setting up of a lower number of productive units is required with lower production costs and greater capacity.

Both trends require increased international cooperation. According to experience — in view of the present situation of the CMEA — this will be a most complicated task. It is, however, better to renounce, in lack of proper conditions, to some production objectives than to create bases which will operate inefficiently in the long run.

Particular features

When working out the reform of the economic mechanism, also the system of objectives of economic policy was subjected to analysis. As a result, it has been established that the objectives of Hungarian economic policy are fundamentally valid. What needs significant change is the system of tools. This means, on the one hand, the recognition of marked *continuity* in the trend of economic policy in the recent past and near future, and, on the other hand, a justification to distinguish between our intentions and the practice of economic policy — at least as regards the past.

Continuity of the trends need not, of course, be overestimated, particularly not if they comprise also specific targets. As a matter of fact, as compared to the situation in 1965

— the signals and "feedback" indicators of the economic reform,

— the development of international economic cooperation, and

— the rise in the development level itself *require changes in the guidelines.*

The particular features of the third and the fourth five-year period may be summed up broadly as follows:

The objective and intentions of economic policy are similar in the following fields:

— In production, efforts at modernization and intensive industrial development as opposed to the hitherto prevailing extensive tendencies (e.g. reducing the growth rate of industrial employment, large-scale reconstruction of industrial plants, mechanization of manual labour);

— approaching to each other the growth rates in industrial and agricultural production as against the tendencies in 1950—1965;

— significant and tangible structural changes in energetics, transport, the methods of residential construction, etc.;

— concentration of investments, reduction of the gestation period;

— strengthening of cooperation, especially with the socialist countries but also with capitalist countries;

— development of consumption and accumulation at an almost equal rate in the distribution of national income;

— achieving permanent conditions of equilibrium in external payments.

Some of the above objectives have been attained; where this is the case, the results must be either stabilized or the process carried further (e.g. the ratio between industrial and agricultural growth rates, the structural changes mentioned in relation of some branches, the balance of external payments, etc.).

In the fields where no satisfactory results have been achieved, the plan concept maintains the earlier trend based on the instruments of the new economic mechanism but requires, precisely on this account, essential changes as against existing tendencies (e.g. ratio of consumption to accumulation, intensive type of industrial development, efficient utilization of labour, development of international cooperation in production, concentration of investments). Particular attention must be paid to this when considering changes in the regulators.

Expressly *new* trends or guidelines emphasizing new features have been envisaged in the following fields:

— It is believed that harmonization of the growth rate with the equilibrium requirements can be attained, on the basis provided by the new economic mechanism, *not by reducing the general rate of growth* but by setting the targets realistically, by relying on a quicker transformation of the *product pattern;* a policy adjusted to the existing limitations must be increasingly based on *enterprising and support* realized from the monetary means of the *state.*

— Ensuring that the rise in consumption should be in parallel with economic growth, the incentive power of income policy must be increased and supported by an adequate pattern of commodity supply.

— An essential increase must be attained in urban residential construction.

— The growth rate in peasant incomes should not exceed that in worker incomes.

— In production, in the interest of accelerating the changes in the product pattern, it is deemed expedient to *ease import restrictions,* to increase the material possibilities for enterprise initiative, radically to *diminish* the subsidies of *loss-refunding* character. On the other hand, development activities representing *progressive structure* should be given *preference,* allowing also an accompanying *greater differentiation* (in enterprise incomes and partly in individual incomes earned from work) and the flow of labour between enterprises.

— Coupling of employment equilibrium with promoting labour mobility that serves economic development.

— The securing of *internal financial equilibrium* should be considered a central task of economic policy.

— It is necessary to work out and consistently implement a *more active*, initiative policy in *international economic cooperation*.

К ПРОБЛЕМАМ РАЗРАБОТКИ ЧЕТВЕРТОЙ ПЯТИЛЕТКИ ВЕНГЕРСКОГО НАРОДНОГО ХОЗЯЙСТВА

И. ХЕТЕНИ–Й. ДРЕЧИН

Статья занимается темпами роста и основными пропорциями народного хозяйства на основе директив по разработке четвертого пятилетнего плана развития народного хозяйства, опубликованных весной 1970 года. В ней излагаются соображения, сыгравшие роль при разработке плановых наметок.

Директивы четвертого пятилетнего плана придают большое значение росту эффективности производственных процессов, особенно увеличению производительности труда, включению в международное разделение труда. Рост национального дохода намечается в размере 5,5—6 процентов в год, что соответствует темпу роста за прошедший длительный период. Такое развитие планировалось не только на основе производственных возможностей, но учитывались также условия реализации и возможности изменения структуры производства.

По сравнению с предыдущим периодом, должно произойти существенное изменение тенденций в темпах роста потребления и накопления. Если раньше темп роста накопления на длительный период значительно превышал темп роста потребления, то в новом плане предполагается их параллельный рост. Такая тенденция желательна в интересах укрепления финансового равновесия, нормализации перенапряженных капитальных вложений и ускорения структурных сдвигов.

В соответствии с демографическими процессами целесообразно наметить дальнейшее увеличение занятости, однако темп роста занятости будет ниже, чем раньше. Имеется сильное стремление к замедлению роста занятости в промышленности в пользу сферы услуг.

В плане капитальных вложений основной тенденцией является ускорение жилищного строительства. В то время как капитальные вложения народного хозяйства возрастут на 30%, государственное жилищное строительство предполагается удвоить. Вообще растет доля капитальных вложений, непосредственно связанных с жизненным уровнем.

Среди структурных изменений производства и потребления — помимо упомянутой изменяющейся тенденции потребления и накопления — существенное влияние на пропорции производства оказывают также и возможности международного экономического сотрудничества. Хотя на основе существующих мощностей было бы желательно увеличить экспорт средств производства в интересах импорта предметов потребления, такая тенденция не может быть сильной из-за условий внешней реализации, поэтому необходимо обращать гораздо больше внимания в плановом периоде на развитие отраслей промышленности, выпускающих предметы потребления.

Указанные стремления не означают оттеснения тяжелой промышленности на задний план. Однако развитие тяжелой промышленности будет более дифференцированным. Производство и использование продуктов, соответствующих современным техническим требованиям и в дальнейшем быстро растет, а в других секторах, в перспективе неконкурентоспособных, темп роста будет более умеренным, чем до сих пор. Основные тенденции в изменении структуры производства: быстрый рост производства, переработки и потребления углеводородов, развитие отраслей промышленности, служащих сельскому хозяйству, развитие алюминиевой промышленности, нефтехимии, производства строительных материалов и электроники.

В период четвертой пятилетки продолжает действовать нынешняя экономическая политика, но в некоторых специфических областях проявятся новые черты. Кроме отмеченных выше, к ним относятся сокращение импортных ограничений для ускорения изменения структуры производства, уменьшение дотаций предприятий, имеющих характер возмещения убытков, и лучшее использование государственной поддержки для перспективных целей.

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J. HONT

MAJOR TENDENCIES IN THE DEVELOPMENT OF HUNGARIAN AGRICULTURE AND FOOD INDUSTRY

The article summarizes the results of investigations carried out in the preparatory stage of long-term planning in Hungary as well as the major conclusions to be drawn from the development over the past two or three decades.

The best utilization of economic resources in harmony with the main objectives of social progress can be ensured by an economic policy with a wide horizon founded on extensive analysis. It is for this reason that the government of the Hungarian People's Republic decided in 1967 to draw up a long-term development plan to cover the 15-year period 1971—1985. Committees were set up to prepare the work of long-term planning. The heads and experts of government control agencies, scientific institutes and institutions of higher education have prepared a great number of studies on questions of detail. On the basis of discussions in the Committees, summary studies were prepared. The first phase of the work, in the course of which the development achieved over the past two to three decades was evaluated, ended by the middle of 1968. In this article, the major conclusions will be surveyed that can be drawn from the broad investigations in the fields of agriculture and the food industry, of course, in a suitably shortened form.

Let it be told right at the beginning that in the past 25 years, in the life-span of a single peasant generation, two events of historical importance were taking place in the Hungarian countryside, namely the land reform and the socialist transformation of agriculture.

The land reform, carried out in the wake of the country's 1945 Liberation, was followed by rapid development in agricultural production. By 1949, we essentially succeeded in restoring the damages caused by the war and production reached around 90 per cent of the pre-war level. In the first half of the fifties, due to the stagnation in the forces of production, the growth rate strongly slowed down. Growth recommenced when — in 1957, following a resolution of the Hungarian Socialist Workers' Party on agricultural policy, compulsory deliveries of agricultural produce were abolished and a new system of government purchases by procurement and prices was introduced to stimulate growth of production with the result that material interestedness of the producers increased and the role of directive plan instructions strongly diminished in agriculture, and when — from 1959 onward, in the wake of

the formation of large-scale co-operative farms, after nearly two decades of stagnation, productive forces began continuously to develop and modern technology found its way in the large-scale farms. With this, the two main obstacles to the development of agriculture — backwardness of production relations and stagnation of productive forces — were removed.

The socialist transformation of production relations in agriculture came about quite rapidly; within four years after 1958 the process was essentially concluded. The penetration of new technologies into agriculture started simultaneously, with an almost explosive force. Both developments imposed extraordinary requirements on agricultural experts, the leaders of the new large-scale farms and the whole peasantry; nor was industry prepared to meet the needs. Also the necessary material resources could (and can) be mobilized only gradually.

In industry, socialist production relations had emerged some ten to fifteen years earlier than in agriculture. Due to this time lag, the development of the food industry took place rather in isolation from agriculture. It was partly on this account that the view according to which the whole process of food production must be developed in harmony with the interrelations between agricultural production and food processing, has become accepted but lately, upon the establishment of socialist large-scale farms.

Two forms of socialist large-scale farms have developed in Hungarian agriculture: co-operative and state farms. Both socialist forms of organization have stood the test of time and proved lastingly viable. In 1967 the state farms were farming 16 per cent of the country's agricultural area, the co-operatives 78 per cent, while private and auxiliary farms occupied the remaining six per cent.

Certain signs of — mutual — approach may be observed in the development of the forms based on state ownership and co-operative ownership. Co-operatives began increasingly to guarantee wages, earlier a characteristic of state enterprises only. In state farms, on the other hand, direct interest of employees in the profitability of farming is increasing; a principle that applied formerly mainly to the co-operatives.

The household plots of co-operative members occupy an important place in agricultural and commodity production. They occupy about 15 per cent of the agricultural area of co-operatives, but this consists in a large proportion of gardens, vineyards and orchards. Part of the fodder produced on the collective farms is being utilized on the household plots. Almost half of the country's cattle livestock can be found there and on the private farms, and their share in pig raising is similarly high. Household farming is an important source of additional income to the peasantry.

Economic policy is giving continued support to small-scale, household-plot farming, for the reason — among others — that material resources

necessary to set up modern, large-scale farms are limited. However, the rise in income and living standards, the changing of generations within the peasantry predicted by demographic forecasts for the second half of the seventies, as well as the urbanization process taking place in the countryside, all indicate that in the long run the tendencies observable already at present — particularly the gradual reduction of cattle livestock on the household farms — will increasingly prevail.

It is a characteristic feature of the development of Hungarian farming co-operatives that differentiation in respect of production level and profitability is increasing. The social productivity of labour is greater in areas with better soil conditions and a more favourable situation. On the farms where natural and economic conditions are more favourable, investments are recovered faster and there are greater financial possibilities to increase investments. The objective production conditions of the individual farms, the abilities of their leaders, the efforts of the farmers, all find their expression in the differences in income between the co-operatives, since the system of state control does hardly apply any restrictions and levelling measures in this respect, or none at all.

The process of differentiation is a healthy one and conforms to the interests of the national economy since it ensures the best utilization of available means. As a concomitant of this process, in the areas where natural endowments are unfavourable (e.g. on meagre sandy soils, or in hilly country) the co-operatives are granted government subsidies which enables the members to earn a suitable income by providing an incentive to establish a production pattern conforming to natural conditions.

In the *food industry*, socialist production relations came to be established by 1949, together with the nationalization of industry. In the course of this process also many characteristically small-scale plants were nationalized mainly in the baking and dairy industries. The subsequent years witnessed a high grade of centralization taking place, especially from the early 1950's onward, as a consequence of the highly centralized system of food allocation, prevailing at the time.

In the further development of food industry, strong concentration continued, also due to the relative scarcity of capital. Sufficient capacity to meet quickly growing demand and modernization that had become indispensable owing to technical and technological progress, could be secured with relatively smallest inputs in most industries by the expansion and reconstruction of existing plants. It is open to argument whether, with the given level of transportation techniques and production organization, less concentrated development would not have been more efficient in some industries.

The disadvantages of exaggerated concentration present themselves primarily in those branches of food industry which have to meet local needs

with fresh products. This is the case also in the industries where, for various reasons (reduction of transportation costs, ensuring of quality, local use of by-products, better utilization of local labour, etc.), it is advisable to organize primary processing on the farms themselves. The reform of economic control and management introduced in 1968 created favourable conditions for further developing co-operation between the agricultural plants on the one hand and the food-processing industry on the other. The results hitherto achieved may be regarded only as initial steps towards the vertical organization of the production processes. For this is still hindered, among other things, also by some horizontally organized monopolistic trusts and big enterprises.

There are several viable forms of co-operation between the large-scale agricultural plants and the industrial and trading enterprises that may develop in the future. Co-operation should be based on the harmonization of mutual interests and advantages, the joining of forces between the farms and enterprises on the basis of equal rights. To exploit economic advantages, specialization of agricultural plants is growing together with the concentration of production, the latter frequently assuming the form of a joint venture in which several large-scale agricultural plants are participating.

In the last two decades, *market relations* stimulated the growth of food production. In accordance with rising living standards, domestic food consumption increased between 1950 and 1966 at the annual average rate of 3,9 per cent. Even today, nearly half of personal consumption consists of foodstuffs and beverages. Of this, 93—94 per cent can be met out of domestic production. With the economic development of the country, the share of foodstuffs in personal consumption will decline; however, the rate of decrease is likely to be rather slow. Changes in the pattern of food consumption — with the share of foodstuffs with high protein and vitamin contents increasing — will, as a matter of fact, tend to raise the value of food consumed. The share of industrially processed goods as well as the degree of processing will grow. This is concomitant to the development of nutrition culture; in addition, it also serves to meet some social needs and to facilitate household work.

The fact that under Hungarian conditions the export of foodstuffs and agricultural produce is of great importance from the point of view of the equilibrium of the balance of payments with capitalist countries and that also exports to CMEA countries are substantial, has ensured food production the possibility of development. In recent years, the product of agriculture and the food industry constituted 23—24 per cent of the country's total exports. The active balance of external trade in agricultural and food products increased from 1960 to 1967 to more than twofold. The pattern of exports has markedly changed. A considerable part of the increment in exports — between 1960 and 1966 almost half of it — came from the increase in the export of horticultural products. In exports to capitalist countries it is live

animals and animal products, in those to the CMEA countries horticultural products, which take the leading role.

In every industrializing country, thus also in Hungary, an unequivocal tendency points to a diminishing share of agriculture both in the global social product and in national income.* Although for lack of suitable data it cannot be verified, it is most likely that the slower growth in national income derived from agriculture than in total social product is also a lasting phenomenon.

An important finding of the broad analytical work is that industrialization of the country has not reduced the importance of the food economy. Although its share is declining both in the global social product and in national income, the supply of the domestic market with foodstuffs in harmony with growing living standards, the contribution to earning the foreign exchange necessary for the imports indispensably needed to develop industry and the whole economy, furthermore the utilization of the country's comparatively favourable agricultural endowments, require its accelerated rate of development.

Productive capacity of the food economy

Since the socialist large-scale farms were brought into being, the development of productive forces in agriculture has gained momentum, yet not sufficiently to utilize all possibilities. Production increases as agricultural land area is diminishing and agricultural employment slowly declining. There is a tendency, which may be considered as lasting and characteristic of advanced agriculture throughout the world, for the quantity and composition of the means of production used to become, beside the increasing qualification of specialists and workers, the most important factors of development in agriculture.

Declining agricultural employment and the increasing average age of those employed are tendencies which manifest themselves also in other industrializing countries. In Hungary, however, agricultural employment, though still rather high, has fallen within a relatively short time. In 1968 it accounted for 30 per cent of total employment. The number of those belonging to the lower age brackets — especially of young men — who are responsive to modern technology and capable of acquiring a knowledge of it, is relatively low. Moreover, in the past there was considerable migration of young men, especially of trained tractor drivers and mechanics from agriculture to other branches which stopped only two or three years ago when in 1967–1968, mainly under the effect of growing co-operative incomes under the new system of economic control, the situation somewhat improved in this field.

* In accepted UN terminology: Gross and Net Material Product (GMP and NMP), respectively.

The creation of socialist large-scale farms and the penetration of new technology into agriculture have radically changed the character of agricultural work. Peasant work of former times, based on family organization, has been supplanted by rapid specialisation and large-scale division of labour. This process is to continue over the next decades. The qualified labour requirements of agriculture can be secured only if the change in the living and working conditions of peasants keeps pace with general development.

In addition to the problems deriving from the composition of manpower, the labour situation in agriculture is ambiguous also because of the seasonality. In a certain period of the year, during the autumn harvest, there is a labour shortage in some places — mainly on the farms with large orchards and vineyards — which is overcome with the aid of students and housewives. In other parts of the year, however, it is difficult regularly to employ the available, mainly female, labour. A solution may be found either in sub-contract work for industrial enterprises or in expanding the economic activities of the agricultural large-scale units along other productive or servicing lines.

Also the question has emerged whether it was not possible to brake the outflow of agricultural labour at the price of slowing down technical development in agriculture and to secure the desired increment of agricultural output with higher live labour input. The investigations have unequivocally proved that this was not possible since there is hardly any element of technical progress — even in the field of mechanization or the use of pesticides — which would serve exclusively to substitute labour and would not simultaneously result in diminishing production and harvesting losses. Nor is it possible to carry out a change in the production pattern that would cut down the autumn peak without reducing total agricultural production. On the contrary — development tendencies point to growing autumn peaks. All this rather calls for than brakes technical development. Besides, reduction in agricultural employment fully conforms to international tendencies.

At the end of 1968, the recorded number of agricultural earners was 1 480 000. At the same time, 163 000 people were working in the food industry. With a series of suitable measures, rationalization of production profiles and reorganization of plants, the seasonal fluctuation can be diminished in part of the industrial branches depending on the seasonality of agricultural production, especially in the canning and conserve industries.

Similarly to the economically developed European countries, in Hungary, too, the *area under cultivation is continuously shrinking*. In the last 30 years it has diminished by some 700 000 hectares (9 per cent). From this loss of area 370 000 hectares were afforested, mainly in such areas where relief conditions or poor soil hindered agricultural cultivation or made it unprofitable. Thus, the growth in forest area did actually not take place at the expense of agricultural production; the change is favourable from the point of view

of the economy as a whole. Special mention should be made of the newly planted poplar forests, the area of which is rapidly increasing and which are doing well, particularly in the poor sandy areas.

The situation is somewhat different as regards the remaining 330 000 hectares of land put out of cultivation. Industrialization, urbanization and the development of transportation invade everywhere the agricultural areas. However, with more economical management of the land area, the same objectives could have been attained with less sacrifice, particularly as regards the quality of the land drawn away from cultivation.

As regards the future, a further reduction of agricultural area must, as a tendency, be reckoned with.

Up to the start of socialist reorganization, the fixed assets of the food economy increased rather slowly. Economic foundation of the socialist large-scale farms had to be harmonized with a rate of socialist transformation justified from the socio-political point of view. Therefore, it had to be ensured that collective production can start in the co-operatives immediately upon their formation with the limited resources available, without causing any break in the growth of total agricultural output. Therefore, the stock-breeding farms and farm settlements came into being on the basis of the situation and plant sizes that had existed at the time of the formation of the co-operatives, and without due consideration — and the possibility of consideration — of the perspectives of long-term development. In the first years, with the exception of cowsheds, mainly temporary wood structures were built which could last only a few years. With the consolidation of co-operative farms, with the introduction of rational large-scale technologies, buildings have become modernized in recent years and also a replacement of the first temporary structures has started.

An analysis of development proves in retrospect that the application of these temporary solutions was correct at the time. As a consequence of this situation, a considerable part of the stock of buildings on the large-scale farms has by now become obsolete and can no longer be operated with the required efficiency. The bulk of the first temporary structures still in use had to be replaced on account of their physical condition. It is, however, also a fact that a considerable part of even the more costly and enduring buildings, constructed at the time of the reorganization, according to the technological requirements known at that time, has become similarly obsolete from the technological point of view, and their replacement cannot be put off for long now. This replacement of fixed assets may still be considered as belonging to the process of providing the first equipment for the large-scale farms.

The equipment level of the food industry shows marked differences by branches. In the branches where nationalization had inherited substantial

capacities which could not be fully utilized at the time, hardly any investment was made for a considerable time. In these branches — especially in some plants of the sugar, baking, milling and distilling industries — the equipment has become technically obsolete. Processing losses on this account are rather considerable, mainly in the sugar industry. In recent years there has been substantial development in this field.

In order to maintain and increase international competitiveness and to meet growing domestic demand, it is most important to develop meat processing, deep-freezing, storing and warehousing, as well as the packaging of foodstuffs.

Owing to the extremely fast development — as a matter of fact, hardly 8 years have passed since the date when the establishment of socialist large-scale farms could be considered an accomplished fact — in the branches of the food economy there did and, indeed, could not come about the harmony of fundamental, complementary and "consequential" investments. In many branches, the mechanization of agricultural productive processes, the equipment of stock-breeding, the building of storage units for processing and manipulation connected with large-scale planting (of grapes and fruit-trees) has not yet become sufficiently complex. The internal technologies of many processing plants have been only partially modernized to date.

As regards investments, in the following years the modernization, reconstruction and complementing of existing productive capacities will be in the foreground; later on, a harmonius development of raw material producing and processing capacity along the whole vertical line must gradually become practice.

A better supply with *working capital* is an essential condition for the more efficient utilization of fixed assets. It is a well-known fact that the efficiency of assets engaged in agricultural production is affected by several interrelated factors. On the basis of investigations, we have nevertheless arrived at the conclusion that there is a single factor which essentially improves the efficiency of the input of every other factor. In plant production this factor is at present the increased use of fertilizers; in animal husbandry, the setting up of structures and equipment necessary for improving the conditions of animal keeping. Of course, this is only a temporary generalization, the lasting tendency will be a harmonious development of all factors affecting production, which is the only way to achieve optimum efficiency.

In 1959, the demand of Hungarian agriculture for industrial means of production suddenly began to grow. However, to provide for these, the country was lacking and, — owing to its small size — is still lacking the suitable industrial background. Accordingly, the share of imports in the supply of agriculture with means of production is relatively high. It is due to the lack of experience in the initial stage of large-scale agricultural develop-

ment and to the resulting uncertainty of the indication of demand to industry, to the inadequate development level of the industrial background — and, let it be added, also to the unexpected rapidity with which the demand presented itself — that the possibility of developing the supply of agriculture with means of production in a planned and complex manner is being created only gradually.

With the given size of the country, industrial policy must — both in developing domestic industry and in the policy aimed at international cooperation especially with CMEA countries — pay greater attention than hitherto to developing and improving the industrial background of food production.

The size of the socialist large-scale farms offers better conditions and possibilities to apply modern techniques and increase the competitiveness of the products marketed than can be found at present in several countries with a developed agriculture. The average area of the state farms is above 5000 hectares, that of the co-operatives nearly 2000 hectares. The production conditions — considering also the rapid improvement in management and in the supply of specialists — enable a quicker development of the forces of production than before.

Large-scale organization provides possibilities for a relatively fast spread of new production processes. In addition to domestic results of research, Hungarian agriculture has successfully adapted in the last decade new foreign plant varieties (e.g. of wheat, maize and sunflower) to domestic conditions, and adopted technologies of animal husbandry (up-to-date methods of poultry keeping, egg production, pig keeping, etc.). This way should also be followed in the future.

Growth of production

It is only since 1957 that the level of agricultural production has attained, and remained above, the average level of 1934—1938. From that year onwards, the annual rate of growth has attained and even exceeded the 2 per cent average annual growth rate in world agricultural production. Between 1966—70, in the present five-year plan period, the expected annual growth rate in agriculture will somewhat exceed 3 per cent; it has thus accelerated. Several signs indicate that the present growth rate of agriculture may become stable.

Acceleration of the growth rate in food production is proved by the following data: the growth rate of agricultural production was 0,8 per cent on annual average between 1938 and 1967, and 2,2 per cent between 1950 and 1967, the corresponding rates for the food industry are 5,0 and 7,4 per cent respectively, and 8,7 per cent between 1957 and 1967. Considering the total

food economy (agricultural production and food production combined) the corresponding rates are 2,1, 4,2 and 4,5 per cent on annual average. Within that, the processing of foodstuffs developed more evenly and faster.

Within the food economy the ratio between agriculture and the food industry has changed — particularly in comparison to the pre-war situation — in favour of the latter.* Calculated at 1959 constant prices, the share of the food industry in food economy was 22 per cent in 1938, 40 per cent in 1960

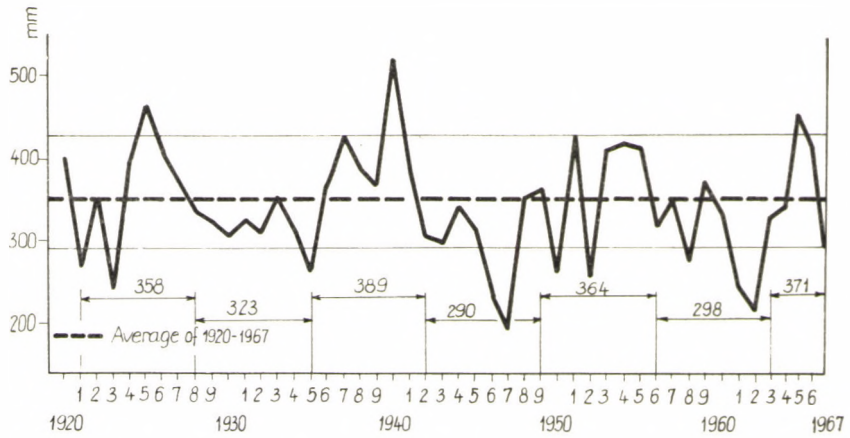

Fig. 1. Precipitation during the vegetation period (1. April—30. September) between 1920—1967, mm

and 46 per cent in 1966. This process is in harmony with the changes in social needs, with rising living standards, with the restratification of the population. Progress follows the same direction in every economically developed or developing country.

Within agriculture, the growth of plant cultivation was below average, with an annual average of 0,6 per cent between 1938 and 1967 and 2,2 per cent between 1950 and 1967. However, in 1968 and 1969 the growth of average yields has accelerated and, as a result, in the five-year period 1966—1970 ending this year, the average annual growth rate will probably reach, as compared to the average of the years 1961 to 1965, 3,5 per cent.

Up to now, development of plant cultivation has been characterized by frequent substantial fluctuation in yields. The fundamental objective cause lies in the climatic conditions of the country where draught and years with rich precipitation are alternating.

* The method of statistical accounting employed in Hungary measures the cumulated value of products, without adjustment for cumulations.

The calculations have, however, shown that the ratio of the fluctuation in yields to the trend values is decreasing. Fluctuation is mitigated by the development of productive forces and by the more diversified pattern of production. However, the improvement in the stability of production is mainly due to the increasing input of nutritive materials, to the increased



Fig. 2. Yield of plant cultivation on arable land and the replacement of nutritive materials, 1871—1965

1 cadastral yoke = 0.575 hectares
GE = cereal unit, a unit of calculation, formed on the basis of the nutritive value of the various plants.

use of fertilizers. The effects of changing precipitation conditions can be eased with the continuous and purposeful development of water management and irrigation in complex unity, which includes also the building of adequate water reservoirs.

The above statement is supported, and the close relationship between plant yields and the replacement of nutritive materials is shown in Fig. 2.

Plant cultivation has become more intensive, mainly through a considerable change in pattern. The combined area of gardens, orchards and vineyards has grown by about 230 000 hectares, while arable land decreased by

550 000 hectares, and meadows and pastures by 320 000 hectares. Accordingly, in the gross value of plant cultivation between 1938 and 1966 the share of plant growing on arable land decreased from 83 per cent to 75 per cent, that of meadows and pastures from 5 per cent to 3 per cent, while that of orchards increased from 2 per cent to 8 per cent, of vineyards from 7 per cent to 10 per cent and of gardens from 3 per cent to 4 per cent (at constant prices).

In the same period the sowing pattern of plant cultivation on arable land has also changed. The share of bread grains has decreased from 26 per cent to 18 per cent, that of maize has increased from 17 per cent to 24 per cent, of vegetable grown on arable land from 3 per cent to 7 per cent and of sugar beet from 2 per cent to 4 per cent.

The shift in land use and in sowing pattern is corresponding to the change in consumer demand. It has also helped better to utilize the possibilities of increasing yields offered by a greater input of nutritive materials and by technical development. A more intensive utilization of a diminished agricultural area was also enforced by the requirement to employ the agricultural labour force and to raise the income of agricultural plants.

The periods of the second five-year plan — between 1961 and 1965 — witnessed a great planting drive in vineyards and orchards. About 80 per cent of these has been planted on the sandy soils — mainly in the areas between the Danube and Tisza Rivers, and in East Hungary — little suited for cultivation, and much less for the production of fodder. To increase yields on these soils would have required substantially higher specific inputs than in the case of good arable land. In addition, in these areas agricultural population is dense and the level of industrialization low. However, as proved by old experience, they are suited for growing fruit and wine. The additional yield achieved and the present level of employment could not have been attained or even approached in any other way.

Thus, the endeavour to increase the ratio of horticultural branches has proved to be correct. Nevertheless, the highly forced rate of plantation resulted in some places in lower quality, and also the fruit pattern (characterized by a comparatively high share of apples) will have to be gradually modified.

In addition to changes in pattern in the right direction, the development in plant cultivation manifested itself also in the level of yields. In spite of substantial results, the latter cannot be deemed satisfactory. The changes are very uneven as regards different plants. The greatest increase is in wheat where the average per hectare yield in the years 1963—1967 was 161 per cent of that in 1934—1938; in maize, the rate is 147 per cent. In recent years the growth of yields has further accelerated. The average yield in the years 1966—1969 was 24,9 quintals per hectare in wheat and 30,6 quintals in maize.

In the future, the main source of growth in plant cultivation can be higher yields. Actually, as regards major structural proportions, no consider-

able further changes can be expected on national scale. As regards the pattern of plant cultivation on the individual farms, with the progress of specialization a reduction of the number of plants grown and an increase in the area of individual cultures will facilitate the application of modern techniques and technology.

Growth of *stock-breeding*, the "processing" branch of agriculture, has shown smaller fluctuation than that in plant cultivation. Between 1938 and 1967, the average annual growth rate was 1,8 per cent, between 1950 and 1967 2,3 per cent. However, in stock-breeding, the increase in average annual growth in 1966—70 as compared to 1961—65 will most likely be somewhat smaller than in the case of plant cultivation, a fact partly due to the acceleration in the growth of plant yields.

Over some longer period, the ratio of the two major branches of agricultural production, plant cultivation and stock-breeding, will slowly but continuously change in favour of the latter. The share of stock-breeding in the gross production value of agriculture was 37 per cent in 1938, 38 per cent in the average of 1949—51, 30 per cent in 1954—56, 41 per cent in 1959—61 and 42 per cent in the average of the years 1965—67. This tendency may be judged as a healthy one, since it follows consumer demands and foreign-trade possibilities. In the majority of the economically developed countries the shift is similar in direction but even faster in rate.

In evaluating the development and situation of stock-breeding, two further factors must be taken into account in addition to the uneven development hitherto rather characteristic of agriculture. The development of large-scale stock-breeding is essentially more complicated and more capital intensive than that of large-scale plant cultivation. Stock-breeding in Hungary cannot simultaneously cope with the growing demand of domestic consumers and exports.

Stock-breeding has grown somewhat faster than plant cultivation and two thirds of the increment have their origin in the transformation of the pattern of breeding. In the long-run changes of two or three decades, it is mainly the diminishing number and share of draught animals that is conspicuous. Hungarian development is, in addition, characterized by an enduring stagnation in cattle livestock, a continuous decrease in the number of cows, and an increase in the stock of dry fodder consuming animals, mainly pigs.

In spite of the diminishing cattle livestock, the production value of *cattle raising* has — due to improving yields — increased by 2,5 per cent on annual average between 1962 and 1968. The diminishing number of cows is an unfavourable phenomenon since it puts a brake on the growth of production. Fattened cattle is, for a long time yet, our best exportable product. Half of the Hungarian slaughter cattle is sold abroad, live or slaughtered.

Milk consumption per head is low in this country in comparison to other European countries. Among the long-term objectives of agricultural development, one of the most important is to develop cattle raising.

A fast increase in cattle livestock is hindered by the fact that cattle raising is highly capital intensive, specific capital input requirements are several times higher than in other branches. Owing to the low turnover velocity of cattle raising — due to biological reasons — investments are slowly recovered. No satisfactory, modern large-scale technology has been developed as yet in cattle raising. We must also reckon with the fact that cows will be kept in decreasing numbers in the household plots of the co-operative members because of changes in living conditions, of urbanization trends increasingly influencing life on the country-side. Up to now, development has been also hindered by low profitability. Therefore, in 1970 the government has substantially raised the producer price of milk and especially of fattened cattle; several other measures to promote the keeping of cattle have been also taken.

The results achieved in producing feed, the rapid spread of producing and feeding fodder-mixtures prepared according to modern recipes, as well as the gradual spread of the technology of large-scale animal keeping have provided a basis for increasing the breeding of fodder-consuming livestock. Growth has been particularly dynamic in poultry-raising and meat producing, with an annual average rate of 6,5 per cent between 1962 and 1968. On the large-scale farms, the rate of growth has been much quicker. The rate of further growth depends on marketing possibilities.

In domestic meat consumption pork is of great importance, representing the biggest share. The composition of pig livestock by kinds has radically changed. In 1935, 81,2 per cent of the stock were fat pigs; by 1957, this diminished to 43,5 per cent, and by 1964 to a mere 6,1 per cent, and the trend s still continuing, though at a slower rate. In spite of this, the possibilities inherent in improving the utilization of fodder are by far not exploited in pig raising and fattening. This is due mainly to the fact that the structures erected earlier in the co-operatives with a temporary character do not provide proper keeping conditions for the meat-pig kinds that are suited for intensive raising. The technology of modern large-scale pig raising is in the process of development. From its massive spread, rapidly improving results can be expected already in the near future.

Between 1962 and 1968 the production value of pig raising increased by 2,2 per cent on annual average. Growing domestic demand, and favourable marketing possibilities of some processed pig products (winter salami, dry sausages, canned ham, etc.) abroad both warrant the acceleration of development.

In Hungary the *processing of foodstuffs* has rapidly increased, mainly in the food industry separated from the agricultural plants. Between 1950

and 1965 it has grown to threefold. The share of food industry in total industrial production in Hungary amounts to 20 per cent.

The most dynamic branch of the food industry has been the production of canned goods. Its development has particularly accelerated after 1958; since then, vegetable and fruit processing capacity has grown to threefold. A great part of the products of the canning industry is being exported (in 1967 almost 70 per cent in terms of quantity). New forms of co-operation between the agricultural producing and processing plants have emerged only recently; in the framework of this co-operation, the pre-processing activities of agricultural plants are expanding.

Of the industrial branches related to stock-breeding, the poultry and egg processing industries have experienced marked growth. The growth rates of the meat and the dairy industries could, however, not keep pace with growing consumer demand. Recently, a widening range of choice, an improvement in packaging techniques and better supply conditions could be observed.

Development is above the average also in the branches which cater to satisfy demand for eatables increasing as a result of rising living standards. Such are the sweets, the distilling and soft-drinks industries. The growth in wine processing capacity could hardly keep pace with the increase in grape growing, nor could the production of beer satisfy consumer demand.

As regards the structure of food processing industries, it may be expected as a trend that the share of industries processing slaughtered animals and animal products — and, within that, especially deep-freezing, storing and drying — as well as that of those processing plant products — particularly the bottling of wine — will continue to grow.

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In the course of the last two decades there were many extraordinary or, rather, unique factors which have influenced development and in many respects hindered progress. In recent years, development became fater and more even in spite of the fact that these years were immediately following the setting up of large-scale socialist farms, accompanied by the difficulties of establishing new organizations. The results achieved do thus emphatically prove the viability and development possibilities of large-scale farming, especially of co-operatives. A condition of utilizing these possibilities is to co-ordinate the development of agricultural and food production to a higher degree than up to now, and to strengthen the industrial background connected with food production and affecting its development. Within the food economy, it should be considered as a major task to co-ordinate the individual branches vertically, as well as to adapt production to the changing and growing needs

of domestic and foreign markets. In addition, development calls imperatively for a better utilization of the soil, the material means and human labour, in other words, for more efficient management.

ВАЖНЕЙШИЕ ТЕНДЕНЦИИ РАЗВИТИЯ СЕЛЬСКОГО ХОЗЯЙСТВА И ПИЩЕВОЙ ПРОМЫШЛЕННОСТИ

Я. ХОНТ

Автор на основании исследований, осуществленных в рамках аналитической работы по подготовке перспективного плана на 1971—1985 гг. и, соответственно, материалов состоявшихся дискуссий, в наиболее общих чертах излагает главные тенденции развития сельского хозяйства и пищевой промышленности на протяжении последнего двадцатилетия, а также выводы, которые можно извлечь на основании упомянутых тенденций.

В вводной части он рассматривает общественные перемены, происшедшие в течение данного периода в сельском хозяйстве и пищевой промышленности. Автор доказывает, каким образом менялись влияющие на производство продовольствия рыночные условия и соотношения цен. Он отмечает, что в венгерском народном хозяйстве производство продовольствия по-прежнему является одной из самых значительных отраслей.

Останавливаясь на производственной мощности продовольственного хозяйства, автор рассматривает трудовые ресурсы сельского хозяйства, использование плодородных площадей, обеспеченность основными средствами и инвентарем. Одной из важнейших проблем он считает замену первоначального и в настоящее время отчасти уже и физически изношенного оборудования крупных хозяйств и обеспечение согласованности основных, дополнительных и сопряженных капиталовложений. Интересы дальнейшего развития производства продовольствия требуют создания отечественной промышленной базы или, соответственно, организации планомерного международного сотрудничества в снабжении средствами производства.

Рост производства продовольствия ускоряется. Наблюдается рост переработки продовольственного сырья. Темп роста сельскохозяйственного производства со времени создания крупных сельскохозяйственных предприятий и ускорения технического прогресса улучшился и стал более равномерным.

В области растениеводства и животноводства автор сравнительно подробно останавливается на производственных результатах, изменениях в структуре производства, а также росте урожайности и, соответственно, продуктивности.

Основными направлениями дальнейшего развития продовольственного комплекса являются обеспечение вертикальной согласованности отдельных отраслей, приспособление производства к изменчивым и растущим нуждам отечественного и внешнего рынка, повышение эффективности использованных средств.

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INTEGRATION OF CMEA COUNTRIES' NATIONAL MARKETS

The paper deals with the main features of CMEA integration, reveals the major contradictions developed among CMEA countries, and, finally, expounds that one of the most important goals of development is to pull down gradually the barriers between CMEA countries' national markets. Establishment of a CMEA customs union might be one of the most important means to integrate the national markets. The main task of a reform is to make plan co-ordination among member countries more efficient and to promote the growing role of commodity, money and other market categories.

Main characteristics of the CMEA integration

The regional market of CMEA member-states (henceforth called socialist world market) is a complex of the national markets of CMEA countries connected by international division of labour, different forms of economic co-operation and, particularly, foreign trade. The national markets of individual countries are connected principally by the foreign trade into a world market, but the concept of world market comprises more than merely foreign trade. The laws of world market development cover more than the foreign trade among participating countries.

Socialist world market is an integral part of socialist world economy, they came into existence simultaneously and the evolution of both has a mutual effect on one another as well.

The nature of world market and world economy is determined by production relations existing in the participating countries. Socialist world economy is a complex of planned economies of socialist countries connected by the means and forms of socialist international division of labour.

The economic basis of socialist world market development is provided by purposefully developing national economies of socialist countries, since the socialist international division of labour connects the purposefully developing national economies of socialist countries.

On the basis of plan-co-ordination and long-term foreign trade agreements between CMEA countries, production of the individual member-states becomes interdependent and the economies of these countries rely on the production and deliveries as well as markets of the other countries, in the first place, on those of the Soviet Union.

Owing to the development of forces of production and international division of labour, great areas become economically interwoven with each other. International integration is a process of development, and the concrete international integration indicates a certain stage of development of the integration process emerging in both social systems.

Hence, the integration process goes on due to the growth as well as the internationalization of forces of production, the intertwining of production and exchange processes among nations, the widening of international division of labour and, particularly, the interlinking of certain national branches of production with those of others.

At a given stage of development of the integration process the nature of such integrations — formed by the associated countries — is determined by the production relations, the political and economic objectives, as well as the corresponding institutions of economic policy and by other organization of the participating countries. The network of collective institutions of the integration develops and the international economic mechanism of the integration is established. As the integration is advancing, the increasingly stable links between a certain part of a national producing apparatus and the producing apparatuses of the participating countries are getting closer; on the other hand, the national markets are vigorously growing into an integrated broad international market.

In the framework of the CMEA countries' integration the network of collective institutions was established by the socialist countries with planned economies. One of the main characteristics of CMEA integration is the co-ordination of plans, and its related international mechanism comprises the organization of foreign trade, credit, monetary and financial connections among socialist countries.

On the basis of plan co-ordination and foreign trade between CMEA countries the planned production of the individual member-states becomes closely intertwined and the economic development of these countries relies on the production and deliveries as well as outlets of the other ones, particularly on those of the Soviet Union.

The international market of CMEA countries is, for the time being, a deformed world market integration, where the economic barriers between the participating countries impede the formation of a more advanced socialist world market integration, which would be part of a more advanced socialist production integration.

The barriers between the national markets are, among others, as follows: administrative protectionism which allows trade among countries but according to strict quotas; lack of multilateral trade; extreme efforts at equilibrium in the framework of bilateral trade; lack of a fully developed socialist world-money; lack of realistic rates of exchange; distorted relative

prices; the excessive limitation of mutual effects between internal and world market prices; unsatisfactory flow of capital among countries; undeveloped direct connections between economic units, and so on.

The actual state of CMEA integration represents a certain stage of development in the course of integration but being a process, it advances through different contradictions. The mechanism applied up to now in the framework of CMEA integration is out-of-date and contradicts the realized stage of development of productive forces as well as of production relations. Besides, the working out of a complex mechanism, which would organically link up the partial processes is still required. The acceptance and the application of a complex mechanism will represent a more advanced stage of development in CMEA integration.

Some contradictions in the economic co-operation of CMEA countries

In the course of social progress the most general contradiction is the one between the forces of production and the production relations. In what concrete forms does this general contradiction appear in the co-operation of CMEA countries?

a) On the one hand, *the forces of production of the participating countries in CMEA integration are more and more growing beyond the frontiers* and their production is increasingly becoming intertwined and international, as the international division of labour advances. At the same time, the decisive means of production are the socialist property of independent countries, which property has a distinct national and separate character, and the countries or rather their socialist enterprises exchange their products as commodities. Thus, *in addition to the mutual interests of the CMEA countries, the distinct interests,* namely those of the individual countries and enterprises and the contradictions among them, *are necessarily existing and have a great influence.* In this context it is worth-while to call attention to Marx's statement, according to which the social division of labour comprises the common interests of the individual producers and the dialectic unity of the contradiction between individual producers as well as the whole producing organization linked by the social division of labour; and that this contradiction will be completely eliminated only in a communist society.* Thus, one important contradiction of the CMEA integration is the one existing between the internationalizing process of production and the social ownership of the means of production, which are of national character. This cannot be eliminated for a long time in the course of historical development, but it might be eased

* Marx—Engels' Works. Vol. 3. Budapest. pp. 33—35. — in Hungarian.

or aggregated by the forms of international economic co-operation creating more favourable or unfavourable conditions for it.

b) *A contradiction arose between the international socialist division of labour and the developed economic form (economic mechanism) of co-operation on the one hand, and between the development level of productive forces and the socialist ownership, of national characteristic, of means of production, on the other hand.* This economic form of international division of labour and co-operation was closely related to the planning and economic control system (economic mechanism), which regulated production, distribution and trade mainly by administrative measures as well as by compulsory plan-instructions given to the enterprises, and restricted the effective role of commodity and money relations. The economic form of the division of labour and co-operation among the socialist countries also worked out corresponding to this situation. Since, however, in the framework of the CMEA integration there are independent socialist countries which are owners of means of production separately, there was no possibility to plan and control production, distribution and trade of these countries by orders from a single centre. Accordingly, the limitation of the effective role and function of the commodity and money relations, as well as of the market caused a considerable disadvantage to the socialist division of labour and cooperation. Development of division of labour among the socialist countries and a realistic utilization of economic resources as well as the joining of resources in various countries in undertakings with mutual benefit were restrained in many respects by the above phenomena.

This can be stated even if the results achieved by the CMEA integration and the individual socialist countries are kept in evidence.

c) *As the whole social progress, the development of the socialist countries' national sovereignty is advancing amid contradictory movements.* While, on the one hand, the sovereignty of socialist countries is increasingly accomplished, on the other hand, individual socialist countries voluntarily limit their own sovereignty, a part of which is transferred to collective forums which evolve in the course of international co-operation. In this way also small countries have a share in decisions affecting several countries, and thus their sovereignty becomes not only not restricted but, in a sense, expanded. This development process in the CMEA integration is in its initial stage. The CMEA countries restrict their own sovereignty in the interest of their own as well as the other countries' economic development whilst their role becomes internationally more important by tallying their plans and mutually assisting their development. They do not interfere with the internal affairs of each other, but the trends of the member-states' economic development are indirectly influenced by the plan co-ordination. Each individual country enters only such obligations which meet its national as well as international interests, while its participation in the international division of labour and its contribution to

the development of the economic grouping serve both its own development and that of the other countries.

The integration process of CMEA countries and the self-limitation of member-states' sovereignty might have a varying rate, that is, it might accelerate or decelerate, depending on the attitude of the participating countries. The development of the integration is urged by an overwhelming majority of CMEA countries, since it has a beneficial effect on the improvement of effectiveness in the international division of labour, which, naturally, promotes economic growth of the individual countries and improves the effectiveness of their production.

d) *The autarkic tendencies of the individual CMEA planned economies are getting increasingly into conflict with the tendency of rapprochement of the CMEA countries' people.*

The great advantage of a planned economy is to control centrally the growth of the whole national economy, to set the main goals of development, and to be able to organize the means and economic regulators to serve the realization of these goals as well. The purpose of the international co-ordination of plans is to establish on part of the CMEA countries the international conditions for purposeful economic growth in the individual countries.

However, the forms of planned economy applied up to now comprise certain tendencies towards autarky, since efforts exist that production should satisfy domestic productive and consumption needs as far as possible and individual branches of production should complement each other in an ever more complex manner, within the scope of possibilities, but many times at the expense of economic efficiency. These efforts render difficult a far-reaching and efficient co-ordination of national plans, they serve involuntarily certain autarkic tendencies and increase the international barriers between the national markets. At the same time, the plan co-ordination of CMEA countries cannot become collective planning within reasonable time even if further progress has been achieved.

Since exports-imports are extremely centralized and strictly attached to permits even in socialist relation, since domestic prices are detached from the foreign trade ones, and since there exists an extreme protectionism, the national markets of the CMEA countries have become isolated to such an extent which, instead of helping, restricts the economic interlinking of CMEA countries, the reasonable utilization of comparative advantages, international specialization and co-operation in production, the improvement of economic efficiency in national production and a quicker adoption of technical revolution.

On the domestic national markets the trade in other socialist countries' products is extremely restricted by the prevailing economic mechanism of CMEA countries. Generally, these countries import if domestic sources are

either not available at all or not in the required quantity. The users have, practically, no choice as regards either assortment or prices.

The forms and ways of imports have become bureaucratic, circumstantial and clumsy in the trade of socialist countries, too. The enterprises are protected more than necessary from the influence of the international market; and the results are an excessive feeling of security, lack of mobility, and lack of financial interest in international specialization and co-operation in production. However, high manufacturing costs and inputs of producers were accepted by society and such costs are the bases for the domestic prices as regards either foreign trade or domestic use, irrespective of the prices of products to be imported from other countries.

This contradiction, on the one hand, also gives an impetus to the gradual development of collective planning and the establishment of collective enterprises, and, on the other hand, calls for the elimination of the national market barriers.

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There is a relationship between the development of the socialist countries' economic co-operation and the development of production relations among socialist countries, as well as the control of contradictions constituting the difficulties in evolution, and so on.

The complex control of the forms of movement of the contradictions, the production relations among countries and the forces of production, are contained by the notion of a complex development of CMEA integration.

The market integration of CMEA countries

One of the most important tasks in the complex development of CMEA integration is to gradually eliminate the extreme restrictions applied by the national markets of CMEA countries against each other, *thus developing a collective integrated market.*

On the socialist world market there is a trade in commodities, that is, the goods of the socialist countries (as separated national owners) are exchanged. This is a special trade in commodities, that is, trade among socialist countries with planned economies. If we neglected any kind of these characteristics, increased difficulties would arise as regards trade of the socialist world market and, particularly, the efficiency and proportions of this trade. The more certain people refuse to consider these problems, the more difficult it becomes to organize deliberate co-operation. Opposition to the further development of an organized market is not the way leading to an improvement of efficiency in the co-ordination of the countries' production plans, but the one which accepts and directs purposeful, centrally organized

co-ordination to such areas, where satisfactory solution is not guaranteed in the long run by advanced commodity, money and market relations.

The CMEA's production and market integration might progress by means of further improving the co-ordination of the countries' production plans and utilizing the market categories in a more advanced and purposeful way.

It is necessary that the change in and the further development of the CMEA's production and market integration shall proceed along two lines. Both are interdependent and conditioned by one another. The first is to improve and make more efficient the bilateral and multilateral co-ordination of countries' production plans and the other is to help the evolution of the effective role of commodity, money, and other market categories.

According to the differences in the reforms and development of the CMEA countries' economic control systems there are different possibilities for the elimination of the existing protectionism and the national markets' detachment. Conditions are ripe for creating closer connections between the domestic and external markets, first of all in the framework of the CMEA. It is necessary that the socialist international market competition shall have a free scope under the new domestic and international economic mechanism. This competition can be only a controlled and limited one, and this is realizable in the framework of socialist economy and its purposeful control. The participating countries' economic integration process must be substantially helped, connections between enterprises producing the same kind of goods must be tightened, development of practical productive co-operation must be forced, evolution of the socialist international division of labour must be accelerated and its economic efficiency must be improved to a considerable extent by this controlled socialist international competition.

The controlled socialist international market competition provides possibilities, on the one hand, to utilize the advantages of enterprise concentration within individual countries and, on the other hand, to get rid of, or at least reduce the disadvantages resulting from the monopolistic position of certain huge factories. Such a competition reduces the price levels, helps the efforts to improve the quality and up-to-dateness of products as well as to widen the range choice, enables to meet the needs of the population on a higher level and in a more refined manner. This kind of competition is compatible with a purposeful and reasonable protectionism, which guarantees an economically justified protection for the domestic productive companies. The extent of protection must change and continuously decrease with economic development.

Formation of an advanced market integration of CMEA countries is a many-sided, complex problem to be solved gradually during some longer period. The main processes of the CMEA market integration are controlled

by the co-ordinated economic policy of the member-states, and it is necessary that their tendencies shall be influenced by a jointly established CMEA control system.

The development of the CMEA countries' market integration requires a reform as concerns the system of foreign trade between CMEA countries, the development of a CMEA customs union, and so on.

At first, trade in the CMEA integration would consist of three groups:

1. Long term agreements would be concluded to supply basic materials in contracted quantities.

2. Quotas would be fixed in value terms for given groups of products — for example: machinery — during plan-co-ordination and in the foreign trade contracts. The companies' mutual contracts would fill these quotas.

3. In the third groups of products direct agreement between companies would gradually have an increasing role. In the beginning, this form could cover 10—15 per cent of the trade in consumer goods and a smaller part of the trade in machinery, instruments and component parts. The volume of the latter group should be continuously expanded.

One of the important means of developing the CMEA market integration is the establishment of a regional *customs union* of CMEA countries.

If it were established, this customs union would be the first one in world history, the members of which would be countries planning their economies and co-ordinating their plans. In the circles of economists at home and abroad the opinion is widespread that the socialist countries do not use customs duties against each other. Though this is formally true, it is easily misunderstood as regards its meaning since they are using more vigorous administrative protectionism than the customs duties. During the centralized plan co-ordination and in foreign trade agreements it is decided by the individual countries what products will be accepted for importation. In most cases, the internal price levelling and the price levies are much greater than the normal customs duties.

Customs policy is considered as one of the most important means of the foreign trade policy in the capitalist countries. There are different kinds of customs, but as regards foreign trade policy, it is interested mainly in "protective duties" because the prices of imported products are increased by them — apart from any other economic regulator — in the interest of domestic production and price level, giving advantages in this way for the production and sale of a given product in price formation.

The protective duties may be either temporary or permanent. In the first case their task is to help domestic production through the initial difficulties and contribute towards developing new branches of production. The classical task of permanent duties is to compensate for the differences between the domestic and foreign production costs.

One of the important methods of customs policy between countries is the most-favoured-nation clause, according to which the greatest reduction of duties given to any country will be applied to each other. Generally, the customs unions and economic unions are exceptions to this. The member-states of a customs union apply low tariffs to each other, or in certain cases customs duties are wholly eliminated, whilst to non-members they apply high tariffs.

"...in the age of the imperialism — was written by Lenin — there is no customs policy which can be efficient, since there are enormous differences between the destitute and the excessively rich countries. Bucharin refers several times to the protection of duties, and he does not notice that this protection of duties, in conditions cited, can be broken through by any rich industrial country."*

The Soviet Union of those times, being economically undeveloped, required for her economy more efficient protective measures than the one of customs duties, since, simultaneously with economic expansion, she had to face armed intervention and this danger permanently threatened the Soviet Union in the subsequent years, too.

Since the establishment of socialist foreign trade monopoly 50 years ago, a great change took place in the development of the world economy.

1. The Soviet Union of today is an industrially advanced country which gained victory in the second World War against the fascists applying advanced techniques. The Soviet Union of today would also win in any kind of customs wars, since all the necessary economic means are available to her.

2. A socialist world economy has developed, which, in addition to having run the economic blockade applied against it in the 1950's developed more rapidly than the capitalist world economy, in spite of economic discrimination. It was on the basis of the powerful economy of the Soviet Union that the aggressive economic attack of the imperialist powers was driven back by the socialist world economy.

3. Since the principles of internationalism are the basis of economic co-operation among socialist countries, the question, that any kind of customs policy might be destructive to economic cooperation among each other, did not arise. At the time of establishing economic co-operation among CMEA countries the forms of co-operation were determined by the member-states' considerably centralized planned economies. The fact that the application of the socialist monopoly of foreign trade was interpreted in a limited sense also between each other was closely related to this.

It is decided by the individual countries during the centralized plan co-ordination and in foreign trade agreements what products would be accepted

* V. I. Lenin's Collected Works. Vol. 33. Gospolizdat. — In Russian, Moscow 1950.

for importation. Formally, customs were not applied by the CMEA countries against each other, practically, however, an extreme protectionism prevailed, when determining the domestic prices of imported products, and this resulted in much higher prices than would have been set if normal customs duties had been applied. The reason was that the prices of imported products were raised up to the price level of the domestic products.

4. The colonial countries, which are backed by the socialist countries in their efforts to become economically independent, became free after the second World War during the new stage of the period of general crisis of capitalism. This backing takes shape mainly in direct economic agreements and aid; however, the necessity of applying a customs policy which is also claimed by the developing countries against the imperialist powers, becomes increasingly felt.

5. The developed capitalist countries are united in various customs unions, which apply discriminatory customs policies against the socialist countries. To protect themselves it has become necessary to apply on the part of the CMEA countries a common customs policy, which is suitable to force the capitalist countries to apply the most-favoured-nation clause.

6. In consequence of the particular structural and power relations of the CMEA, which are basically different, for example, from those of the Common Market, the Soviet Union has a distinguished role in the implementation of changes. The position of the Soviet Union is again entirely different from that of the other member-states. Her domestic market amounts in itself to a regional world market, and her economy is rather insensitive to changes on the world market. This statement is convincingly demonstrated by the small proportion of foreign trade to national income in the USSR. However, the other member-states have only small markets, they are lacking natural resources and by far the greater part of their exports consists of finished products. As a result, these countries are sensitive to foreign trade, and exports are growing quicker than national income. The Soviet Union is a world power and, because of her extensive political interests, the non-economic factors play a far greater part in her economic policy. On the other hand, having more limited foreign trade connections (as compared to her domestic economic activity) certain impulses of the world market find channels through the other member-states more rapidly than through her own economy.

The incorrect interpretation of the socialist monopoly of foreign trade put in many cases a brake on the progress of CMEA market integration. It restrains the development of direct connections among companies and, therefore restrains — together with the other braking factors in the mechanism — international specialization in production and the evolution of co-operation between companies.

The socialist monopoly of foreign trade rendered useful services to the national economy of the Soviet Union and it is a highly useful means in the hands of the socialist countries against the capitalist ones. However, its rigid interpretation might put a restraint on development even as regards relations with capitalist countries. As concerns the socialist countries, the socialist monopoly of foreign trade must be gradually transformed, and the role of state-owned productive companies must be reasonably determined in the framework of trade within the CMEA integration.

The socialist monopoly of foreign trade among socialist countries continues to exist in the sense that the state-owned companies which are allowed to establish direct international connections are designated by the state. The Ministry of Foreign Trade and other supreme state authorities may intervene in the activity of companies in order to keep it in the course of the correct development. Their instructions and the economic regulators applied influence the activity of companies, and, at the same time, check compliance of this activity with their instructions, etc.

The incorrect interpretation of the socialist monopoly of foreign trade, the extreme centralization of export-import activities and the rigid system of permits even in the trade among socialist countries, the separation of domestic prices from foreign trade ones and the excessive protectionism led to an isolation of the CMEA countries' national markets of such an extent, which, instead of helping, restricts the economic intertwining of CMEA countries, a reasonable utilization of comparative advantages, international co-operation and specialization in production, and an improvement in economic efficiency of national production.

In every country there are economic politicians, industrial or foreign trade experts, who, after a long period of extreme protectionism, are afraid of closer integration as something jeopardizing national interests and socialist industrialization. This attitude is incorrect theoretically, since there is no national economy that would need uneconomical branches of production, which diminish national income, reduce productivity and badly supply the customers (users). However, the transition must be worked out, because the fate of a reform will be usually determined during the transition period. As a requirement of the integration, it is beyond question that

a) the production of groups of products, which remain unprofitable in the long run, will not be developed and will be gradually abolished;

b) from the products, which can be more or less economically produced, only the most profitable one will be developed, because in the small countries (and with the exception of the Soviet Union every CMEA country is a small one as concerns modern technical and industrial proportions) many branches of production are not able to produce series on a proper scale and to keep pace with rapid technical progress.

In every country this process and the particular interests of certain branches of production, factories and foreign trade companies are in contradiction. Subjectively, it is justifiable to take offence at liquidating branches of production, which, at one time, were built up according to plans, for which workmen were trained, researchers, managers were specialized and organizations were established. Yet, there is no other solution to guarantee the development of the economy. Only graduality coupled with purposeful activity may help on the way which leads from extreme protectionism to moderate liberalization.

Particular interests and the interests of the national economy are opposed to each other within the nation; in this case, however, the properly conceived interests of the national economy are quite close to those of the entirety of the CMEA.

To develop further the market integration of CMEA countries, the CMEA countries' customs union must be established, as the means to connect national markets. The CMEA customs union should be a socialist one, the members of which are CMEA countries, and the principles of socialist economic co-operation must be asserted in it. The customs system may function even in the framework of the plan co-ordination and trade taking place on the basis of long-term foreign trade agreements, the system may help a gradual elimination of barriers between national markets, stimulate price reduction and cutting production costs, it may contribute to international co-operation and specialization in production.

In the CMEA customs union the development plans are agreed upon by the countries on the basis of plan co-ordination, and the CMEA customs union must become one of the most important means of plan co-ordination and of implementing the objectives of national development.

It is most desirable that such a customs system be established by the CMEA customs union by means of which the CMEA's integrated regional market will be able to separate from other markets. The system will, transitorily, acknowledge duties between member-states in the beginning but later they should be progressively eliminated, preferential tariffs should be applied to the products of developing countries and a uniform tariff should be used for the other countries. Naturally, grouping of products can be also used in this tariffs system, as is applied also by other integrations. Thus, for example, the raw materials might be imported duty-free, but the manufactured products would be imposed duties in accordance with the tariffs.

It is possible that, simultaneously with the acceptance of the uniform tariffs system, an *import turnover tax of varying rate* will be imposed by the individual countries on different products to protect their own production branches in the competition with developed countries. Naturally, imposing an import turnover tax is the sovereign right of every country, but, in the

interest of the development of an economically more efficient integration, there is a need to arrive at an agreement on a progressive reduction of import turnover taxes. This may cover even several five-year plan periods.

The effective functioning of a custom systems is limited only to a small extent by *prices fixed for a long term*, but the application of a combination of fixed and moving prices would have a considerable stimulating effect on the formation of foreign trade and domestic prices. The fixed prices would be applied for a longer term only for the most important materials, and as regards the other kinds of products only the principles of price calculation would be established and between the enterprises an effective price-bargaining would develop which would take into consideration demand and supply as well as the quality and up-to-dateness of products.

The building up of a *connection between the domestic and foreign trade prices* is an important condition of the effective functioning of a customs union.

As regards the bringing to perfection of the inner price systems, economists in several CMEA countries have gained experiences during the formation of new economic control systems.

As concerns the important products of the CMEA countries, the methodology for comparison of production costs was worked out in the framework of the CMEA's Standing Economic Committee and the price formation methods of the different countries were learned by the Committee. Domestic relative consumer prices are different to a great extent, and this results mostly not from differences in production costs, but from those in methods of price formation as well.

The CMEA customs union would function more effectively, if the *domestic price formation methods were drawn much nearer to each other* by the member-states.

If an agreement were reached according to which the same principles were applied by the interested countries for the imported products as for the domestically produced ones, the inner price-formation methods would not prevent the CMEA customs union from influencing the formation of inner prices. The domestic consumer price constituted of the producers' price and the financial additions, and, as regards the imported goods, of the import price, the customs duty and the domestic financial additions.

For the retail prices of imported consumer goods a comparatively constant rate of turnover tax could be applied in addition to the prices worked out with the price coefficient from the import price given in foreign currency; by means of this device the changes in foreign prices would show in the formation of domestic prices.

For example, in the framework of the customs union existing among the Benelux countries the imported goods are imposed customs duty and turnover tax as well, as follows: *a)* all imported products are imposed the

same turnover tax as is borne by similar domestic products; *b)* many imported products are imposed customs-turnover tax, too. The reason is that the duty is subject to international agreements, while the customs-turnover tax depends on sovereign national decision.

In the framework of the new domestic price mechanism, the prices of imported goods can change flexibly, since (the greatest part of) the products included into the actual nomenclature belong to loose price forms (i.e. free prices or those moving between established limits). Accordingly, the actual domestic consumer and producer prices are formed by the enterprises according to market conditions.

The lack of *reasonable rates of exchange* is a bound as regards the establishment of a close connection between foreign trade and domestic prices, though it is a condition, to a certain extent, of forming the CMEA customs union. For the time being the rates of exchange declared officially have no real economic contents.

Naturally, it is naïve to believe that the real purchasing power parity of the capitalist currencies is truly reflected by the rates of exchange. It is a well known fact that the dollar's domestic purchasing power is lower by 25 per cent than its rate of exchange. The rates of exchange of other countries' currencies differ to varying extent from the rational parities of purchasing power.

As bases for establishing reasonable rates of exchange may serve the purchasing power and the balance of payments of an individual country. The purchasing power parity can be determined as the quotient of purchasing powers in different currencies, which means that the value of an individual country's currency depends on its purchasing power compared to those of the other countries' currencies. As much will be paid for the currency of an individual country as is represented by its purchasing power in relation to goods and services.

To establish reasonable rates of exchange a sensible domestic price system is needed and the domestic prices must be rationally connected to the foreign trade ones.

In the course of the reforms of the economic control systems of CMEA countries there are considerable changes pointing towards the formation of sensible price systems. Naturally, relative prices will not be the same even in the future owing to the different stages of development and the different levels of productivity. The most important condition is to have the same price formation methods in the different countries. This still requires a long time.

It belongs to gradual introduction that in the framework of the customs union every product will not be covered by agreements in the beginning, but first mutual agreements will be made for freely traded goods, and these

agreements will be gradually extended. The wider this scope of goods, the sooner the elimination of barriers between national markets will be finished.

Considering that the reforms of the countries' economic control systems are realized in different forms and at different times, the set of enterprises which have rights to export and import on CMEA markets without limitations must be agreed on.

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The CMEA customs union is much more able to force the developed capitalist countries to apply mutual advantages.

The CMEA countries — thus Hungary too — are discriminated on part of the customs policy of developed capitalist countries. In conformity with the agricultural policy of the Common Market, the foodstuffs imported from non-member states are imposed a high levelling duty. In addition to this, the import quotas for the socialist countries have a discriminatory nature.

A CMEA customs union would have a greater opportunity to force the developed capitalist countries to decrease or diminish the customs duties and levelling taxes as well as the quotas applied to the socialist countries.

The tendencies of the customs and business policy existing in the world economy may be taken into consideration by the CMEA customs union to a great extent. In general the goals of the UN Conference on International Trade and Development are supported, and its basic principles respected by the CMEA countries.

These could be flexibly harmonized by the CMEA customs union with its own goals.

As regards the products imported from developing countries, a preferential tariff policy may be applied by the CMEA customs union, which may be expressed by reduced or, in certain cases, completely eliminated rates of duties. Thus, developing countries would get a more advantageous position on the CMEA markets.

In this way, the fight carried on for the economic independence and development in the developing countries would be much better helped both politically and economically by a CMEA customs union.

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The foundation of the CMEA customs union is one of the important means of developing the CMEA integration. In addition to the plan co-ordination between CMEA countries, it may help to develop the production pattern, the optimal efficiency of national production, a closer interlinking of national markets, and the political and economic rapprochement of CMEA countries.

The CMEA customs union is a political and economic device in the development of connections with the developed capitalist and the developing countries.

In the course of the development of the CMEA countries' economic cooperation the CMEA customs union is only one of the means of economic policy, its rules should be used in the interest of the national development of CMEA countries as well as in that of economic co-operation and intertwining of the socialist countries.

ИНТЕГРАЦИЯ НАЦИОНАЛЬНЫХ РЫНКОВ СТРАН-ЧЛЕНОВ СЭВ

Т. КИШШ

В статье автор кратко характеризует существенные черты интеграции стран-членов СЭВ, а затем переходит к рассмотрению важнейших противоречий в их экономическом сотрудничестве. Из их числа он выделяет противоречие между общими интересами стран-членов СЭВ и особыми интересами отдельных стран, и, далее, между производительными силами и производственными отношениями, а также нынешними формами (механизмами) международного экономического сотрудничества.

Автор анализирует взаимосвязи углубления интеграции стран-членов СЭВ. Он указывает, что чрезмерную замкнутость национальных рынков стран СЭВ следует устранить посредством интеграции. Важными мерами этого являются, в частности: создание прямых связей между выделенными хозяйственными единицами, предприятиями; допущение определенной регулируемой конкуренции на рынках друг друга. В интересах дальнейшего развития социалистической, регулируемой рыночной интеграции стран-членов СЭВ желательно создать таможенный союз этих стран. Это будет первый в истории таможенный союз, в котором примут участие страны, ведущие плановое хозяйство, координирующие свои планы. В кругу как отечественных, так и зарубежных экономистов распространено мнение, что в отношении социалистических стран таможенных пошлин применять не следует. Формально это отвечает истине, по содержанию, однако, может быть неправильно понято, так как в этих странах применяется административный протекционизм, гораздо сильнее таможенного. При централизованной координации планов и согласовании торгового оборота решается, ввоз каких товаров разрешается отдельными странами. Внутреннее субвенционирование или изъятия выручки чаще всего гораздо строже обычных пошлин.

Система таможенных пошлин может функционировать и в рамках товарооборота, производимого на основании координации планов и заключения долгосрочных внешнеторговых соглашений, и может способствовать устранению барьеров между национальными рынками; поощрять снижение цен, сокращение себестоимости; способствовать международной специализаци и кооперации производства.

Желательно, чтобы таможенный союз стран-членов СЭВ создал такую систему пошлин, которая обособила бы региональный интегрированный рынок стран СЭВ от остальных рынков; которая временно признает, а затем постепенно упразднит пошлины между странами-членами, установит льготные пошлины на товары развивающихся стран и применит единые тарифы по отношению к остальным странам. В рамках такой системы тарифов, конечно, можно применять и группировку по видам товаров, как это делается и в других интеграциях. Так, например, сырье могло бы ввозиться беспошлинно, а обработанные промышленные изделия — по дифференцированным тарифам.

В социалистической рыночной интеграции таможенное сообщество, устранение барьеров между национальными рынками следует осуществить таким образом, чтобы это привело к росту производительных сил, ускорению технического развития, выравниванию уровней экономического развития и лучшему снабжению населения во всех странах-членах СЭВ.

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REVIEWS

M. SÁGI

INSTITUTE OF ECONOMICS OF THE HUNGARIAN ACADEMY OF SCIENCES

The Institute of Economics of the Hungarian Academy of Sciences was founded by the Council of Ministers in 1954. It was assigned the task to provide scientific foundations for economic policy, to investigate the scientific problems of the construction of socialist economy, the major interrelations of the economic sectors, the basic methodological problems of planning and of the economic control system, the questions regarding the economic co-operation of socialist countries, as well as the new phenomena of development in the capitalist system, and to analyze new trends in contemporary economic theory. It is an important characteristic of the Institute's activities that it has always endeavoured to carry out its research work in close contact with economic practice, which means on the one hand that it strives to select its research subjects so as to cover the most important and timely problems of the national economy and, on the other hand, that it draws a great number of specialists from different fields of the national economy into the evaluation of the research work, and frequently into the research work itself.

In the beginning, the Institute of Economics was the only one engaged in economic research in this country. This is no longer the case. During the years that have elapsed since its formation, economic research work has expanded and a whole network of institutes has been built up — although it should be added that the activity of the latter does generally not cover general economic problems but is closely linked to some individual sector of the national economy, for which they carry out economic research. This circumstance only adds to the importance of the endeavours of the Institute of Economics to become the intellectual centre of economic research work and to contribute with its activities to the formation of economic thought and public opinion in this country.

Over the past fifteen years or so, the research workers of the Institute have carried out a great number of research projects, covering a large field and contributing with a great many results to economic science and to the solution of the tasks of Hungarian national economy. It would be impossible, of course, to survey all these in this paper even approximately, or even to list them; only a few outstanding problems should be mentioned, where the researchers of the Institute were among the pioneers. Among these are the working out of the theoretical bases of the multi-channel producer price model and of the economic problems of labour productivity in agriculture serving as a basis for co-operative management, the results achieved with the application of mathematical methods in economics, primarily those relating to the input-output balances and national economic programming, the results achieved in the examination of the theoretical problem of economy-wide efficiency, the investigations concerning the principles to be enforced in

the mechanism of the economic cooperation of CMEA countries, and the results attained — on the basis of examination of the latest development characteristic of the reproduction process in the capitalist economy — in the theory of money, the business cycle and economic crises in contemporary capitalism. In addition to the scientific results of primary importance, the Institute has achieved considerable results in the analysis of the operation of the old economic mechanism, especially in connection with the problems of material incentives. The Institute is one of the main bases in Hungary of the research into the application of mathematical methods in economics.

The work accomplished by the research workers of the Institute can be followed through some 50 books (listed below) and 13 thousand pages in periodicals and journals, published in 15 years. Beside the publications, senior research workers participated also directly in the elaboration of such important issues of national economy as were the basic principles of the reform of the economic mechanism and at present the long-term national economic planning.

At the end of 1969 the Institute had a staff of 103, of which 64 are scientific researchers. Nearly half of the research worker staff — some thirty — hold scientific degrees, with 7 doctors of sciences, and 23 candidates among them. The Institute belongs to the research network of the Hungarian Academy of Sciences having a two fold character after its recent reorganization. As an authority headed by the Secretary General it partly controls its research institutes, partly as the highest scientific body headed by the President, it promotes scientific activities at national level. The Institute is controlled directly by the Department of Social Sciences of the General Secretariate and is headed by the Director, Academician István *Friss*, who has been the head of the Institute since its foundation. The Board of Directors comprises the Deputy Director, György *Cukor*, Doctor of economic sciences, and the department chiefs Tamás *Nagy*, Doctor of economic sciences, and Béla *Csendes*, Candidate of economic sciences. Each member of the Board controls a Department consisting of research groups, headed by a senior research worker, as research-group head. Groups are organised to do research work on a certain subject and after finishing it, they can stay together to examine another subject, or they can be dissolved, or merged with other groups.

The research tasks of the near future are laid down in the Institute's three-year, 1969—1971 plan. The main directions of the planned research work reflect the endeavour of several years on the part of the Institute's directors to aim in the first place at solving or contributing to the solution of selected research tasks outlined in the two priority problems of economic research: 1. scientific foundation of planning, with special regard to the elaboration of an optimum structure of Hungarian national economy which can be actually envisaged; 2. perfectioning of the system of economic control and management. It is obvious that these two priority problems of research exceed the Institute's possibilities for investigating them continuously and simultaneously in all their aspects. Therefore, it has a special importance, what the Institute selects for itself from among the great number of possible research tasks. This "foundation" work was done by the Institute in the years 1967—68 and, on basis of the analytical studies prepared and discussed, the directions of research work were set out for the next period.

Within the compass of the examination of the problems regarding the scientific foundation of planning, the researchers of the Institute are investigating the main methods of long-term planning, in the first place the relations between long-term and medium-term plans, the contentual problems of long-term plans, as well as their relations with other, far-reaching decisions on economy and economic policy. As regards the questions of medium-term planning, examinations are centred on the interrelations between high-level plans (high-level plans meaning here the national economic plan, the budget, and the credit plan). A very important and voluminous part of the research work centres on the use of economic models and mathematical methods in planning, on the objectives, methods and means of medium- and long-term planning of the trends in consumption, incomes and the ratio of personal to social consumption, as well as on the relationship between the main factors affecting agricultural manpower supply and national economic planning. Within the sphere of investigations aimed at perfectioning the system of control and management of the national economy, the research workers of the Institute are dealing with the models of the operation of the economic control system; with the characteristics of the mechanism reforms in each socialist country; with the main tendencies of Hungarian foreign trade and the main methods of economic control affecting them; with the development of inflationary processes and with the problems of regulating them; with the main theoretical questions of the system of agricultural prices and taxes; with the questions of material incentives for enterprises and the regulation of their income under the conditions of the new economic mechanism. In connection with examining the production relations of co-operative farms, the researchers deal with the collective enterprises of co-operative farms, as well as with the economic analysis of the lower-type, so-called "special co-operatives" and, finally, with the important economic problems of developing an integrated food economy.

Though within a more limited sphere, the researchers deal also with the analysis of the economic development of each socialist country, with the changes which have taken place in the economic mechanism of capitalist countries and, within the framework of the analysis of contemporary economic theories, with Keynesian theory.

In addition to the research programmes outlined above, the Institute avails itself of the opportunity given by the new economic control system, and undertakes to elaborate subjects on commission. However, the Institute can assign only a small part of its research capacity to that aim, so as not to hinder the basic research work. Beside the research work, many members of the Institute are taking part in the teaching of economics, and some participate in the work of the directing organs of national economy or in the activity of special and social organisations and associations.

Research workers have recourse to the Library of the Institute — which has an outstanding place in the network of Hungarian economic libraries — as well as to the documentation unit. In the former, at the end of 1969, some 32 thousand volumes, among them 600 current periodicals, were at the readers' disposal and in the latter some 1 700 000 bibliographical data are accessible (from periodicals, newspapers, etc.). A number of institutions have asked for and are receiving the Press Information published four times a week by the documentation unit.

Ever since its establishment fifteen years ago, the Institute has carefully built up its international relations, in the first place, of course, in socialist countries. Various forms of relations have developed, such as exchange of publications (at the end of 1969, the exchange partners numbered 202), publications in foreign periodicals, participation at conferences abroad, personal meetings of researchers on study-tours, etc.

In 1954, the year of establishment of the Institute, there was hardly any economic research work going on in Hungary. In the fifteen years that followed, Hungarian economists have gained international standing. In this accomplishment, the Institute of Economics of the Hungarian Academy of Sciences had a rather important part.

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J. Bognár

ON THE BRITISH-HUNGARIAN ECONOMIC COLLOQUIUM

International scientific relations developing on bilateral or multilateral bases have an ever increasing role in the life of the whole world as well as in that of individual nations. The influence of these relations spread far beyond the sphere of scientific activity in the closer sense of the word, and the specific problems of the disciplines concerned. Intensity of these effects has been boosted by the fact that the up-to-date science is capable of dealing also with complex activity programmes. So, the international activity in the disciplines which are in close connection with social activity stimulates and enriches not only research work but also social practice and international political and economic co-operation as well.

Taking into consideration the recent situation and circumstances of the world, international economy and those of our science, the logical conclusion can be drawn that there is an urgent need also in economics for international co-operation, for an analytical comparison of different economic systems as well as for an exchange of information and points of view.

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The British–Hungarian colloquium held last November in Britain was not preceded by any joint research, still, on the basis of a preliminary agreement, a single complex problem was put into the centre of the conference for many-sided discussion. This was more than and also different from an exchange of information on research and economic problems, as regards both content and quality.

The main point

"*Problems of economic growth in countries sensitive to the foreign trade*" — that was the complex subject standing in the focus of the discussions. We started, namely, from the similarity of the British and Hungarian economies, that both are sensitive to international trade. We speak about an economy sensitive to foreign trade, when the growth rate of the exports and imports is higher than that of national income. In this case, the rate of economic growth, the pattern of the increment and the structure of investments are many-sidedly influenced by foreign trade.

The most important questions discussed

The discussion was centred around four groups of questions:

1. Basic problems of development in the two countries;
2. National priorities and national economic relations;
3. Integration and bilateral relations;
4. Role of the international institutions in the development of world economy and trade.

In course of the discussion these groups of questions did not have the same weight; the questions and answers highlighted on both sides primarily the basic questions of economic development in the two countries and the improvement of bilateral relations.

In case of a bilateral conference this is self-evident, since those participating are interested primarily in the problems of development of their own economy.

When discussing the basic internal econom ic problems — as was expectable — most of the questions received concerned the new system of economic control and management.

The Hungarian speakers pointed out that our growth rate (5—6% per annum) had been achieved in the period of transition under far better conditions of equilibrium. Earlier, a similar growth rate was coupled with a deficit in the balance of payments as well as with a weaker supply of the home market. But recently we have got an active balance of payments not only in global terms but even in the foreign trade with non-socialist partners. Furthermore, there is a promising tendency as far as activity in economic life, the behaviour and initiative of economic executives is concerned. We treated as a great result in our lectures that we succeeded in keeping the equilibrium of social and political forces, since an upsetting of dynamic equilibrium is fatal from the point of view of any reform.

Our answers to the questions were highly appreciated. In my view this was due mainly to the sound and proportioned judgment coming to expression in them — in accordance with the domestic methods of economic control and management. We did not "praise or eulogize" the reform, but analyzed its internal problems with its positive effects, negative tendencies and uncertainties in detail and we also highlighted the situation we intend to improve, we presented the possible alternatives of our activity, the limiting factors in favour of one or against another alternative.

The Hungarian economists were primarily interested in the influence of the two-party political mechanism on economic growth. It is well known that in recent decades the periods of the so-called economic cycles have shortened, which is in close connection with both the acceleration of the economic processes and the political mechanism. Political mechanism can be characterised — in this respect — as follows: every four years an election takes place in the two-party system, being very well balanced from the point of view of power relations, and the election is decided by strata less convinced politically (whose votes depend on their considerations of the moment). Because of this, cycles develop in a rather peculiar way; usually new ideas are introduced, and established in the first year following the election; in the following second and third years the less popular measures are introduced. (For instance, reduction of the living standard, diminishing of the burden

on the budget, reduction of employment, etc.) While in the fourth year — in case the party in power intends to stay — more popular measures follow. (Reduction of the interest rate, increase of investments and employment, etc.) From the point of view of the foreign trade this means that the growth rate of the imports is higher in the first and fourth year, and smaller in the second and third year. Apart from this, the political parties influence economic policy mainly through their members in the government, who get otherwise rather quickly separated from the party apparatus — as it was declared by several English speakers.

We put many questions on the export possibilities of the country, how it is judged by the British economists. But these questions and the answers received led us to the sphere of bilateral economic relations and international trade. In the course of the exchange of views on bilateral economic relations and on international trade we took into consideration that we were talking not only about the British–Hungarian questions, but directly and indirectly about East–West economic relations as well. Western Europe (the Common Market and the EFTA together) is even today the greatest importer and exporter of the whole world-trade. Western Europe has a share of 44 per cent in the total world imports and exports, against a 14—15 per cent share of the USA. This is but understandable since the USA is not sensitive to foreign trade. The socialist countries' share in the West European trade is only 4—5 per cent. The developing countries' share is approximately 16—18 per cent. The share of Great Britain is even higher: 25—27 per cent.

Conclusions of the discussion

1. Great Britain is much interested in developing her trade with the European socialist countries from a marginal factor (3—4 per cent) to an important one. It is evident that her trade with the developing countries (primarily with the sterling-zone) cannot be increased particularly in the most dynamical articles at a rate required by the widening possibilities and needs of her home economy.

2. The critical remark that their attitude was less elastic and more conservative in many commercial questions than that of Japan, West Germany and Italy, was accepted. They complemented this statement by saying that nowadays it is almost impossible to get new technique in the most up-to-date branches either in the form of goods or in that of patents. In their opinion, therefore, in the branches requiring the most up-to-date, most expensive and highly qualified workers, in case of a transfer of new techniques a share must be claimed in the results. Of course, this share may be limited in time and modest in quantity, but in the lack of it business is not profitable for them.

3. In their opinion the marketing methods of the Hungarian foreign trade are rather obsolete and the publicity of the goods is rather poor.

4. A weak reduction of the world trade prosperity is expected (for instance an 8—9 per cent growth rate per annum instead of the earlier 11 per cent) and they are afraid that the USA might adopt measures to reduce imports.

In connection with the evaluation of the British–Hungarian economic colloquium I would like to make the following statement:

1. This type of economic conference proved to be good and mobilized a wide sphere of economists, journalists and politicians.

2. The discussion during the colloquium and at the final meeting in London (with 130 participants) was very open and sincere, sometimes violent without belittling the other partner in the course of expounding or defending the own ideas. The aim was to better understand each other and the social background and mechanisms radically different from each other, directing the two economies. There is no other way to co-operate in a world where confronting socio-political systems, radically different civilizational inheritance and highly different economic levels exist at the very same time.

3. During the conference we got acquainted with many excellent economists (including theoreticians as well as advisers), businessmen and social personalities. We had the chance to better learn their way of thinking, reflexes and their systems of activity. This is of great importance, since all sort of economic relations and especially co-operation demands the ability to calculate with the expectable behaviour of our partners. As regards the leading West European economists, we cannot treat them simply as partners, but as personalities who can influence the whole world-trade indirectly by certain activity alternatives (through their own countries) and directly (through the channels of integration or international monetary institutions, etc.). From these evidently follows the conclusion that what these people do or neglect doing effects, in some way, our selling and purchasing possibilities. In case we are not familiar with the way of thinking and activity system of these people, we might prepare for different situation from the ones which will actually happen.

4. In the conference we successfully demonstrated the high level of Hungarian economic research work as well as that of economic practice being in close connection with it. This was necessary and remains so in the future, since a great part of the Western public opinion is still thinking in terms of the ideas formed in the period of the Cold War as far as the socialist countries are concerned. This ingrained habit of thinking is the consequence not only of anti-communist propaganda but also of the lack of information. So, we have to do a lot (not only we, but all the other socialist countries) in order to change their way of thinking and bring their thoughts closer to reality.

A realistic way of thinking — particularly in the rather dangerous and interdependent world of today — demands a mutual understanding of the internal logic and activity mechanism of each other's socio-economic systems, even those which are rejected otherwise.

The results of the British–Hungarian economic colloquium prove that it is worth-while and useful to continue this recently established practice — taking of course into consideration the necessary corrections as well as the experiences. So we decided to organize a next colloquium in Hungary in 1970.*

We intend to inform the economic public opinion of the world about the work of the colloquium — including the lectures delivered and the discussions on different groups of questions — in a jointly edited publication.

*In the meantime this has taken place in September 1970. Proceedings will be published in No. 1, 1971. *Ed. note.*

BOOK REVIEWS

DOBB, M.: *Welfare economics and the economics of socialism.* Towards a commonsense critique. Cambridge. 1969. Univ. Press. 275 p.

Maurice *Dobb* divides his book into two separate parts which, although seemingly independent as regards their subject, constitute nonetheless an interdependent unity from the theoretical point of view.

The first part of the book gives a synthetized analysis and a critique of welfare economics, a theory that has by now come to be regarded as classic in the West. The second part deals with the possible models of socialist economy and its fundamental economic problems, expounding the athor's own theoretical ideas. All this is fitted into a critical analysis of the standpoints taken on the major problems in the course of several decades of discussion, and the author finds a way to show the theoretically possible solutions which he would consider correct. He does not regard it his task to work out the economics of the socialist system since, in his view, this could as yet not be done realistically owing to the insufficiency of historical experience and, accordingly, to the limited possibilities of theoretical generalization. Instead, he attempts — successfully too — to create solid theoretical platform and to clarify his independent views in respect of some fundamental questions such as planning and market economy, centralized and decentralized control, the role of prices and the principles of price formation under socialism, the criteria of decision, the conflicts between short-term and long-term decisions, the harmony between individual and social interests, and, related to the latter, the important differences between socialist and welfare economics as regards their handling of the problems and their theoretical foundations.

Both parts of the book, that treating the so-called classical welfare economics as well as that dealing with the economic problems of socialism, are characterized by high theoretical standards. Welfare economics is discussed by the author not by starting from some external theoretical norms which are independent of the theoretical system or from logics but by criticizing the internal contradictions of the system and the untenability or weakness of some of its initial assumptions. At the same time, however, also the useful elements of the theoretical system are disclosed. Here, the main weakness of the theoretical system in question should be mentioned, namely, the hypothesis of constant income distribution. The author succeeds in providing a scientific critique with his detailed treatment of the subject, showing as he does the consequences of removing this hypothesis.

In the part entitled "Economics of socialism", the most essential economic categories of socialism as an economic system are treated on the basis of the possible systems of economic control but emphasizing their common content. The

theoretical abstractions do not serve to explain from some extreme point of view the concrete system of economic control of some concrete socialist country but to analyse the most essential interrelations and decision problems of a socialist economy, utilizing the theorems of macrotheory.

In the following, the essential subjects of the individual chapters will be reviewed.

The first part, dealing with welfare economics, expounds — in addition to other problems — three theoretically highly interesting problems which are today in the centre of research and arguments. The first is utility and perfect competition, the second the measurement of the global product as an expression of global welfare, and the third the problems related to the optimum conditions.

The substance of the first group of problems is the clarification of the two fields of application of the Pareto optimum criterion and the related theoretical questions. The Pareto-optimum, as an exchange of final products among consumers, raises the problem of the real value of needs, from one side. Dobb shows that we have here an optimum which is built upon a definite distribution of goods and income and that there are, therefore, several optimum positions. Nor can a single optimal solution be given within the system regarding the optimal pattern of production.

The Pareto-optimum can be applied unconditionally only to situations where relative outputs do not change; otherwise — unless we exclude this possibility in a wholly irrealistic manner — the changes themselves affect the given system of income distribution.

An analysis of welfare economics as developed by *Pigou* leads the author to expounding all his important ideas, inclusive of the fundamental problems of socialism. According to Pigou, the objective to be maximized is net national product or, more exactly, the utility or welfare content of national income. This criterion brings to the surface a whole series of economic relationships. As first should be mentioned the price system, and the effect of price changes, measurement of the latter as related to price policy, as well as the interindustry relations and the effect of changes therein. By breaking down the optimization condition of Pigou into two sub-conditions, Dobb succeeds in showing that the Pareto optimization condition although necessary, is *insufficient*. As a matter of fact, the so-called consumer sub-condition can be met in any price system while the production sub-condition can be satisfied even without prices and its meeting is independent of satisfying the consumer subcondition though it depends on the pattern of demand. The latter is, however, a function of income distribution. The two subconditions do thus not form a unity and it is, therefore, impossible to define with their aid a single common optimum.

On the other hand, as the author stresses the point, if the aim is to choose a correct path with the aid of the marginal rates of substitution, and not to determine an optimum, this theory can be used for defining possible policies also under conditions of a socialist economy. Based partly on the above and partly on a possible disharmony between individual and collective preferences (treating in detail the assumptions of the Bergson-welfare function and pointing out their irrealistic character) the author proves in a convincing manner the impossibility of determining a single social welfare optimum and the correctness of the views of Malinvaud — according to whom it is the seeking of consistency rather than of an optimum that should be considered a correct and progressive objective. This does, of course, not mean that the author would discard the possibility of a welfare evaluation. Indeed, he points out that the consideration of utility may provide great help in achieving a better, if not an ideal situation. This means, first of all, to account to an increased extent for consumer demand.

As an example, the author mentions that important conclusions may be drawn from the considerable deviation between price and cost rates (as is known, one of the possible ways of formulating the optimum condition is to require that these rates should be proportional). The application of the production condition to selecting the best production method will help to work out the principle of determining the cost of reproducible inputs. All these constitute central problems of socialist economy.

It is in this way that the two seemingly unrelated parts of the book are linked to each other and individual economic problems of socialism are built upon the problems of welfare optimum. In a socialist economy, the solution of the problem of social welfare will require selection to be made from among many and even qualitatively differing objectives. Therefore, the author considers the choice from among these objectives as the field of planning *par excellence*.

In the part dealing with the socialist economy, the author endeavours to give a summary characterization of the latter and to emphasize some of its most controversial features. It seems, it is this chapter where the author can be most reproached for the insufficiency of theoretical generalization. Not as if he were not right when referring to short historical experience. Still, in my belief, if he were less inclined to compromise when raising such fundamental problems as the forms of ownership under socialism and, particularly, the individual basic forms of the systems of economic control (centralization or controlled market economy), and would have based the discussion of these important problems on thorough economic analysis, he could have raised this chapter of the book to a theoretical level as high as that of the others. Here, as a matter of fact, the author would rest satisfied with reviewing the present varying practices as experiments, without giving the economic theoretical substance of the really existing conceptions underlying the models from the practical aspect.

In the fore of the author's interest is the market economy controlled by the plan, since he would consider it as a criterion that the markets of final products and of labour should be free. It is most definitely stressed that even in a system of planned directives and tasks, the local organs should be given autonomy since, however perfect the information system on which the plan rests, it cannot comprise every detail and prepare for every contingency. The author is of the opinion — quite correctly, I believe — that in the extensive phase of development of an economy and in the case of a less complex economy greater centralization is necessary than in the later phases.

The importance of centralized decision lies — according to the author — in long-term investment policy since it is this policy that can secure the general stability of the economy and the elimination of the well-known unfavourable market fluctuations. In a decentralized system, the function of prices and cost accounting are highly important. Therefore, he is treating in a highly interesting manner and in great detail the various functions of prices and the possible price types.

Finally, the chapter compares the decentralized socialist market economy with the so-called perfect market economy of the abstract models and analyses their differences. What is said here about the prices and the two types of market economies will provide theoretical orientation also for a wide circle of economists in the socialist countries — and even much more for the future generation of economists.

The rest of the book may claim the interest of the majority of economists, namely of those who do not engage in modern mathematical methods, since it offers a survey of a series of theoretical problems (e.g. efficiency, and cost or price). For the qualified reader these chapters may provide mainly inspiration for further discussion. What I am thinking

of here is primarily the measurement in terms of embodied labour in the framework of an ingenious model which, however, does not facilitate a real solution of the problem, and of the author's statements about leaving capital as a constraining factor out of account. The latter may apply for an economy with labour surplus where there is no technical progress.

In his introduction, the author speaks about the fact that it is, indeed, only in the socialist economy that the main theoretical core of welfare economics, the objective of maximizing the global welfare of society, has become a practical and theoretical aim — and this is the only economy where the realization of this objective is the basis of the functioning of the system. One of the central problems of welfare economics — and a main target of its critics as well — is harmonization of the individual and social (collective) interests. This problem has been assigned its proper place in the economic analysis of socialism. The problem is raised by the author partly when discussing price policy and the functions of prices, partly in connection with choosing the pattern of production. He theoretically proves why it is not expedient — even under conditions of socialist planned economy — to exert influence only through incomes and why it is necessary to use price policy in a bolder way. In the course of the reasoning he analyses the various effects of material incentives and their macro-economic relations but what makes his ideas particularly interesting is an aspect which other economists are frequently inclined to neglect, namely, the necessity of accounting for the effects of consumer behaviour. The problems are discussed in close connection with income distribution and the effects of changes therein. While emphasizing the importance — from the point of view of macroeconomic relationships — of taking into account and shaping demand, he also criticizes the policies hitherto followed by socialist countries in this field. In connection with this problem he treats separately the problems of planning collective consumption, those of central objectives and decisions and of individual behaviour (decisions) and as related to the latter, the questions of central control and of the validity of the market mechanism.

In view of the fact that the author's raising of the problems is characterized by a theoretical approach, it may be considered highly useful from the point of view of providing a theoretical foundation for the practical measures connected with the mechanism as well as in forecasting the possible economic consequences of some practical steps. From the point of view of theoretical clearsight the chapter on the theory of marginal costs is highly important. This part expounds very definite and, in my opinion, valid and theoretically well-founded views, from the practical aspect on a theoretical question emerged also from the Hungarian price debate. (It should be noted that here the author's view does not agree in all respects with the opinion of those taking an extreme view in these discussions.)

Since there are relatively few in number who could acquaint themselves with the theoretical problems of the growth of socialist economy, the publication of so comprehensive a theoretical work which answers at the same time also the most pressing practical problems on the basis of a uniform conception should be greeted with great enthusiasm. It would be desirable to publish it also in Hungarian.

A. GELEI

Mrs. FALUS SZIKRA, K.: *Létszám, termelékenység, gazdasági növekedés* (Employment, productivity and economic growth). Bp. 1968. Kossuth Könyvkiadó. 212 p.

On the basis of her investigation of seven socialist countries (i.e.: Bulgaria, Czechoslovakia, Poland, Hungary, Romania, the German Democratic Republic and

the USSR) covering the period 1950—1965 in her recently published book the author was looking for answers to three questions, formulated as follows:

1. What is the interrelation between the differences in economic growth rates and the faster or slower growth of employment in the various countries? Is it true that a faster development of certain countries was due to a higher rate of growth of employment?

2. What was the contribution of growth in employment and labour productivity to the development in the countries concerned? How has this contribution changed? Has development become more extensive or intensive in this respect?

3. To what extent can the decelerating growth be traced back to the slowing down of employment or to that of labour productivity?

The author analyses also the role of the quantity and efficiency of the fixed assets in growth or in its slowing down. The study contributes to our knowledge of the most important sources of economic development in the countries examined not only by its choice of a topical subject, but mainly by the novelty of its conclusions. Though the author has been primarily concerned with the disclosure of *common* development tendencies in the seven socialist countries, she analyses also some differences between development in Hungary and the rest of socialist countries.

In this work, the method chosen and partly created by the author herself is really in service of her analysis. Economic growth is measured by her in terms of the growth of the size or the physical volume of national income created — as reflected by index numbers. She uses three main statistical data series by countries: data on the growth of national income, employment (within this employment in various industries) and productive fixed assets. The data of labour productivity, of technological equipment and of the efficiency of fixed assets are worked out from these indices. The total (national level) labour productivity is measured by the volume of national income per man-year in all productive industries. The growth of labour productivity within the main industries is approached through the employment ratios. The author separates the growth of national productivity "cleaned" from the effect of changes in the employment structure, on one hand, and that due to changes in the employment structure on the other. The first is calculated as an index number with unchanged weights and the second as composition index.

Because of the well-known unreliability of the basic data worked with, the author emphasized that she had intended to become acquainted only with the basic directions of development and not to work out "precise data series". As stressed also by the author, the greatest, and in similar cases for the time being unavoidable uncertainty of the whole calculation originates in the price-systems and in the differences among the price-systems in the countries concerned. It is declared that in a cost-proportionate price-system the growth of national income would show an absolutely different picture. Let us add, the contribution of various industries to national income would even more differ from what we usually calculate nowadays. This problem is a bit "mitigated", as the author says, but we are of the opinion that she can not eliminate it, by comparing only the dynamics of development instead of development levels.

In lack of time series, the changes during the fifteen-year period (1950—1965) were worked out in the analysis from the data of the first and last years. The period investigated was analyzed for each question partly as a whole and partly divided into three five-year sub-periods, namely, 1950—55 (first), 1955—60 (second), 1960—65 (third). For each sub-period the data of the initial and the final years served as basis.

This no doubt simple establishing of common periods, which is eventually very "comfortable", does not pay any attention to the fact — as is underlined by the author, too — that the reconstruction periods after World War II finished at different dates in the various countries concerned. Naturally, there are several possibilities justified from the economic point of view to dissect this period of development of the countries in question.

However, it seems that the economic development of these countries can be divided *at least into two* periods essentially differing from each other. Namely: the *first* could be the period of reconstruction after the War (in Hungary in addition the period following 1956) the characteristics of which are incomparable with those of the *second* "normal" period. The advantage of this division is not only that it results, from a certain point of view, in a totally homogeneous period, but also gives the chance to treat the general characteristics of the two periods in isolation.

Each of the 8 chapters of the study shows a definite structural order. In the chapter on national income, as well as in the chapters describing the role of employment and labour productivity in the differences between growth rates, beside the whole national economy the main branches (industry, agriculture and others) are separately investigated. In addition, each question is discussed for the period as a whole and for the three sub-periods.

Nevertheless, the positive and negative interrelations among the main industries in the course of development are unfortunately neglected. The author describes not only the changes in the growth rate of national income and its slowing down but she makes a novel distinction between the relative and absolute slow-down of national income. A decreasing growth rate of national income with increasing volume of increment is called a "relative slow-down" being a milder form of slowing down. When the growth rate of national income decreases and the increment becomes smaller even in absolute volume, this is called an "absolute slow-down". She states that the increment during the second five years was only in two countries less than in the preceding five years. A comparison of the increments of the second and third five years indicates an absolute form of deceleration in four countries.

The author proves in a sophisticated manner that the differences in the growth rates of national income in the various countries show a closer relation with the growth of labour productivity than with that of employment. It was labour productivity which had a decisive role in the differences both in the growth of national income and in that of industrial production between the countries concerned. Between 1950—65, 70—80 per cent of the growth of the national income was the result of growth in labour productivity achieved in the various industries, the remaining 10—20 per cent can be attributed to the growth of employment and to changes in employment structure.

In a very important question facts did not confirm previous expectations: a comparison of the periods of the first and second five years showed that in the seven socialist countries development had become a bit more intensive, while in the period of the second and third five years it tended to become considerably more extensive. The author finds the fundamental cause for extensive development in the countries concerned in a substantial slow-down of the growth in labour productivity. This process was connected with a certain increase in the growth rate of national income, due to changes in employment structure.

One of the most remarkable conclusions of the author, beside many well proved statements, is the realization that although the slow-down of the growth rate in the socialist countries was going in parallel with a slowing down of the growth of employment in the production sphere, the slowing down of development was caused

mainly by the slowing down of the growth rate of the *labour productivity*.

Mrs. Falus states that from the two basic components of the growth of labour productivity, the first, technological equipment improved in most of the countries concerned and tended to accelerate development. The second, the efficiency of the fixed assets decreased, especially in the first half of the sixties, first of all in the developed socialist countries.

The basic cause of this — as she explains — is that economic policy and the system of economic control applied in the past were more suited to the circumstances of countries starting from a lower level than to those of countries setting out from a higher one.

É. EHRLICH

BEREND, T. I. — RÁNKI, GY.: *Közép-Kelet Európa gazdasági fejlődése a XIX—XX. században.* (Economic development in Central East Europe in the 19th and 20th centuries.) Budapest, 1969. Közgazdasági és Jogi Könyvkiadó. 416 p.

The above mentioned book is a great asset of the literature of economic history. No similar book has been published as yet on the economic development of Central East Europe*, though our fate cannot be isolated from this region.

The economy of the countries concerned, situated in this region had been characterized by such special features of capitalist development which later caused national differences also in socialist development. Apart from the *choice of the subject*, the *method* of the book is worthwhile to be mentioned. Not only in the Hungarian literature on the economic history of this region but even in the international literature of these countries, it is the very first work where the comparative method has been applied on such a level. As far as earlier publications are concerned they can be characterized by the fact that the region provided only a wide framework to the subject, where the various countries in question were investigated separately. The method of the authors was applicable just because of their success in solving the contradiction between the interdependence of Central East Europe and the great internal differentiation.

Prof. Berend and Prof. Ránki describe the existence of a special economic development model valid for this whole territory in a new way. The basic idea is that there has been a special Central East European model of capitalist development and it can be divided into three regional sub-types — in order of their development level — as follows: Austrian—Czechoslovakian, Russian—Polish—Hungarian and the Balkan development.

The problem cannot be simply reduced to the statement that capitalist development in Central East Europe was late in comparison to that of the West European one. Development of the feudal society was also late but as a whole, it was almost the same model as the West European one. From the 16th century our development in Central East Europe followed a distinct path and finally this gave birth to a special model of capitalist development in the 19th—20th centuries.

In this specialities a certain role was played by the time-lag itself: the existence of the developed capitalist countries at the dawn of the East European industrial revolution, and also the geographical conditions of this region. The influence of the geographical situation may be also men-

*We use the expression "Central East Europe", since this term is used in the book. However, we would like to add that it is rather misunderstandable. It may be understood that the central part of East Europe is to be meant (this is wrong), but also that Central and East Europe is meant (which is better, but not the stipulated meaning either). In English literature East Central Europe is the most usual term.

tioned: far away from the main routes of the world trade, short bank-openings to landlocked seas, etc.

For the sake of examples here are some special features of the period of capitalist transformation up to World War I:

— *Development of agriculture* after the late liquidation of serfdom accelerated and became an important factor of the national economy. The existence of a solvent West European market enlarged the possibilities of agricultural exports and this greatly supported the evolution of East European industrial revolution. In the capitalist development of agriculture an important role was played by the modern bank system and the development of transportation. The above features, as well as the ownership relations in agriculture and its production pattern sharply differed from the features of the western-type capitalist agrarian development.

— As far as capitalist development is concerned, an indispensable and lasting role was played by *foreign capital.*

— In Western Europe the industrial revolution took place explosion-like, causing fast social changes. The majority of Central East European countries did not become industrial countries, the industrial revolution proceeded rather slowly, some of the Balkan countries reached only its threshold. The building of factories was more capital intensive than 100 years earlier in England. A special *structural* feature of this region was the leading, primary role of the *food industry.* This was motivated, apart from the existence of the West European food market, by the possibilities to produce food, due to the geographical conditions. Regarding the *organizational* points, it is interesting that in spite of industrialization being on a low level, and notwithstanding the feudal obstacles to development, in some branches of the national economy the first monopolistic organizations had been established, and capital concentration reached quite a high level.

After World War I, the circumstances of Central East European development had changed in many respects. The Austro-Hungarian Monarchy, an economic integration, was dissolved into smaller national economies. These countries, being often inimical to each other, were looking for economic relations outside of the region, and they got almost completely isolated from the U.S.S.R. There can be found no better proof for the existence of the special East European development model than the fact that the special development continued even in the disadvantageous political atmosphere.

Results of the war and the dissolution following World War I were disadvantageous — to the winners as well as to the losers. Financial crisis, inflation, running into debts characterized the first half of the 1920s. Though there were some positive changes too (for instance the land reforms) which prepared the recovery of the economy. But in Central East Europe there were only 3—4 so-called "good years" and eventually only the situation preceding the war could be restored, when the 1929—33 world crisis already arrived. This was followed by the years of fast expansion of Hitler's Germany.

One of the specialities of economic development in Central East Europe between the two World Wars is that its *intensity* extremely *slowed down*, the growth rate of national income was an approx. 1 per cent per annum. Modernization of the transport system — previously so important — stopped and stagnation characterized agriculture as well. A faster development of industry could be seen only in the Balkan countries, elsewhere — under the effect of the narrowing markets — development hardly reached the 1913 level in the year of 1938. The internal structure of industry unfavourably changed. The heavy industrial branches relatively stayed in the background and light industry advanced (within the latter, the food industry was substituted for the

textile industry). That was just the reverse of the process desirable for up-to-date technical development and of the one which had taken place in West Europe.

An evident conclusion to be drawn from the economic development during the period between the two World Wars is that the isolation of the small national economies, the weakening of the economic relations within this region added much to their constant economic difficulties. This facilitated the economic penetration of Hitler's Germany into this territory, the countries of which — sometimes willingly, sometimes under pressure — joined one after the other the German "Lebensraum".

Reading this book, one is compelled to reflect how badly we needed even today a well worked-out differentiated model of special Central East European development, for that of the socialist Central European countries. There is a rich literature dealing with economic cooperation within CMEA, but there are not only foreign trade aspects and coordination conditions of desired economic integration. We cannot rest satisfied with the economic, economic-geographical, in general with the social science-research and knowledge of our "wider homeland", of Central East Europe. With a few exceptions, the research institutes and scientific periodicals existing in the capitalist countries are not infrequently dealing with this region ill-willed.

For a long time the adjective "East European" used to have a pejorative meaning and it certainly could have one, since it indicated the economic as well as the political backwardness. Since World War II, this region leaped to the head of the European social progress, its economic dynamics grew unbelievably, so we can confess to being East Europeans without being ashamed as well.

The basic condition of this is a realistic and correct knowledge of the region.

GY. ENYEDI

A mezőgazdaság fejlődésének közgazdasági kérdései. (Economic problems of agricultural development.) Közgazdasági és Jogi Könyvkiadó. Bp. 1969. 286 p. (MTA Közgazdaságtudományi Intézet)

A working group of the Economic Institute of the Hungarian Academy of Sciences deals in this collection of studies with the topical problems of agricultural development.

The first study of this volume is "*The rate of growth and its factors in agricultural production*" written by Béla *Csendes*. The author outlines the remarkable development achieved by Hungarian agriculture during the past decade — after the stagnation in the first half of the fifties. The 2.1 per cent growth rate per annum between 1957—1967 is the fastest development of Hungarian agriculture in our century.

The author analyses in detail the factors which caused this fast development, investigates the two main branches of agriculture and also the structural changes in agricultural production. Investigating the annual fluctuation in agricultural production, he comes to the conclusion that the measure of these fluctuations can be mitigated by an even higher growth rate, as well as by raising the production level. The study is completed by characterizing the changes in the basic productive factors within agriculture and presenting also the problems of efficiency. In this part, the conclusi ons regarding the improvement in the efficiency of production are very remarkable.

The study written by Károly *Ihrig (Contribution of agriculture to the growth of capitalist economy)* investigates the growth of the social product and highlights on this basis the role of agriculture in the growth of the national economy. The author distinguishes two main sources of growth of the national economy. He calls extensive growth when the increment of the social product derives from the higher rate of employment of social manpower

capacity. Intensive growth of the social product is due to the growth of labour productivity. This standpoint of the author is a new approach in socialist agricultural economics. The Hungarian agrarian economists have judged the character of growth by different criteria up to now. In my opinion, depending on the role the change in efficiency of the social labour plays in growth — even intensive development may cause both extensive and intensive economic growth.* As far as Károly Ihrig's definitions are concerned, it is not clear that in investigating the character of growth the combined quantity and efficiency of the live and embodied labour is to be considered. In case we approach the problem from the aspect of live labour, then, as far as the character of growth is concerned, we can reach the right conclusion by analyzing the change not of the social product, but of the new value created. Studying the factors in growth, the author does not mention the efficiency of the factors of production.

In the further part of the study, Professor Ihrig introduces some new and interesting ideas on the ways, possibilities, proportions and realisation problems, concerning the contribution of agriculture to the growth of the national economy.

Interesting interrelations are highlighted by Miklós *Hegedűs* in his study "*The material connections between industry and agriculture in the countries of the Common Market and in Hungary.*"

In spite of the fact that with economic development the role of agriculture decreases in contributing to the social product and also in per capita consumption, in the last decade economics has turned — both in the developed and in the developing countries — with a growing interest towards agriculture. Amongst the reasons for this, the author mentions that in the course of development agriculture is getting ever more open for the other branches of the economy, partly as raw-material producer, partly as a market for producer goods.

This remarkable interest for agriculture is caused by the qualitative changes in the requirements towards agricultural production and by a new arrangement of the factors of agricultural production. The author characterizes the internal connections between agriculture and the food-industry on the basis of the input-output tables. However, he does not mention that these inner relations of the food economy may be influenced beside the different levels of development also by differences in the integration possibilities and forms. He points out the connections between the production level and the extent to which producer goods of industrial origin are used in agriculture, and the industrial raw material quantity required for a unit of production. It is a thought-provoking statement that the participation of agriculture in the international division of labour is low not only in comparison with the economy as a whole but also with the corresponding proportions in developed countries.

László *Komló*'s study "*Concentration of the food production at the industrialization stage of agriculture in capitalist economy*" states that the concentration of production is on a rather high level in the developed capitalist countries. This is possible, since — owing to the development of the productive forces — concentration may be coupled with specialization. He analyses in detail the factors which make possible the separation of the agricultural production branches. Investigating the connections between the food industry and agriculture he states that the highly concentrated food industrial production directs agriculture — capable of specialization — towards territorial specialization. Next the technical-economic aspects of

* This problem is investigated by László Bethlendi in: Growth and factors of production in the state farms. Statisztikai Szemle. 1969. No. 6.

concentration and integration within capitalist agriculture are presented. By all means, the investigated technical-economic processes can be realized in a socialist agriculture in a different, diversified way, in socio-economic forms much more advantageous from the point of view of agriculture.

The disharmony between animal husbandry and feedstuff basis is caused by an unsatisfactory development of feedstuff production, by the wrong use of fodder, by the deficiencies in the feedstuff import and by the lack of adequate stocks — states the author, János *Köves*, in his study "*The role of the feedstuff basis in the development of animal husbandry*". Later on, he palpably proves that the quantity and composition of the feedstuff-basis essentially influences the development intensity, direction and proportions of animal husbandry. His main conclusion is that animal husbandry can be purposefully developed in a balanced way by the creation of a firm feedstuff-basis, by the forecasting of the breeding cycles, as well as by improving the efficiency of feedstuff consumption.

Ernő A. *Tóth*'s essay on "*Problems of manpower utilization within the household plots and complementary farms in the recent stage of commodity economy*" deals with some topical problems of manpower utilization primarily important from the point of view of labour management. He starts from the fact, that in the socialist as well as in the capitalist agriculture the small farms necessarily subsist beside the great farms and in these smaller farms agricultural production has a complementary character. Then he analyses the types of the complementary and household farms and their importance and role in the co-operatives. Investigating the manpower demand of these household farms, he reveals the cases when a certain competition arises between the common and household farms for manual labour. He analyses in detail and highlights from a new standpoint the factors which cause the differences in profitability between the common and the household farms.

In her study, entitled "*Employment of women, juveniles and old co-operative workers in the common farms of the co-operative*" Mrs. Zsuzsa *Kovács Orolin* investigates the possibilities and circumstances, which make possible the regular or temporary employment of women, juveniles and elderly people in the co-operatives. On the recent level of the forces of production even the common farms need this manpower but the individuals also seek employment. The rational co-ordination of the different requirements is a problem not only of the co-operatives' manpower utilization but a social question as well, states the author.

The book offers useful information to people dealing with the development of agriculture on theoretical or practical level, and may give a theoretical orientation to the specialists of the enterprises, who labour on developing policies for plants.

L. BETHLENDI

OBITUARY

KÁROLY IHRIG

(1892—1970)

At the age of 78 died Professor Károly *Ihrig*, senior research worker of the Institute of Economics of the Hungarian Academy of Sciences.

Professor Ihrig graduated at the Faculty of Law of the University of Budapest in 1918 and was appointed Assistant Professor to the Chair of Co-operative Societies in 1921, where he worked for more than a quarter of a century. In 1924 he habilitated, in 1934 he became professor and in 1936 full professor. In the forties he directed parallelly also two institutes of agrarian science. In the last 15 years, until his retirement at the end of the last year he worked at the Institute of Economics.

Professor Ihrig devoted his exceptional abilities during half a century to the investigation of problems of agricultural economics and co-operation. In 1928 he published the book "Internationale Statistik der Genossenschaften" (International statistics of co-operatives). His book on the role of co-operatives in the economy had been published in 1936. His "Agricultural economics" had been awarded a prize of the Hungarian Academy of Sciences in 1941. Professor Ihrig even in his later years was a fertile author. Last year he published a study on the economic implications of the size of membership of co-operative farms. A review of this may be found in the previous number. He passionately argued for improved methods in co-operative farming. He published some 300 studies and articles in journals both home and abroad. He had been an internationally well-known expert of agricultural co-operation. Professor Ihrig's death is a sad loss for economic science in Hungary and for the international co-operative movement too.

AUTHORS

István FRISS, see Vol. 5. No. 1–2.

Béla CSIKÓS-NAGY, see Vol. 4. Nos 1.

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Artículos:

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Table of contents

Towards a policy for social research

Henning Friis:	Introduction
Roberto M. Bernardo and Dean A. Worcester, Jr.:	Rational salary policy for leading universities in developing nations
Angus Campbell:	Problems of staff development in social research organizations
Albert B. Cherns:	Relations between research institutions and users of research
Oscar Cornblit:	Factors affecting scientific productivity: the Latin American case
Bernard-Pierre Lécuyer:	Contribution of social sciences to the guidance of national policy
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CONTENTS

K. SZABÓ: Twenty-five Years of Economic Science in Hungary 253

I. T. BEREND: Some Main Tendencies of Industrial Development in Postwar Hungary 271

A. HEGEDÜS: Economic Reforms, and the Fundamental Types of Control Systems Established in Socialist Societies 289

T. NAGY: On the Expedient Forms of Reallocating Capital in the Hungarian Economy 305

F. PERROUX: Le théorème Heckscher—Ohlin—Samuelson et la théorie du commerce international 325

A. NAGY: Approximation of the Foreign Trade Optimum 339

GY. VARGA: Long-term Planning at the Hungarian Enterprises 355

T. ERDŐS: Surplus Value and its Rate in Contemporary Capitalism 371

REVIEWS

Z. ROMÁN: International Conference on Industrial Economics 389

B. CSIKÓS-NAGY: Colloque d'économistes franco-hongrois 394

J. TIMÁR: A Conference on the Technical Personnel Supply 398

State Prize Winner Economists 401

The New Editorial Board of Acta Oeconomica 403

BOOK REVIEWS

L. FEHÉR: Unsere Agrar- und Genossenschaftspolitik 1965—1969. (E. CSIZMADIA) 405

A. HEGEDÜS: Changing World (P. HALÁSZ) 410

J. BIRÓ: Hungarian Foreign Trade Policy (I. FÖLDES) 412

F. KOZMA: Economic Relations between the Two Europes and Socialist International Cooperation (M. SIMAI) 414

GY. ÁDÁM: America in Europe. Business Empires in the World Economy (GY. BECSKY) 416

To Our Readers

The Editor and the Publisher have the pleasure to announce that from 1971 on *Acta Oeconomica* will be published in two volumes a year making some 800—900 pages.

Doubling the volume of this journal aims at a twofold purpose: first to meet the growing interest of economists abroad in information on the socialist economy, planning and related problems, second to enlarge the scope of the journal by giving more opportunity both to Hungarian and foreign economists in order to express their views on the most vital problems of world economy.

The death of Professor Imre *Vajda*, Chairman of our Editorial Board and the growing responsibilities in consequence of the above-mentioned changes led the Committee for Economics of the Hungarian Academy of Sciences — as reported later — to reorganize the Editorial Board. From now on we enjoy the collaboration of many outstanding Hungarian economists, among them that of Professor József *Bognár* who was kind enough to accept the mandate of being Chairman of the Editorial Board.

The growing recognition of the importance of mutual information as a factor of international co-operation renders the hope that our efforts will meet favourable acceptance by our readers.

The Editor

Acta Oeconomica Academiae Scientiarum Hungaricae, Tomus 5 (4), pp. 253—269 (1970)

K. SZABÓ

TWENTY-FIVE YEARS OF ECONOMIC SCIENCE IN HUNGARY

For the 25th anniversary of the liberation in Hungary the author summarizes the 25 year development of Hungarian economic research. A historical survey is followed by a detailed description of future tasks. A close relationship between the development of economic science and the development of other social sciences is pointed out.

Liberation and the revolutionary change which accompanied it held the promise of an upswing in all sciences, including economics.

Regarding economic science, this turn appeared concretely under the joint effect of two important factors. The first was increased practical demand. In the country devastated by the war public interest, and along with it, political struggles concentrated on economic issues. The primary gauge the public used to evaluate the coalition parties was their programmes for reconstruction, stabilization and living standards, and how they realized them. In the final analysis, however, it was the establishment of the system of socialist ownership and planned economy which multiplied demands on economic science.

The other factor was mass ideological demand. After 25 years of being forced underground, the Marxist — Leninist ideals, the ideology of the working class which had gained power, took the floor legally, as a government-supported trend and gained hegemony in the decisive year of 1948. The ideological struggle and its outcome proved to be a driving force of tremendous energy in placing research on a Marxist—Leninist foundation in general, and in a creative approach to economic theory, which constitutes an organic part of Marxism, in particular.

But no matter how great social need was in this discipline, the heritage of a progressive theory was lacking. This heritage would have been needed as positive achievement of pre-1945 theory, to serve as a starting point for economic science. At the same time, research forces on which the science could be built from both human and organizational points of view, were just as scarce.

Here we must not simply think of the well-known fact that the reactionary system in Hungary, in contrast with other capitalist countries, did not tolerate even objective information on the Marxist sciences in its universities, and could not stand even the democratic economic theories, for instance, not even the democratic or the sociological village-exploring directions. This tremendous barrier to the free atmosphere needed for scientific creation was reinforced by another, by no means accidental, circumstance: the extremely low level

— even by bourgeois standards — of economic science in Hungary. There was no basic research at all using modern methods, no organizational framework of any size had been built up; there were no original works, rather encyclopaedic textbooks were published and no creative schools developed. The ruling trends in economic theory in feudal-capitalist Hungary lagged much behind the development of the modern bourgeois science. The neo-classical school represented by Ákos Navratil was full fifty years behind times, while the marginal utility school of Farkas Heller — else an internationally recognized personality — was outdated by several decades. This general backwardness, together with nationalist isolation, was reflected in the foreign works chosen for translation into Hungarian. An interesting example is the fact that not even were the works of the most famous representatives of the marginal utility school, so popular here then, published, not to speak of works by J. M. Keynes and others.

So we cannot consider it accidental that, in contrast to other social sciences, there was not found a single one of the better known economic theoreticians who could have sided with the anti-fascist democratic forces and could have played an effective initiative role in scientific research after the Liberation. And, with a few exceptions — as István Varga — the same thing occurred among the well-known students of the applied economic sciences. They were prevented from doing so by their commitment to the reactionary policies of the former ruling classes and by their ideological positions in keeping with these commitments. This is the reason behind their open or tacit opposition to the post-liberation forces which started to struggle on a broad front for a democratic and socialist Hungary. Their refusal to work for the social progress of this science meant that many of their students who already had suitable experience in research, drifted away from the field, either permanently, or for some longer time. In the first years there were only a few persons, primarily in applied research and ancillary scientific branches, who could be relied upon in organizing scientific work and passing on methods.

These are the reasons why a good portion of the institutes which still existed after 1945, more precisely the university faculties intended for basic research and, for example, the old Hungarian Economic Association were characterized by vegetation, and were driven merely by the force of inertia while in the institutes operating on the practical side (the Hungarian Central Statistical Office, the Hungarian Economic Research Institute) economic analyses began earliest, usefully complemented with the activities of several new bodies (such as bodies established within the framework of the Central Council of Hungarian Trade Unions and the Supreme Economic Committee).

Looking back from a distance of twenty-five years, we must recognize that in the drift of struggles going on then, there were faults in the evaluation of certain individuals, and mistakes were made. But this does not alter the fundamental objective situation of economics developed after the Liberation

and the events which followed: as an heir of the bygone system — together with many other sciences — it had to begin its development from rock bottom. For this reason, if we do not want to make errors in its evaluation, we must compare achievements made since with this starting point.

The pioneers

The very limited starting basis was no doubt one of the factors which, for a comparatively long time, determined the achievements of Hungarian economic science, placing the creation of conditions needed for its cultivation above everything else. The most burning of these conditions proved to be the need for a suitable number of scientific cadres — a need which under no circumstances can be satisfied rapidly — who had to be trained while simultaneously meeting the demands for the mass training of economic experts, required by nationalization and planned economy.

In this concrete situation, there was only one way of taking the road to realizing the broad possibilities opened to economic science: to rely on the force of those persons who, through having worked in the labour movement at home or in emigration, were in possession of thorough knowledge and experience, which they had gained in theoretical and propaganda work, and which made them capable to contribute their work to building up Hungarian economic science on a Marxist—Leninist foundation, and who were willing to do so.

The majority of these pioneers did not have backgrounds of long experience in scientific institutes. A few of those who had such experience, as László Rudas, Béla Fogarasi and Erik Molnár, took on great roles as general theoreticians of the Marxian social sciences, applied to this field. At the same time, the majority, as István Antos, Lajos Bebrits and Imre Vajda, beside the positions they filled in different leading posts in post-Liberation political and economic life, took a role in training the new generation of economists, in educating the scientific creative group which grew from this basis and served as reserves, and in general, in developing Hungarian economic literature. We are not mentioning this simply for the sake of listing facts, but rather to stress their achievements in completing this mission, which, even in the perspective of a quarter of a century can only be remembered in tones of respect.

It was in no way their fault that almost a decade had to go by from the date of the Liberation for the first, no longer sporadic, but systematic though modest achievements of economic science to show. On the contrary, they played a positive role in that not even in the years of the personality cult was the process of educating cadres capable of independent activity interrupted — a process which was founded, among other things, by the training of economists within an independent university framework set up in 1948, and

by post-graduate training which began in the years that followed. In the final analysis, this is what made it possible, after the Hungarian Socialist Workers' Party liquidated the consequences of the personality cult and the counter-revolutionary uprising, for economic research immediately to start on a general upswing which has lasted ever since.

Problems in the early 1950's

The political distortions of the first half of the 1950's sharply held back the process of establishing the conditions needed for creative work in this important social discipline and filled it with contradictions.

Beyond doubt, the most positive appearance of this period was the general advance of Marxian theory, its penetration into concrete economic studies and different fields of economic practice. The removal of the prohibitions of earlier decades meant partly the publication of the economic classics Marx, Engels and Lenin — including the three volumes of "Capital" — in Hungarian, and partly, the issuing of the volumes of contemporary Soviet economic literature. Study of the classics had the effect of a revelation and permanently determined the way of thinking of the new economist intelligentsia. As regards the works of the Soviet authors, in that period they were the most important sources for economic cadre training. This includes works studying the latest phenomena of capitalism, as represented by the writings of Eugen Varga ("Post World War II Capitalist Economy" and "Major Issues in the Economics and Politics of Imperialism"). But this holds even more for works dealing with the theoretical and practical questions of socialism, for this was the time when the first experiences of planned economy were gained in Hungary and in the other people's democracies and actual research of reality was in but its very beginning stages in every one of these countries. Soviet textbooks and theoretical studies (The Hungarian—Soviet Economic Review played a great role in publication of the latter) provided irreplaceable aid to the University of Economics, struggling with the problems of formation, in establishing the curricula for various subjects, — theoretical, methodological, specialized and ancillary branches — and beyond this, in the activities of the newly organized economic faculties in party and government institutes of education.

But simultaneously with this positive development, harmful trends, connected with the personality cult, also appeared. Infringements on the law in the years following 1948 created an extremely unfavourable situation for economics, since, being a class-determined social science an elemental condition for creative activity is a suitable political atmosphere. The practice of branding people spread, greatly increasing the personal danger for researchers in social issues, precluding every possibility of a genuine debate and, at the

same time, of defeating the representatives of the bourgeois schools in open ideological battle, of convincing them of the truth of the Marxian scientific theory, or of disclosing the correctness of different concepts based on Marxian foundations through the force of scientific arguments. Narrowing down the field of international contact, and exaggerated secrecy in respect of statistical data had the same effect.

Cultivation of Marxian economic theory — similarly to other sciences — can only be truly fertile under conditions of building socialism if such activity is built on the collective activity of a broad circle of researchers under the theoretical guidance of the party, the latter providing incentives for creativity, and organization for practical aims. However, the concept which considered the task of further developing Marxian theory the monopoly of a single or of several leading personalities, became harmful to the very cause of progress. This was primarily because it led to an underestimation of the role of scientific collectives, and to neglect in supporting their formation. Furthermore, instead of speeding it up for economic theory to outgrow the children's diseases which may be considered as necessary side-effects of a science with a comparatively weak basis in the midst of great social change, it rather strengthened, on the one hand, the inclination of great numbers of persons freshly completing their Marxian studies toward scholastics, and on the other hand, the strivings of young researchers, alarmed at problems of political content, toward narrow empirical research.

Finally, this concept also contributed to certain disturbances in taking over international ideas and methodological material. In general, it prevented the young Hungarian research from making use, right at the start, of the gift of modern methods of economic science born elsewhere, and concretely, it prevented reliance on the achievements by Soviet economic science prior to World War II. At the same time it promoted an easy take-over, together with the early achievements, of Soviet economic science, later on of uncertain or even easily disprovable theories, as was the case with Stalin's work "The Economic Problems of Socialism in the Soviet Union". There is no doubt that while this work helped to overcome certain incorrect views in many respects and served as a starting point for broad debates, it is no secret that it contained incorrect conclusions and erroneous orientation as well.

In the adoption and spread of these dogmatic views, however, a fundamental role was played at that time by the dominating conduct within the leadership of the Hungarian Workers' Party, which, instead of a creative application of the economic policy, planning methodology and forms of control and management reached under the concrete conditions of the Soviet Union, often chose their mechanical application, and simple copying.

The concept that solutions to problems which arose in the Soviet Union

relieved us of the independent study of building socialism in Hungary, in itself meant renouncing the concrete analysis of economic relations which objectively determine the possibilities for and specialities of application, and the scientific research into the suitable forms and means of solution. But this concept was just a symptom of the deeper error: of voluntarism which gained force in economic policy. Economics — together with the national economy — suffered the longest from the consequences of this policy.

What the party leadership of those times expected from economic science was justification for all current steps in economic policy and what it could tolerate was at most an ulterior criticism of inconsistencies in the implementation of decisions. It did not find it necessary to give the workers of the theoretical front an active role in working out different concepts for economic policy or in preparing resolutions. Meanwhile, in the management system of the direct type which developed, the demands of enterprises and other economic institutions for independent economic solution became limited to an extremely narrow sphere. All this, taken together, meant that on no level of economic management did those mechanisms, which are intended to transmit the increased needs of socialist economy to economic science, function. The stimulating force of practice on developing the research basis, and on its useful functioning became paralyzed. A deep gap appeared between practice and economic theory. Conditions for research deteriorated also in the institutes meeting the quantitatively increased demands for training economic experts, and without research facilities there can neither be modern education nor effective ideological activity.

The era of catching up

This unfavourable trend in circumstances began to come to an end in the mid 1950's, following the July 1953 session of the Central Committee of the Hungarian Workers' Party, which, with its criticism of errors made in economic policy, drew attention to the need for economic analysis and research. At the same time, elimination of the consequences of the personality cult had still to wait, so the practical break with voluntarism in economic policy was neither clear nor definite. This meant that earlier barriers to research were by far not removed and, in fact, the internal discord within party leadership, and the fluctuation between left and right wing in political life made it more difficult for resolutions aimed at making up for backwardness in economic science to be realized.

But these factors were no longer able to hold back the fundamentally favourable trend in the process. All the more so, since this was the time when an upswing took place in the economic literature of the other socialist countries, primarily of the Soviet Union, and the efforts made to educate a new

generation of economists began to bear fruit. Fresh forces appeared behind efforts at progress of the older generation. This was the time when the first candidate theses in economics were defended, on the level of the Hungarian Academy of Sciences, and when it became possible, with the increase in studies by Hungarian economists to change the Magyar—Szovjet Közgazdasági Szemle (Hungarian—Soviet Economic Review), which primarily used the works of Soviet economists, into the Közgazdasági Szemle (Economic Review) relying on new Hungarian authors. After a long period of stagnation broad-scale debates started, first on the application of the NEP, (New Economic Policy introduced in the Soviet Union in the early twenties) in the Társadalmi Szemle (Social Review), then on the role of economic and financial incentives which were published in the periodicals. Finally, in late 1954, a long-standing problem was solved by the establishment of the Institute of Economics of the Hungarian Academy of Sciences, as an independent organizational basis for basic research.

But despite these positive changes, we cannot state that the position of economics substantially improved in these years, or that the favourable circumstances needed for research had come about. We might rather call this period the time of catching up, and preparation for advance. The situation which came about following the 20th Congress, and its turn against the personality cult, contained the promise of an opportunity to create conditions for rapid advance, but realization was interrupted by the 1956 counter-revolutionary attack. The extremist ideological-political trends which preceded and accompanied it caused serious confusion in the ranks of economists, too. The long-desired ideological-political conditions for healthy advance were only created with the consolidation. That was the beginning of a period marked by a general and lasting revival of economics and by an accelerating development in the organizational and creative fields alike.

Therefore, if we want to sketch out in what respects Hungarian research has enriched Marxian economic theory, how much it has aided the practical and ideological work, then, *summa summarum*, it is the achievements of the past 10—12 years that we must study. We must not forget, of course, that the concrete support for all this was provided by the process which had taken place in the years following the Liberation, and which, while by no means free from pitfalls and retrogression, yet, as a tendency could not be held back.

Achievements of the last decade

By way of introduction it must be stated that even today we cannot rest satisfied with what we have done in the interest of working out, in general, Marxian, and in particular, socialist political economy; nor can we be satisfied with the fact that what has been realized, shows a very uneven picture, from

the viewpoint of the different research themes. At the same time, there can be no doubt that in the last decade substantial achievements have been made in the theoretical exploration of economic categories, in fact and process analysis, and in research directed towards advancing the methodology of economic decisions. (Here we would primarily like to discuss developments within the sphere of theoretical basic research, that is, those touching directly on general economics.)

The economists satisfied a demand of scientific progress moving along the tracks of Marxian theory when, studying the new appearances of reality and generalizing the collected experience of socialist practice, they reexamined, and in some respects deepened certain *fundamental categories of political economy*. They successfully contributed to a more complete exposition of the Marxian concepts of mode of production, forces of production, production relations and ownership relations, as well as to exploring relations between interest relations and the economic mechanism. On certain points they further developed scientific information on the objective character of socialist economic laws their relationship to consciousness, the character of their realization as a tendency, and their reciprocal effects. However, from the point of view of theory and practice, the most important change occurred in the concept of purposefulness and commodity relations.

In harmony with work started in this direction in other socialist countries, important work also effecting *the economic reform* was performed when researchers pointed out the increasingly tangible disadvantages of the earlier mechanism of socialist planned economy and proved the need for further essential measures also under our own relations. Applying it to concrete Hungarian conditions, they worked out the major lines of a theoretical standpoint concerning the possibilities within socialism for an organic unity of the national economic plan and active commodity and money relations. They provided a new explanation for the function of the socialist enterprise, of the necessity for their autonomous economic functioning and the role of enterprise interest in profits. Many people participated in the work aimed at defining the fields where coordinated decision-making was necessary in national economic plans, at working out the economic tools for, and the ways of applying them in running the national economy.

Evolving theory of demand suited to socialist relations also made substantial progress. The study to place *long-term national economic planning* on a more scientific foundation, to establish the place for and the methods of working out the concept of economic policy and to identify the conditions for preparing plan variants has begun, and brought certain achievements. However, in my opinion, it is the contribution to a theoretical foundation for the long-term development of the national economy, and for the objectives of economic policy, where we can be least satisfied with ourselves.

We can speak of achievements regarding the *theoretical and methodological foundation of a price system* corresponding to socialist relations and, in this connection, of an *advance in the Marxian theory of value*. Our economists have played an active role in clearing up the content of the theory of value, its role and operation mechanism in socialism, a research activity which is also going on in the other socialist countries. It was not a coincidence that Hungary was the first to realize the modelling in a product system and the economic calculation of the various price types; further, to analyse the economic contents of the shadow prices related to mathematical programming; and finally — while preparing the economic reform — to recognize the different role of prices in the two types of socialist planned economy systems.

The factors were worked out which determine the *centre of price movements* under socialist relations. It has been proved that the different capital and land intensity of products must be reflected in prices; it has been disclosed that the relations between home and foreign trade price ratios, the relationship between supply and demand, and the utility deviations in substitute products must be expressed in their prices. The advantages of consumer prices which are more adjusted to input ratios, and the justified types for realizing different government preferences have been shown; the need for a broad scale of prices caused by the market has been justified; the reasons for maintaining direct government price regulation, the sphere in which it is necessary, and more flexible forms of application have been explored.

One of the outstanding results in the *theory of money* was proving the fact that the money used in socialist economies and in the capitalist countries domestically is credit money with no intrinsic value. With that, the concept that also modern money was unequivocally gold, and that the signs of money used internally were gold substitutes, was defeated. Besides, a number of theoretical problems essential from the practical point of view too, were worked out in connection with issuing credit money, with the supply of money with money-creating short-term bank loans, and in working out these great help was provided by showing the complex relations between money accumulation and real accumulation taking place in the socialist economy.

In the theory of international economic relations, this scientific revival is connected to the reform of the economic control and management systems of the socialist countries. Research began into economic problems connected with the necessary reform in the mechanism of international relations (coordination of economic policy plans, international commodity relations and markets, and the related price system; multilaterality, convertibility, foreign exchange rates, flow of capital).

The sphere of questions involving *income distribution and material incentives* is one of those fields where in recent times there has been large-scale research and as a result, serious and at the same time useful polemies have

developed. E.g. a long-lasting debate among researchers into farming cooperatives' problems in which two viewpoints opposed one another, is just in the course of solution. One group was of the opinion that the cooperatives are interested in maximizing their per capita gross incomes, and it showed the consequences of this, together with the connection of the form and distribution of income with the cooperative form of ownership, and with the particular features of agricultural production. According to the other view, the cooperatives are collective enterprises, and the fundamental enterprise categories are just as valid for them as for other types of enterprises, and this includes wages, profits and losses too. In accordance with this, cooperative members are interested in wages, and beyond this, in sharing incomes, while the interest of the cooperative as an enterprise lies in maximizing net income.

Many have provided serious reasons for the need for diversified income distribution and wage forms within the cooperatives, and have defined the conditions for their application and for extending guaranteed and regular financial wages. They have contributed to concretizing the theory of land rent under socialist relations.

During preparations for the economic reform the problems of individual and enterprise financial interest arose in a new way in the government sector, too. The earlier interpretation of distribution according to work done was re-examined, and with the extension of the active role of socialist commodity relations it was coordinated with the financial interests of the enterprise's collective. Research into the theoretical problems of the socialist enterprises' profit interest, profit taxation, and into these related to the regulation of profit utilization was begun. Many studies dealt with questions of financial incentives for those participating in the completion of investment projects, including designers, investors, contractors. These studies successfully contributed to the conclusion that free allocations to investors do not promote the selection of efficient solutions, and they provided help to developing a new financing system for investments.

A field in Hungarian research which is ever expanding and has been producing important achievements, is the study of the *problems of social reproduction*. It cannot be considered accidental that Hungary was the first of the socialist countries to apply input-output analysis to disclose interrelations in the reproduction process. The application of mathematic programming on the branch, and the national economic levels have partly raised new theoretical problems, and have partly helped to become better acquainted with the nature and quantitative determination of important economic categories and objective relations.

There was lively discussion on several fundamental economic categories of social reproduction: the contents of national income, and the modern interpretation of the distinction between productive and non-productive work.

Most recently, noteworthy results are being reached in research aimed at formulating the theory of growth of the socialist economy, in the interest of working out growth models for a quantitative study of the major factors of economic growth. Part of this work was a critical analysis of the modern bourgeois growth theory and becoming acquainted with its positive elements.

Regarding the capitalist theory of reproduction, the classical Marxian theory of reproduction was successfully connected with the theory of business cycles in a new way and it was further developed by establishing theses on conditions for a lasting equilibrium by extending the reproduction schemes to non-balanced conditions. Here we should mention those works which, regarding the special features of capitalist reproduction cycles under state monopoly capitalist conditions, came to important scientific conclusions and raised new questions.

Nor should we underestimate the results achieved in *the analytical description and evaluation of latest development trends in the capitalist countries.* These studies — in coordination with international Marxist research — proved that state monopoly capitalism is an organic part of capitalist production relations, and that it is characterized by many compromises on part of capital, and that under these circumstances it is not likely that very serious crises should break out. Mention should be made here of research which analyzed the socio-economic effects of modern scientific and technical development, and which studies questions of the monetary system of the capitalist world, and its functional mechanism and conditions.

Studies of the *socio-economic problems of the economically underdeveloped countries* have also produced substantial results. This is the reason why today, economic literature and practice have accepted many new conclusions, such as e.g. the thesis on the existence of a so-called third market type.

The substantial progress involving the theoretical economics of socialism and capitalism — sketched out above — could not have been realized to this extent if fundamental research had not been accompanied by concrete applied and methodological development research on an ever-increasing scale and covering many details. It would appear that during the last ten years research in these branches developed far more intensively — and from the quantitative point of view this is fairly certain — than in the field of theoretical analysis. So this phenomenon, positive in itself, causes certain problems. On the one hand, factual research often does not find necessary Marxian theoretical support, and on the other — owing to the lack of an established scientific information system — there is often insufficient contact and confrontation among different research groups.

At any rate, the circumstance that basic research could richly draw on the results achieved in various fields — relating to trends in international relations, national economic and branch (industrial, agricultural, commercial,

financial, labour economy, regional) problems — and on the achievements of enterprise-economics process studies, not to mention research in important related sciences such as economic history, economic geography, demography, economic law and, most recently, economic sociology — played an important role in the general theoretical achievements of economic science. A similar — and in the science-historical sense even more essential — source of strength was the fact that in this period, when the use of electronic computers rapidly spread in economic practice, economics could increasingly rely on modern quantification processes on the economic application of mathematical methods (linear programming, input-output analysis, non-linear models, elasticity analyses); on the significant results of research aimed at improving traditional statistics (representative surveys, the statistical macromodel M—I, the system of statistical indices).

Major factors in the acceleration of development

To what may the accelerated development of economics since the late 1950's be attributed?

First of all, to the change in the general political atmosphere, to the fact that, as a result of the consistent, two-front Marxist—Leninist activity of the Hungarian Socialist Workers' Party aimed at building socialism, those barriers which earlier accompanied the personality cult, dogmatism, and later revisionism, were removed. The party was led by its recognition of the role of economic science, when it effectively supported existing research institutes (the Institute of Economics, the Research Institute of Agricultural Economics, the Research Group for Industrial Economics) and their reinforcement, the establishment of new research groups (the Institute of Financial Research, business research institutes) and when, in the most recent Central Committee resolution, it called for the reinforcement of the university research bases.

Another reason is the faith in creative work which became manifest in making international scientific contacts possible, in aiding cooperation between the economists of the socialist countries, as well as in ensuring access to statistical data, and in refuting the view which condemned "on Marxist foundations" the application of mathematics in economics. But the most important driving force proved to be the regular drawing in of broad circles of theoretical economists in the preparation of resolutions aimed at solving the country's economic problems, be it the reform of the control and management system, and its improvement or the working out of national economic development programs.

And, last but not least, among the forces aiding this turn is the fact that during these twenty-five years, beside the few experienced scientific per-

sonalities, new researchers grew up and joined in the work who had satisfactory Marxian training and scientific and practical experience to enable them to carry out their mission. Solution to the problems of economics has been directly dependent upon, and will remain dependent on the creative force, self-sacrificing and responsible work, and organization of the economists working in the various research institutes, university faculties, and in the competent organs of economic control and management.

The tasks

In Hungary the *forces of scientific research* should be centered primarily on *two spheres of themes*, partly the *scientific foundation for planning*, and within this on the *development of the optimum structure of the Hungarian national economy*, and partly on *improving the the system of control and management*. In the first case the content, function and character of plans and of economic policy, specific problems stemming from the economic reform and, in general, the foundation for the strategy, theory and methodology of the economic policy must be worked out. In the case of the other sphere of subjects the job which must be done is intensive analysis of experiences of socialist planned economy on international and national, social and enterprise level, the necessary theoretical generalization, the drawing of practical conclusions.

Partly within these major groups of subjects, and partly complementing them, many theoretical problems need urgent solution, both for practical work and because of the internal need of science and education. We may emphasize the following tasks facing economic basic research — as indications.

To work out the economic contents of the socialist ownership of the means of production, and socialist ownership relations in general, and in this respect, the systematization of the scope of subjects of political economy in socialism, of its relationship with the different branch and methodological disciplines as well as of its functions.

The theory of the socialist enterprise as an economic category, including the nature of differences between microeconomic and macroeconomic relations, and exposing the relations between enterprise and national economic profitability as well as the criteria and forms of capital re-allocation among enterprises.

To work out the different fields, forms, (competition) and the function of the forms of commodity and money relations, with particular emphasis on central regulation through economic measures and on the existence of economic automatisms.

Research aimed at studying the effects of factors influencing trends in the price level, the value of money and price-wage relations, including the question of the economic value of land.

The theory of money circulation, credit and public finances, with particular attention to the increased active role of these spheres.

To disclose the factors affecting the territorial allocation of the forces of production, to work out the reasonable criteria of location.

The Marxian theory of international economic relations, and in this respect, based on experience gained so far to work out the theoretical problems of world trade, including the foreign trade of the socialist countries, and the socialist international division of labour.

The socialist theory of growth, with particular attention to central planning and regulation aimed at realizing national economic interests on the one hand, and on the other, to effects developing according to the preference scale of enterprise and local interests.

To increase — if only in order to theoretically substantiate the above questions — critical studies of modern bourgeois economics, and in the course of doing so, to study the possible application of the methods worked out, and used under socialist conditions.

Research aimed at studying the real possibilities for international division of labour among the socialist countries, their development trends and stages in suitable detail and with proper theoretical background, must be increased. In order to do so it would seem necessary to carry out broad-scale statistical data collection, to study these data with scientific methods, to build models simulating the behaviour of socialist economies.

In general, there is a need for disclosing the microeconomic laws and the particularities of industrial branches related to the management of socialist enterprises in order to promote the theoretical preparation for the practical spread of modern management principles and methods.

Greater forces must be concentrated on the foundation of agricultural micro-decisions, on the economic evaluation of mechanization, machine operation, the application of new technologies, on questions related to the components of the complex development of modern food economy, its structure, prices and marketing, as well as on agricultural policy.

The system of statistical surveys needed for research into industrial location and transportation geography must be developed and, in general — in order to study the territorial aspects of national economic processes — so must be the balances of the production and utilization of national income, input-output tables, the balance of the incomes and expenditure of the population and the territorial balance of fixed assets, etc.

The demand for a complex study of the process of social reproduction calls for the creation of a comprehensive national economic accounting system, which will equally reflect trends included in traditional balance calculations, and those outside it.

We must strive to overcome our backwardness in labour economy, and to gradually solve certain labour economy question complexes (education—economy etc.) relying on the research basis being built up.

As regards the application of mathematical and statistical methods, in the future greater emphasis must be placed on the use of econometrical methods, on working out stochastic, non-linear, integer and dynamic programming methods, since the reality of economic life can be more easily approached through them. Increased attention must be paid to the theoretical evaluation and analysis of the results achieved through the applied methods.

Performance of a greater amount of foreign trade optimization calculations than is done presently must be placed on the agenda, along with the aggregated economic methods aiding the disclosing of foreign trade trends, and flow charts showing dynamics.

As regards home trade, on the one hand, the prognostic methods applicable to planning, and on the other, the ecoscopic and demoscopic methods of market research must be worked out and tested.

The increasing role of commodity and money categories demands many-sided statistical observation of the operation of market mechanisms, the development of economic prognostic methods, and an improvement of price observation methods.

In the foreground of the political economy of capitalism there are such fundamental problems as the theory of surplus value, a careful analysis of the Marxian reproduction and crisis theory, taking into account the conditions of contemporary capitalism.

The contradictions characterizing present-day capitalist society in the course of the development of state monopoly-capitalism must be subjected to a careful study, together with those factors — appearing after the Second World War — which have for a long time determined the economic growth of the capitalist countries, making efforts to quantify the effects of these factors, to prepare better founded prognoses.

Of similar importance is research, which discloses the laws and important interrelations existing equally in capitalist and socialist economies.

In connection with the developing countries, it seems necessary theoretically to found questions like aid, possibilities for speeding up their development, the methods of realizing a lasting cooperation with them; credit, technical aid, training of experts, etc. taking their own sources and needs into consideration.

In conclusion, we are justified in stating: economics can show after twenty-five years of development a valuable surplus in its balance. The result may be summarized in the fact that in these twenty-five years it has become, *for the first time* in Hungarian history, a truly creative science relying *on an independent national basis*, and as such — despite its shortcomings — it has

won with its achievements a merited place and prestige both on the national and international level. The weight of this achievement is the greater, because it has come about on the soil of *socialism*, on the basis of national and international interests of the working class which gained power. Therefore, this is the record of the development of *Marxist* economics whose historical foundations were established by the Liberation. But at the same time it is also the highest guarantee that its scholars will continue to faithfully serve the historical tasks in the coming period with their creative work in the period called upon to realize the complete building up of socialism.

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ДВАДЦАТИПЯТИЛЕТИЕ ВЕНГЕРСКОЙ ЭКОНОМИЧЕСКОЙ НАУКИ

К. САБО

Настоящая статья написана по поводу 25-ой годовщины со времени освобождения Венгрии.

В период после освобождения развитие экономических исследований в Венгрии, из-за отсутствия марксистских кадров и соответствующих организационных рамок, началось в весьма трудных условиях. До войны экономическая наука была очень отсталой. В начальный период организацией экономических исследований занимались специалисты по общей марксистской теории. Спешной задачей являлась массовая университетская подготовка молодых ученых, результаты которой сказались только приблизительно через десять лет.

Для начальной стадии в развитии экономической науки было характерно более или менее механическое перенесение на венгерскую почву советских теоретических и прикладных исследований. Только в период последовавшей за контрреволюцией консолидации (1957—58 гг.) возникли благоприятные условия для исследовательской работы.

Развитие экономической науки ускорили три фактора: изменение политической атмосферы и выдвижение на передний план экономических институтов (поддержка со стороны партии); улучшение международных связей; постоянный рост числа молодых ученых.

В ходе анализа достижений последнего десятилетия автор подчеркивает значение научного сотрудничества с социалистическими странами.

На протяжения последних 25 лет экономисты изучали основные категории политической экономии, в первую очередь закон стоимости; подробно разработали и развили дальше марксистскую теорию цен. Далее они изучали теорию денег, теорию международных экономических связей; плодотворная дискуссия развернулась по вопросу распределения доходов и материальной заинтересованности предприятий при учете требований новой системы управления народным хозяйством. Исследовались также и проблемы воспроизводства в социалистических, капиталистических и развивающихся странах.

В дальнейшем в статье намечаются задачи на будущее, которые сосредоточены около двух тем: во-первых, научного обоснования планирования, в том числе образования оптимальной структуры венгерской экономики и, во-вторых, совершенствования системы хозяйственного руководства и управления. В первом случае имеет место необходимость в разработке содержания функции и характера экономической политики и планов, их специ-

фичных проблем, вытекающих из экономической реформы и вообще теоретических и методологических основ стратегии экономической политики. Во втором случае очередная задача заключается в тщательном анализе международного и отечественного опыта социалистического планового хозяйства на уровне всего общества и предприятий, в произведении нужных теоретических обобщений и извлечении практических выводов.

В заключительной части своей статьи автор дает положительную оценку проводившимся на протяжении последних 25 лет экономическим исследованиям, в первую очередь потому что в этот период венгерская экономическая наука превратилась в самостоятельную марксистскую общественную науку.

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I. T. BEREND

SOME MAIN TENDENCIES OF INDUSTRIAL DEVELOPMENT IN POSTWAR HUNGARY*

A short historical introduction is followed by an examination of the rate and level of industrial development. Conclusions are drawn as regards the structural changes within the whole industry and the different branches. Some remarks on tasks for the next period of industrial development are made.

Historical background

Similarly to most of the East Central European countries, a special way of the industrial revolution evolved in Hungary. Emergence of large-scale industry started rather late, in the second half of the 19th century, especially in its last third, and even by the time of the World War I the country could not overcome its onesided agrarian backwardness. 60 per cent of the gainfully employed population were still working in agriculture, and only 25 per cent of the total national income was produced by the industry, and, in spite of the fact that within industry mechanized large-scale industry made a fast progress, yet small-scale industry remained very important.

The latter was developing even at the beginning of the 20th century at the same rate as industry, and, employing almost half of the total number of workers, it represented one quarter of the industrial output. After a not completely finished industrial revoution, between the two World Wars, the extremely disadvantageous circumstances did not give any chance for any important rise in the industrial maturity, major progress was made only in the years of the war-economy. Calculated for the area of Hungary in 1920, the capacity of the industrial prime movers rose — taking the 1913 level for 100 — to 210 by 1938 and even to 269 by 1943. By 1938 the number of workers increased by 17 per cent and by 1943 already by 59 per cent. The volume of industrial output in the last pre-war year exceeded the level prior to the World War I by 28 per cent and in 1943 by 76 per cent. 24 per cent of the total industrial capacity was completely destroyed in the last year of the war, mainly after the country had become a battlefield. The slow progress — by European standards — may explain that small-scale industry could keep its importance throughout these years, and even in the last years of World War II it produced one quarter of the whole industrial output. (After the war the strongly ruined large-scale industry produced merely 60 per cent of

* This paper was delivered on the March Session of the Industrial Section of the Hungarian Economic Association. The author used the publications of the Central Statistical Office as well as the studies prepared in the Economic and the Industrial Committees for Long-Term Planning.

the total volume.) The structural pattern of the industry, however, has substantially changed: the food processing industry, initially of determinative importance, gradually diminished: in 1913 — calculated for the area of 1920 — food-processing shared in the industrial production with 42 per cent, in 1938 with 29 per cent, in 1943 only with 24 per cent. The textile and light industrial branches, however, increased their 15 per cent share up to 26 per cent and 25 per cent. The basic industries and the engineering branches turned out 38 per cent of industrial output before the World War I, whilst in 1938 36 per cent and reached a certain growth in 1943: 42 per cent, only because of the war economy.

All these were, nevertheless, not enough to overcome the industrial backwardness of the country. Because of the modest development even the first census after World War II (1949) reflected the characteristic features of moderate backwardness: more than 56 per cent of the population still was employed in the agriculture.

Economico-political framework

After the war the social and political change of historical importance, the new possibilities following the revolutionary socio-political changes, the establishment of the socialist system opened the gates to new methods of economic development. In the centre of economic strategy developed after 1948 — whose detailed discussion cannot be undertaken here — stood forced industrialization. The efforts of economic policy were aimed at this objective: this was supported by the planning based on compulsory directives. With its aid a big accumulation could be ensured and the central tasks defined by the aims of economic policy could be concentrated to. This basic feature of the economic strategy, i.e. industrialization, was characteristic essentially for the past two decades as a whole. Many important changes in economic policy modified in the meantime the preliminary ideas, diminished the extreme rate of accumulation, modified the disproportions in investments to the advantage of agriculture and infrastructure, diminished the initially one-sided overemphasis of the heavy industry (90 per cent) and carried out various conceptual modifications also within heavy industry.

All thesep olitico-economic changes starting from 1956 were accompanied by corrections which substituted for the onesided and over-expensive growth of extensive character methods emphasizing technical requirements and higher quality.

It is evident that the above changes in economic strategy influenced the rate and direction of industrial growth considerably. In the following the reasons and conditions will be overlooked and attention will be focussed to

the effects and consequences, to the main tendencies of industrial development.

From 1950 on, an excessive investment drive appeared in industry. The volume of industrial investments multiplied by three and a half. Several new big establishments, reconstruction and enlargement of existing plants increased the fixed assets of the industry: in the sixties the volume of fixed assets almost doubled, the share of the industrial fixed assets in the total has doubled since 1950, which means they amount now to more than a quarter of all fixed assets.

All these were accompanied by a massive employment of newly recruited labour; employment more than doubled and their skill also increased considerably.

Rate of industrial growth and the level of industrialization

The dynamism of industrialization was unparalleled in the Hungarian economic history. The annual growth rate was 13.8 per cent in the first half of the fifties, in its second half 7.6 per cent, then in the early sixties 7.3 per cent when it showed a further increase, approaching thus a ten per cent average over the whole period. This is somewhat behind the annual 11 per cent average growth rate observable in the socialist countries, but it exceeds the growth rate of the so-called developing countries (8.2 per cent) and definitely greatly surpasses that of the capitalist countries, (5.1) in their intensive stage of development.

The tremendous increase of the industry, of historical importance, is well demonstrated by the fourfold increase in the net production value between 1950 and 1967. Due to the increase in industrial volume, the per capita industrial production — which may be considered a measure of industrialization — increased also considerably during the sixties. If compared with the 35 most industrialized countries, Hungary's place is in the middle zone. American, West German and English levels are higher by 2.5—3.7 times, the Swiss, Swedish, Belgian twice as high, the Dutch, French, Czechoslovakian, and Austrian levels about 50—70 per cent higher, those of Italy, Japan, and Finland are approximately the same, whilst the Spanish, Bulgarian and Yugoslavian level reach only two-thirds of it, and the Portuguese, and Romanian level come only to half of its level. As a result of this development process, the Hungarian industry became capable of satisfying the domestic market. Concerning all industrial end-products (for consumption, investment, stockpiling and exports), during the second half of the sixties only 11 per cent was imported. Most of the imported goods served investment in machinery, since during 1964—66 50 per cent of machinery invested were imported. However, only

8—10 per cent of the goods consumed by the population were imported, which is much below international average. On the other hand, 85—90 per cent of Hungarian export goods were industrial products. Rapid industrialization has increased the role of industry in the national economy, and became its leading branch. This is reflected in the number of those employed in the industry. In the first part of the 20th century, in spite of a certain decrease in the agricultural population, — as we have seen — no important changes have occurred, and the distribution of employment remained unchanged until the middle of the century. In the decades following World War II there was an extremely fast and radical change. In 1950 employment in industry made out only 19 per cent of the total, in 1967 it already exceeded 32 per cent, thus is higher than in agriculture, which earlier dominated employment, as the latest group fell at the same time from 52 to 31 per cent.

So the industrial population has on the whole reached its highest level. This is so not only because *Hungary occupies the seventh place among the 35 countries as far as the rate of industrial employment is concerned, but also because, on the basis of the international experience, industrial employment rises till it reaches about one-third of all wage-earners and then becomes fixed at that level.*

The employment data mentioned above, beside marking an industrial expansion and the emergence of its leading place also indicate that the maturity reflected by industrial employment is more favourable than that based on per capita production. In this case not only the remarkable progress but industrial overemployment becomes also evident. The staff employed in industry is, due to full-employment policy, higher than necessary, covering up a non-utilized labour force, and also highlights the technical backwardness of industry, especially in the field of the auxiliary industrial activity (such as internal transport of materials, etc.) where most of the work is done by manual labour, and therefore 44 per cent of those employed in enterprises controlled by ministries are engaged in such auxiliary activity. The extreme increase in industrial employment is also due to the backwardness of the service branches, since employment could increase first of all in the industry.

The increase in the role of the industry is well demonstrated by its growing share in the national income. The industrial contribution at current prices shows an increase from 45 per cent to 67 per cent from 1950 to 1965, while at the latter date the proportion of agriculture was only 16 per cent. However, statistics based on current prices are well known to distort the real proportions to the advantage of the industry. Calculations performed at so-called input proportionate prices (with a proportionate distribution of capital and wage inputs and not by distributing accumulation proportionately to prices) furthermore those made and published at world prices, have led to the conclusion that the industry represents 40 per cent of national income, in other words, the ratio of the industry has increased by 1/3 within the production of nation-

al income while the proportion of agriculture is about 30 per cent, i.e. its proportion has decreased by one fourth or one third and lastingly became lower than that of industry.

Structural changes in industry

The remarkable development of the industry caused important changes not only in the growth of production volume and in respect of the place of industry within the national economy, but within industry itself as well. The industrial development was highly diversified and involved pronounced structural changes. Regarding the structural changes in industry it is important *that the concentration of production has increased.* As against the small concentration in space, the data point to extreme changes in enterprise-concentration. The number of the state-owned industrial firms was 1427 in 1950 and 839 in 1965. Average employment per firm increased from 336 to 1180 persons. Almost 30 per cent of the workers were employed in the industrial firms employing less than 500 persons in 1950; in 1965 this percentage fell to 10 per cent, while in the firms employing 5000 workers or more were concentrated 35 per cent of workers compared to the earlier 17 per cent.

Nevertheless, this great concentration was mostly the effect of organizational changes and centralization steps, and not the result of a real concentration process. Also it reflects consequences of the industrial re-organization between 1962 and 1964. In these years there was an intention to solve the contradictions getting ever more evident in the economy and due mostly to the planning system based on compulsory directives — beside partial and gradual reforms of the mechanism — by the re-organization of the industry as well. The essence of the re-organization was a great reduction of the number of enterprises, the amalgamation of the enterprises, taking the form in certain industries of amalgamating the firms into a single big enterprise. This type of fast and radical changes in the industrial organizational framework mostly did not affect the real concentration of the industry nor did it help the emergence of features characteristic of highly concentrated industrial plants. It is rather remarkable, for instance, that after the completion of the reorganization there was only a ten per cent difference between the per capita values of the machines and machinery-equipment in a small firm employing 100—500 workers and a big one employing more than 10 000 workers to the advantage of the latter. In spite of the concentration process, production was carried on in the old form, only the majority of the earlier independent enterprises became subordinated plants. Though the centralization changes cannot be treated as changes of only formal importance, since in many fields they led to rationalization and helped the de-

velopment of large-scale production, yet over-centralization of the enterprises limited the healthy and necessary competition among the enterprises and also strengthened undesirable and harmful monopolistic positions.

The real progress of concentration was, however, important. The number of large-scale industrial plants increased by 1965 by one quarter in comparison with the year 1942 and by one fifth even in comparison to 1955. But within the increase of the number of plants, there was a faster development, a higher concentration of production and employment at the plants with greatest employment. In 1942, in plants employing less than 500 workers, 47 per cent of the workers was employed, whilst at those employing more than 1000 workers almost 39 per cent was the corresponding ratio. In 1955 the ratios did not change, as a matter of fact, in the upper group but in the lower group the ratio fell to 39 per cent, due to rationalization in the light industry, to the liquidation of some small plants, which also led to the increase of the share (from 14 to 22 per cent) of the medium-sized plants employing 500—1000 workers. Afterwards by 1965, mostly as a result of real concentration in the heavy industrial branches, the ratio of those employed in the lower category diminished to 35 per cent, and the ratio of the upper group rose above 45 per cent. In accordance with this real progress in concentration the biggest plants centralized a disproportionately greater part of the machinery: the share of the lower group in the total of prime movers decreased between 1942 and 1965 from 66 per cent to 22 per cent, whilst in the upper category this ratio increased from 27 per cent to 51 per cent.

Thus, the Hungarian industry, highly concentrated already at the beginning of the 20th century due to its late start, considerably advanced in the field of production concentration and, as regards the concentration of labour it achieved the highest level even by international comparison, quite apart from the organizational centralization of administrative nature. (Regarding the ratio of those employed in plants with more than 1000 workers, Hungary overtook even the industrially strongest countries — which, apart from its positive role, is at the same time an expression of a lower labour efficiency — but in the upper industrial establishment group the average employment level per plant in the USA, Italy or the GFR is 50—100 per cent higher.)

So the progress of the concentration as well as its high level even by international comparison reflects the modernization of the industrial structure and the progress of the modern large-scale organization. In the series of industrial structural changes the radical change in the pattern by branches is of an even greater importance. Industrialization, as it is known, had been realized mostly by the primary development of the heavy industry. Between 1950—55, 90 per cent of industrial investments and even between 1961—1965 81 per cent was channelled into the heavy industry.

Even within this scope a special importance was attributed to the extract-

ing industries, especially to coal mining. Engineering, with fluctuations and a diminishing tendency, received 17 per cent of total industrial investments. From the end of the fifties the chemical industry has been playing an ever increasing role. The industrial branches earlier in traditional leading positions, (e.g. the food processing, which, in spite of permanently loosing its significance acquired in the 19th century, was still the strongest till the beginning of the war, and the textile-industry which reached a second place between the two world wars) extremely rapidly kept on loosing in importance. Between 1950—1965 the proportion of the food processing in the net industrial output was decreasing annually by one per cent, the ratio of the textile industry almost by 4 per cent at the same time; the share of engineering increased by 2.5 per cent and that of the chemical industry by 5 per cent per annum.

This process expressed a general world tendency and corresponded to the change taken place in consumption in the direction of the "break-through" of the consumer durables, of a smaller than average increase of the clothing and food consumption and of the increase in demand for machinery and electricity due to the international boom of investment activity, and to the spread of synthetic materials. The similarity of world-tendencies can be proved also by the fact that considering all European countries the share of the food processing in industry decreased annually by almost 4 per cent, the textile industry by one per cent, whilst the rate of engineering and the chemical industry increased by 3—4 per cent per annum.

Concerning thus the structure by industrial branches, a success can be reported in liquidating the old industrial backwardness and onesidedness and, *for the first time in the economic history of the 19—20th centuries, the structural development of the Hungarian industry could follow the modern world tendencies.*

The structural progress of the industry was, in spite of its basically healthy main tendencies, not free from contradictions due mainly to the autarkic efforts and to the low level of the international cooperation.

Development of some basic branches

There were extreme efforts to develop the *basic-industries; basic material manufacturing.* The effort to satisfy to the greatest possible extent the demand for heating and raw material due to the forced industrialization required the development of mining and the metallurgical industry at highest costs. The way of the development started in the fifties was partly determinative for the sixties as well. The development of the mining branches, especially the forced expansion of coal mining was one of the phenomena opposed to world-wide tendencies in up-to-date industrial development. The number of workers

employed in mining was decreasing all over the world, but in Hungary it doubled and represented, as a remarkable sign of backwardness of the employment structure, 11 per cent of total employment. (As opposed to 5 per cent in the advanced countries and even much lower employment rates in the countries with the most developed mining industry.) In the investigated period the output of coal more than doubled: by 1955 it reached an annual 22.3 million tons while in 1938 it was 9.4 and in 1950 13.3 million tons. The peak was in 1964 with an annual production of 31.6 million tons. The energy consumption of the country was covered mainly by coal. The share of coal in world energy consumption reached its peak before the World War I, with a share of 80 per cent, afterwards it kept on declining, and in the decade preceeding World War II, the utilization of the hydrocarbons exceeded 20 per cent. The Hungarian energy-consumption structure represents a backwardness of many decades since, even at the end of the fifties, she had a 75 per cent share of coal and the hydrocarbon consumption reached a share of one fifth only at the beginning of the sixties. At the same time coal production showed the worst efficiency in world comparison, due to the geological conditions.

In the structure of the energy utilization and with this in the field of the coal-mining, there was a change only in the mid-sixties, due to the definitive recognition of the situation, and to the new tendencies in the economic cooperation of the socialist countries. The share of hydrocarbon consumption increased even between 1958—64 only by an annual 1.4 per cent, but after 1965 by 2.6 per cent. By 1967 the share of coal within the total energy consumption fell to 58 per cent and, due to the increased oil production and imports, that of hydrocarbons rose above 36 per cent, which showed a sudden and radical change. Only after that could the reduction of coal production take place. (in 1965 only by 0.4 per cent, in 1966 by more than one million tons, i.e. by 3.5 per cent) by closing down the mines producing the most expensively, which relieved the national economy. The mining of ores developed much faster, and increased ten times. The most important role was given to bauxite mining, its production expanded two and a half times — approaching 1.5 million tons. One of the greatest achievement of the Hungarian industrial development was closely connected to this, i.e. solution of the development problems of the bauxite and aluminium industries which had not been solved previously for decades. In spite of the discovery of the bauxite mines in the midst of the twenties and their important development and European level production between the two world wars, this industrial branch could not emerge from its merely raw material production state. This fact could not be changed by the very modest alumina and aluminium plants established in the thirties. Though the war efforts created the basis of a processing industry, the difficulties of this industry remained still unsolved. Namely, the satisfaction of the huge electricity requirements of the aluminium industry was im-

possible with the poor electric energy resources of the country and this created an obstacle in the way of progress.

Growth in the production of electric power was very fast in the period of industrialization since from an annual 3 billion kWh in 1950 it reached by 1967 12.5 billion kWh, i.e. it increased by more than four times; nevertheless, this increase hardly corresponded to the average growth of industrial production. The lack of reserves caused considerable economic damage because of the frequent lack of electricity in the fifties. Though in the sixties Hungary succeeded in liquidating the shortage in electric energy, still there were no satisfactory reserves available. In this situation, the development problems of the Hungarian bauxite and aluminium industry met with permanent and long-term obstacles. Thus in this field the most evident requirement was international cooperation. This recognition was reflected by the Hungarian—Yugoslavian bauxite-aluminium-agreement, concluded still in the reconstruction period, in 1947, which intended to launch the development of this industrial branch in close connection with each other in the two countries concerned. Because of the well-known political problems this plan was removed from the agenda after 1948, and in the fifties the autarkic development of the bauxite and aluminium industry was launched.

Following this, between 1946 and 1954 the alumina production increased to 24-fold and aluminium production to 15-fold. But the energy demand of this industrial branch created more and more an insolvable problem since this branch of industry claimed more than 13 per cent of the total Hungarian electricity production between 1950 and 1955 (the same rate in the countries producing aluminium is about 2—9 per cent), and beside the insufficient production of electricity this was the basic cause of the frequent and grave energy shortages and consumption problems. Further development was obstructed not only by the lack of energy but by the high production cost of electric energy in Hungary, which made the input cost relations very disadvantageous and also demanded a revision of the total aluminium program.

Economic cooperation was the chance which offered a possible solution as an ever more definite effort in the economic policy of the socialist countries from the end of the fifties. It was on this basis, that the idea of international cooperation was repeatedly raised and the Hungarian-Polish bauxite and aluminium agreement was worked out and signed in 1960; a similar agreement of major importance was concluded with the Soviet Union in 1962. Basically these could solve the procurement of an amount of aluminium proportionate to the Hungarian bauxite supply and alumina production, enabling at the same time an accelerated development of the bauxite and alumina production, and the launching of the aluminium processing industry, without developing the extremely expensive and unavoidably non-efficient aluminium metallurgy.

Whilst in case of the aluminium industry finally Hungary succeeded in finding a possibility to avoid the disadvantageous establishment of metallurgy, as regards the whole period of industrialization as well as the whole of metallurgy this cannot be stated at all.

The development of *metallurgy* was one of the most contradictory fields of the industrial growth following the war. This branch of industry, especially because of the economic policy of the fifties, increased its employment by more than 70 per cent, and the net value of the production increased by three times. The greatest weight within metallurgy is represented by ferrous metallurgy and its growth results were extremely high. The iron-ore production increased from an annual 0.3 million ton of 1938 to 1.5 million by the mid-sixties, and the steel production from 0.7 million ton per annum to almost 2.7 million tons. (Steel production grew in comparison with the one in 1950 by two and a half times.) However, this branch of industry did not attain an up-to-date technical level. The cost of the constructions required quite a big share from total investments, altogether 40 per cent, and even half of the amount spent on equipment was not used directly for technological equipment proper, but for complementary investments (to ensure water supply, gas stations, warehouses etc.).

Owing to the development of ferrous metallurgy, this branch — as opposed to the developed industrial structure — has a considerable share in the industrial production. In 1966 13 per cent of value added was produced by metallurgy (at factor cost) against a 7 per cent share in the highly developed countries. Of course, this fact does — by no means — mean as if metallurgy, or within that ferrous metallurgy, were an overdeveloped branch. Indeed, on the basis of the whole economic growth in the investigated period, the level emerging by the end of the sixties corresponded as a matter of fact to requirements of the national economy, and at most some overdimensioned internal capacities can be compared to the insufficiency of some others.

The contradiction is rooted in the fact that the development of metallurgy took place on a very narrow domestic raw material basis, not with satisfactorily up-to-date techniques and a considerable part of investments were engaged in this field, unsuited for the Hungarian conditions, very much material intensive, and requiring also little labour. At the same time, this high share in the total production kept alive not up-to-date, backward structural proportions and this in itself was an obstacle to the progress towards an up-to-date development conception.

The most important feature of structural backwardness of the Hungarian industry is now the very high share of the mining and metallurgical industries compared to the international level, reminiscent of the level at the turn of this century, with its 1/4 share in the value added.

The most characteristic positive feature of industrial structural changes

was the fastest possible growth of the engineering industries and that of the chemistry, corresponding to the world tendency of industrial development.

Employment more than doubled in the *engineering (metal-working) industries* and, using 17 per cent of the total industrial investments, capacity was substantially expanded, due to which the production of this branch rose to six-fold. The various branches of engineering showed, however, very different growth rates from each other. The production of the machines and machinery-equipment, electrical machinery and mass products increased by five and a half times, production of transportation equipment increased somewhat more than fourfold, while in the telecommunication and vacuum-technical industry production increased 12-fold and in precision engineering 17-fold. (All above figures refer to the net production value.) The rapid growth of the engineering industries involved, at the same time, an internal structural change within the industrial branch concerned.

The most important part of this change can be found in the leap which meant a growth from the 10 per cent (combined) share of the telecommunication and vacuum technical industry in 1950 up to a 25 per cent share by 1966, whilst the share of the transportation equipment decreased from 35 per cent to 27 per cent, and, at the same time, the combined share of machine building, metal mass products and electrical engineering fell from 56 per cent to 48 per cent.

The structural changes within engineering helped a healthy modernization and worked towards a structural development within engineering corresponding to the conditions in Hungary, namely, instead of the development of material-intensive branches the most labour-intensive ones came to the fore. The production of the engineering industries can satisfy demands in many fields completely. The greatest results were reached — among other things — by building up the production of consumer durables — radio and TV sets, washing machines, vacuum cleaners, refrigerators etc. — of these, domestic requirements are essentially met. The huge demand of investments for machinery is satisfied to more than 50 per cent by domestic production. The most important incentive of the outstanding increase in the production was the almost doubled export activity of this industrial branch. Machinery exports contributed more than one half of the total industrial exports in the sixties, a remarkable high rate even by international comparison. Taking into consideration the West European countries, a similar rate could be observed only in the GFR. This considerable export activity of the engineering industries, — exceeding the maturity of the Hungarian industry and engineering — was due to the fact that several engineering branches could develop oriented to the extremely wide market of the socialist countries, which enabled the creation of up-to-date large-series production as well as to develop some new production lines. Nevertheless, at the same time these markets did not

raise satisfactory demand as regards techniques, up-to-dateness and quality and the lack of such demand made the Hungarian engineering products non-competitive in many countries, their export share to the capitalist countries was only 4—5 per cent of the total machinery exports. In this fact, an important role was played by the internal structure of the engineering industries which did not correspond to the conditions required by trade with advanced industrial countries.

The chemical industry developed relatively slowly in the fifties and up to 1956 has hardly doubled its production and thus lagged behind the world rate of growth in chemical industry. Afterwards its development accelerated. Having obtained between 1950 and 1960 1/10th and from the beginning of the sixties 1/6th of total industrial investments it could increase its fixed assets to six-fold and its employment to three-fold. From the end of the fifties the accelerated growth reached a rate one and a half times or twice as fast as that of industry as a whole, conforming thus to the world average, and finally increased its value of output to more than nine-fold compared to its initial level.

In the centre of the development of this industrial branch were primarily the chemical fertilizers, plastic materials and the pharmaceutical industry which was not quite in line with the international trends in this branch. The most developed branch of the chemical industry carrying on a remarkable export activity was the pharmaceutical industry which approached the level of the economically developed countries regarding both technical and production level.

However, it shows a backwardness by international standards that the chemical industry's share in the total value added is still only 8 per cent, which is far behind the 13—17 per cent share in the industrialized countries.

Though most of the *light-industrial branches* and the food processing attained in the period of industrialization a non-negligible development, yet — as we have pointed out — their share in the total industrial production slowly decreased. These branches lagged behind the average growth rate of the industrial development as a whole, and particularly behind the fastly increasing branches. The textile industry with its one and a half-fold increase in employment could raise its production to somewhat more than double its volume, the leather-industry with a three-fold employment increased its production four times while the paper-industry, doubling its employment, increased its production by three and a half times, the printing-industry by not quite three times, and the food processing, with a 70 per cent increase in employment, raised its production by more than three and a half times. Against the slow development of the earlier leading branches of food processing (the sugar, and wine-industry hardly doubled its production, whilst the milling industry could not even reach this level) as the most important factors of modernization the food-preserving industry (with several new

branches) increased its production already by 1960 four and a half times and, due to particularly fast development in the sixties, it exceeded the level of 1950 nine times in the second part of this decade.

The food-industry satisfied not only the demand of the domestic market but almost 1/4th of its production was exported in 1967, playing an important role even in total exports. Some branches of the light industry are also strongly export oriented.

So there was a considerable change in the structure of the Hungarian industry. Amongst the main branches there was a decrease in the share of the food processing against its almost 29 per cent before the war — for the sake of comparability we consider here the whole gross production — by 1965 it fell to 18 per cent, whilst the share of the engineering industries increased from 9 per cent to 25 per cent. The other industrial branches do not reflect any considerable change. The important change in the proportions of the major branches were accompanied — as we have seen — by structural changes within some branches, mainly in engineering but not less in the paper or the food industry, which were at least as important.

The new proportions of the branch structure finally approached, as regards the main features, the industrial structure of the industrialized countries in a remarkable way.

Development level within the structural framework; technical-technological level

On the technical level of the second part of the 20th century the internal proportions of the individual branches are more important than the ratio of the industrial branches to one another. Around the turn of the century, the structural features of maturity were almost completely characterized by the shares of metallurgy, engineering, the textile industry etc. since the internal structure of the various branches was in the main simple and onesided.

In the second part of the 20th century the global share in production of the engineering industry does not mean too much in itself, it is void of contents without the ratios of the internal structure of the industry. But even the internal ratios could denote certain frames only, which may equally cover world level production or obsolate product types, or backward technical level. Industry has become incomparably sophisticated.

Furthermore, beside the general importance of this question in the cases of countries starting their development rather late it is extremely important to investigate the background of the structure. It is, namely, a general feature of these countries, that the economy, and within that the structure of industry much earlier showed some features characteristic of the developed economies,

than did the production volume per capita or the technical-technological level and quality. In other words: there is a considerable contradiction between the last mentioned qualitative elements and the structural features, the first does not correspond to the second. Of course, the development of the industrial structure exceeds the real industrial development in Hungary as well. The concentration level is definitely higher than the real large-scale production level of industry and, because of this, a high level productivity and factory organization can not fill the framework of concentration. In the structure by branches, the share of engineering in total production, its role in industrial exports has reached the level existing in the developed countries, without being able to compete with them in the field of cost input or with its products. The great production volume appears sometimes in the form of little usable and fastly deteriorating products.

Analyzing the development path and level of the Hungarian industry, we cannot neglect characterizing the development level within the structure, primarily the product-structure, quality, in one word, the characteristics of the technical-technological level. Regarding the aspects of technical-technological development, impossible to describe with indices, in the period of the overambitioned industrialization no such progress was reached in the field of the qualitative increase of production and in that of structural reorganization, indeed, technology stagnated at some places, and the quality of the products did not reach the requirements of up-to-dateness. In the first period of industrialization, closing on the whole at the turn of the sixties-seventies, when extensive development was dominating, new contradictions emerged, accompanying the considerable increase of the production volume: some qualitative indices show extremely slow progress, even stagnation, and infrequently a partial decline.

The change of a historical importance embodied in the industrialization was due primarily to the utilization of the extensive resources available in the economy and mobilizable to maximum extent with the applied economic strategy.

The main source of growth were the big investments as well as the massive employment of new labour. Whilst employment increased by 5.5 per cent on average per annum, the *productivity* i.e. the average rate of increase in production in terms of man-years was 4 per cent over the whole period (in the forties 3.1 per cent and in the sixties 5.3 per cent). The gross production value in man-years doubled in industry as a whole.

With this fact Hungary belonged to those countries where the share of the increment of industrial production due to the increase of productivity was the lowest. This was also indicated by the fact, that the output per unit of productive fixed assets did not improve but grew worse in the decade following 1958 (there are no reliable data available for the preceding decade) and that calculated for the stock of machinery and equipment it fell back in 1966 to 84

per cent of its value in 1960. The average decline in the utilization of equipment was rooted mainly in the fields of mining, metallurgy and construction. In most of the socialist countries the growth rate of productivity was faster than the increase of employment, whilst in most of the Western industrialized countries following the intensive way of development, employment increased only very slowly, by 0.5—1.0 per cent per annum, though the production in man-years increased by 3—4 per cent. Even the chemical industry, the most developed one as far as its productivity level is concerned, — where labour productivity increased three times between 1950—1967, and this is more than 1.7 times higher than the average productivity in industry — is lagging behind international standards. In the chemical industries of the highly developed socialist countries one and a half times higher, in the more developed capitalist countries twice, and sometimes four times higher levels of productivity may be found.

Thus, the productivity level of the Hungarian industry increased not only slowly, but its growth considerably lagged behind the productivity rate of the socialist countries, especially behind that of the developed capitalist countries representing originally a higher level.

Thus in the field of the industrial productivity, in spite of the enormous increase in volume, the relative backwardness of the country increased. The fact that while among 35 countries Hungary occupies the seventh place as far as industrial employment per thousand inhabitants is concerned, it is standing only at the 22nd place as regards per capita value added also indicates a low productivity. In the mid-sixties the West-European countries exceeded the Hungarian industrial productivity level two times.

Backwardness was due partly to the general low efficiency of *investments* but mainly to the low technical level of the industry, stagnating and even deteriorating in various fields. The efficiency of the investments deteriorated considerably since there was a great time-gap between the investment-decision and the putting into operation of a certain plant, because earlier too many investment projects were started and, secondly, because of bottlenecks in construction capacity. Some of the projects were completed with a delay of 2—4 years. It occurred many times that by the time the plant was inaugurated it had become obsolate, though it was considered up-to-date when decision was taken. However, the fact was even more general as well as more important that small financial resources were left for machinery investments due to the heavy engagements of resources in the construction investments. Frequently even the recently installed machines were not at the highest technical level available and, as a result of the development efforts, even the necessary machinery replacements were realized only in part. The depreciation percentages were defined in the investigated period irrealistically low — in the fifties even 16 years were sometimes prescribed instead of 10 years usual in the in-

ternational practice, for instance in the case of some machines used in the textile-industry. In the period of fast development even the key industrial branches were not modernized as far as their machinery was concerned, but got older at an accelerated rate. The average age of the machinery in the machine-building industry was 11 years in 1950 and it became 14.2 years in 1965. In the production of vehicles the age of machinery increased from 12 to more than 15 years. 54 per cent of the forging equipment was older than 25 years. Half of the spinning machines in the textile industry, 2/3 of the power-looms, 60 per cent of the shoe-making machinery are out of date already. The backwardness as opposed to the most up-to-date direction of technical progress is characterized by the fact that the automation level of the cotton-industry in the CMEA countries is 59 per cent on average and the same figure in the developed West European countries is 80 per cent, this rate in the Hungarian cotton industry is only 27 per cent. The automation level of the wool-industry is only 6 per cent.

Amongst the obstacles of the required development of the *technical level* an important role was played by the autarky in the field of research and developing activities in the investigated period and so did the very narrow economic cooperation with the technically more developed countries, as well as the very narrow import quotas for advanced techniques. This is convincingly proved by the licence-fees payed, and that sum approached even in the mid-sixties hardly 3 per cent of total research and development inputs, while in the FRG or France with research and development possibilities incomparably better than in Hungary; this ratio was more than three-fold; as for Austria, it spends more than 60 per cent for purchasing licences from its funds for research.

The development level of the industry within its structure, the technical-technological level thus lagged behind the growth of the industry and behind the development level expressed by its volume and structure.

All these indicate most definitely *the central tasks of industrial development in the period to come:* to ensure the future fast development of the industry on the basis of the enormous increase in volume reached, with the aid of a maximum improvement of the efficiency of production and of the technical and productivity level; though this growth should be more modest than that of the past two decades. Also the progress of an industrialization period relying on the intensive method should be supported by well chosen investments of smaller volume but of maximum efficiency.

НЕКОТОРЫЕ ВАЖНЕЙШИЕ ТЕНДЕНЦИИ В ПОСЛЕВОЕННОМ РАЗВИТИИ ПРОМЫШЛЕННОСТИ В ВЕНГРИИ

И. Т. БЕРЕНД

Автор вкратце останавливается на предистории развития промышленности в период до освобождения, а затем излагает основные черты экономической политики, проводившейся после освобождения. Концепция экономического развития в течение первых двух десятилетий состояла в достижении возможно наиболее быстрого темпа индустриализации, а в последнее время постепенная реформа системы управления народным хозяйством предполагает осуществление дальнейшего прогресса в условиях более высокого технического уровня и возросших требований к качеству продукции.

Быстрая индустриализация привела к существенному повышению роли и значения промышленности внутри народного хозяйства: промышленность стала ведущей народнохозяйственной отраслью. Однако, численность занятых в промышленности, в результате политики полной занятости является выше необходимой, скрывает за собой недостаточное использование рабочей силы и проливает свет на техническую отсталость промышленности, в особенности в области вспомогательных видов промышленной деятельности.

В дальнейшем автор рассматривает структурные изменения в промышленности. Возрасла концентрация производства, однако в значительной мере в результате организационных изменений, мероприятий по централизации. В целом структурное развитие промышленности соответствовало современным мировым тенденциям, а подавляющее большинство противоречий возникло на почве стремлений к автархии и низкого уровня развития международного сотрудничества.

В отличие от наблюдаемой повсеместно в развитых странах структуры потребления энергии в Венгрии является высокой доля занятых, а в результате неблагоприятных геологических условий также и себестоимость в угледобывающей промышленности. Металлургия (за исключением алюминия) является второй противоречиво развитой областью венгерской промышленности, где развитие происходило на основании исключительно узкой отечественной сырьевой базы и не вполне современной техники, что привлекло чрезмерно большую часть имевшихся ресурсов.

В противоположность этому благоприятно развивалась добыча руд. Необходимое для производства алюминия большое количество электроэнергии обеспечивается в рамках международного сотрудничества.

Развитие машиностроительной и химической промышленности происходило в соответствии с мировыми тенденциями индустриального прогресса. Производство товаров длительного пользования по существу удовлетворяет отечественные потребности, однако важнейшим стимулом развития данной отрасли являлось почти удвоившееся производство на экспорт.

Хотя доля легкой и пищевой промышленности внутри всего промышленного производства постоянно сокращается, эти отрасли, наряду с удовлетворением отечественных потребностей, осуществляют также и значительную экспортную деятельность.

В заключительной части своей статьи автор затрагивает вопрос сравнительного исследования степени развития подотраслей, входящих в состав отдельных отраслей промышленности, с уделением особого внимания их техническому и технологическому уровню. Наряду с количественным ростом и структурным преобразованием промышленности неоднократно имела место стагнация техники, качество изделий не достигало современных требований. Темп роста производительности труда значительно отстал от такового как в социалистических, так и в капиталистических странах.

Все это весьма настоятельным образом определяет центральные задачи предстоящего этапа в развитии промышленности: на основе достигнутого объема производства, путем максимального повышения эффективности, технического уровня и производительности труда, следует обеспечить и в дальнейшем быстрый, — хотя и более умеренный чем до сих пор — рост промышленности и посредством тщательно определенных, несколько меньших по объему, но максимальных по эффективности капиталовложений заложить основы интенсивного этапа индустриализации.

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A. HEGEDÜS

ECONOMIC REFORMS, AND THE FUNDAMENTAL TYPES OF CONTROL SYSTEMS ESTABLISHED IN SOCIALIST SOCIETIES*

The author, after studying economic control system in statu nascendi in a previous article, [1] examines in this paper three basic types of economic control system in the socialist societies, as consistent ones and confronts them with each other. He comes to the conclusion that none of the basic types is dominating the whole economy of the individual European socialist countries. But structural and functional properties of the individual branches should determine what alloy of the basic types should be used.

The microsociological school which — similarly to microeconomics — generally does not study enterprise, and within this, bureaucratic phenomena in their wide social and economic interrelations, is a wide-spread one in sociology. In this school, therefore, the sociological approach in the Maxian sense is, by necessity, driven into the background, and psychological factors particular to the so-called socio-technical school but to be also found in other social research approaches like factory organization, industrial economics, etc., come to the forefront. Today not only Marxists, but various bourgeois directions also criticize these trends, and are striving to transcend them. We are not exaggerating if we state that phenomena within enterprises, and thus also relations within the specialized management and control agencies — if really of a sociological nature — remain incomprehensible, if we do not take into consideration the socio-economic macrostructure in which the given enterprise operates, including the concrete economic system.

In this same way, a sociological analysis of the true operation of central economic control and management is impossible without first understanding the macrostructure, including primarily the operation of the concrete economic system and its effect on economic life.

My study would only like to emphasize a single aspect of this extremely complex sphere of topics: I will try to analyze the concrete system of economy through fundamental types whose economic sub-systems (finances, labour and wage economy, etc.) and institutions, and their vertical and horizontal relationships mould into a unity in a consistent manner.

* Excerpt from the author's book: Bürokrácia vagy szakirányítás. ("Bureaucracy or Specialized Control") now under publication.

The necessary heterogeneity of the concrete system of economy, and the fundamental types

Economic thinking still inclines to visualize *a concrete system of economy* as some sort of homogeneous type ruled by *uniform* principles and methods of control, or if that is currently *not yet* the case, then it assumes their assertion must be aided.

If we compare the economic systems which developed under socialist relations from the viewpoint of the kind of management and control methods characteristic of them, then in essence we will find three fundamental types appearing in different "alloys" in the concrete economic systems of the different historical eras. [2]

a) Leadership of the "natural" administrative management type, where it is not primarily money, but physical indices in terms of which the goals of the activities of the individual enterprises are prescibed together with the means which may be taken advantage of in order to realize the given goals. The fundamental principle of this management system is: to plan, account for, and distribute everything in kind. This means that the institutes and enterprises operate with very little autonomy, as organizational units of a national economy envisaged as a single enterprise.

b) The so-called independent economic accounting system (khozraschot) with the important special feature that, in comparison to the above type, the role of money increases at the expense of the physical indices. In this system the major goals which enterprise management must aim at take the form of different indices expressed in terms of money, such as the value of gross production, the value of per capita production or, the rate or sum of enterprise profit. These indices — which are alternately brought to the forefront in different periods — have a common problem which stems from the fact that they are built on such prices of products and services which were not formed by economic life, but are the result of decision processes taking place in the different specialized control agencies (I call them administrative prices), and they are invariably founded on the "weighted" mean of *ex-ante* and *ex-post* cost accounts.

In other words: even in the most varied forms under this system the essence of price formation is that the government covers the input needed for producing those products or performing those services which it considers necessary (prescribes them in the plans), and the competent administrative agencies legitimize these inputs. At the same time, enterprise profits are built into the prices as some predetermined percentage. This means in fact, that, in a system of economy built on enterprises operating as independent accounting units, every enterprise, works *in principle* at a profit and *in practice* too, enterprises operating at a loss occur only rarely and exceptionally. This at the

same time reduces the different indices based on profits to complete fiction, just as it does the index of gross production, and productivity.* In this system the major aim is to raise living standards by reducing production costs and prices.

c) The third possible type of the control system of the economy is built on socialist enterprise. This differs from the above enterprises operating as independent accounting units first of all in that the prices of its products and services depend on economic and market relations, and not on whether some authority recognizes the justification for the prices, attained on the basis of *ex-ante* and *ex-post* calculated inputs and profits. In this system it stands to reason that there may be — and there must be — enterprises operating at a deficit, to put it in a simplified way: those which are incapable of producing on a technical and organizational level that would enable them to keep their costs below the marginal costs developed in the competition among products. Under this system of economy the major aim is to develop a pattern of production with which, using the labour power available, the highest use-value and exchange-value can be produced.

How the different fundamental types became predominant in different historical eras

The three fundamental types of economic control systems outlined here did not follow one another in historical sequence, nor did they take on a dominant role by replacing each other. What we called the "natural" system of administrative management historically developed first in the Soviet Union. The historical and economic situation which followed the October Socialist Revolution practically demanded the introduction of an all-embracing centralized system, where money did not play any important role either in accounting or control. This necessity appeared in the "natural" administrative management and control system of war-communism. [1]

The outlines of independent accounting, the "khozraschot" system of economy developed while working out the new economic policy (NEP) and, compared to the preceeding stage, it ensured for enterprises incomparably greater independence, while promising a change-over to planning, calculation and distribution in terms of money. But within a very short time — before the principles of the system of economy built on independent accounting could be consistently introduced in practice — the concrete system of economy became rigid, and in many respects returned to the principles of the previous economic

* A question deserving separate analysis is how this phenomenon distorted and continues to distort the evaluation of the growth in national income, and what was its role in forming the opinion that the progress of the socialist countries is quite dynamic enough, even without perfecting the systems of economic control and management.

system, of physical planning, calculating and distribution. An analysis of the extent to which this return was necessary would take us far. In my opinion, it cannot be considered more than an alternative of development which became predominant over a given historical situation and as a result of struggle between different social forces, but it was by no means the only road that could be followed.

The "natural" system of administrative management was in essence the one introduced in Hungary in the early 1950's, or rather, this was the one that obtained the dominant role in the concrete economic system. The principle of independent accounting was asserted rather in various declarations, but not in practice. This can be easily proven if we study any of the economic subsystems mentioned previously. The changes which took place in the management system following 1956 can be called the genuine advance in practice of the principle of independent accounting.

The strivings for reform which today can particularly be observed in the Soviet Union and the German Democratic Republic — whose perhaps most radical representative is Professor Liberman — can, in fact, again be considered nothing else than a return to the economic system built on independent accounting outlined in the new economic policy of Lenin. While this system retains the method of control thorough plan instructions, it radically reduces the number of indices and increases the role of indices expressed in money at the expense of those expressed in physical units, but leaves the administrative prices unchanged. Under this system enterprise independence can be extended substantially, without, however, developing them from "independent accounting units" into independent "socialist enterprises".

Hungary undertook a large-scale experiment in progressing beyond this position, by working out the principles for the new system of economic control and management, and beginning with its implementation. No matter how important we consider the resolution on this matter, today we should not make the mistake of imagining, even in this respect, that the institutional order of economic life was some sort of homogeneous, monolithic system. We must be able to see the fact that we can equally find in it sectors (branches of industry, commercial functions, etc.), in which the administrative management, others in which the independent accounting, and still others in which the application of the guiding principles of the new management system, the creation of socialist enterprises suits our aims best, because, depending on the specialities of the individual territories, different solutions may ensure the greatest effectivity. This means that the development of the concrete economic systems in the socialist societies of today faces – particularly if the level of economic development attained is taken into consideration — not the alternative to choose between two ways, but a search must be made through the simultaneous and side-by-side application of different economic systems, for an optimum which

will choose from the principles and methods of economic systems developed historically so far the one most suited to the specialities of the individual economic fields, the optimal one. This means that it is not always the same form among the fundamental types listed above which will play the dominant role.

But we can by no means say that either in social consciousness or even in economic thinking we have gone beyond the state which is only capable of moving in "pure economic systems", and considers it impossible that management methods and institutional forms, and systems of decision and information must and can be formed in accordance with the specialities of the branches. (We can also find the concept of socialist ownership relations viewed as a homogeneous, monolithic whole behind the "homogenizing" concept of the concrete economic system. Another of my studies deals with the criticism of this concept and with the analysis of the different forms of socialist ownership [3].

Economic systems thus interpreted place the debate on centralism, very often handled as a choice between two alternatives, in a completely different light.

The economic systems sketched out above stipulate in essence the field of motion for both centralization and decentralization, though, obviously, they do not determine them unequivocally.

This is why I cannot accept the wide-spread view that the essence of the economic reforms taking place in the European socialist countries is decentralization.

This view was stated recently by two West German left-wing economists. Altveter and Neusüss, when they stated: "The fundamental principle of the economic reforms is that bureaucracy decentralizes itself if it is forced to acknowledge the inefficiency of its own centralized form. This decentralization is the essence of the economic reforms" [4].

In my opinion neither centralization, nor decentralization are part of the essence of the economic reforms, but simply phenomena accompanying different substantial changes, one of the most important fields of motion of which is a change in the role of the fundamental types listed above in the framework of the concrete economic system.

In this approach one of the most essential features of the new system of management is by no means decentralization, but the fact that in many fields of economic life economic bodies of the socialist enterprise type are being established instead of administratively controlled institutions, or in place of, or alongside enterprises operating as independent accounting units, and this changes the entire structure in substance.

It is natural, of course — and this is the meaning of the expression "alongside" used in the previous sentence — that this principle of management

cannot be given a dominant role in the whole of economic life. This cannot be done for two primary reasons:

a) There are — and always will be — fields of economic life where, for structural reasons, it would serve the purpose better to maintain or establish administratively controlled institutions or enterprises operating as independent accounting units (war industry, electric energy production, state railways, to mention only the most characteristic branches);

b) There are a number of comparatively important branches in the economic and industrial structure developed under the old economic system, where — if the principle of socialist enterprise were introduced — it would cause tremendous difficulties in the operation of the given branch, causing a substantial drop in home production, and this would be an unbearably great economic and social shock not only to the given branch but to society as a whole. (I consider mining and metallurgy to be such branches.)

As a détour, and perhaps grotesque analogy, I would like to mention that the appearance of the "administrative character" and "independent accounting unit" can clearly be recognized in the development of the modern capitalist economy, too. (The former can primarily be found in the form of capitalist government ownership, and the latter in the framework of multi-national organizations.)

If I were not afraid of being considered an adherent to the mechanic and determinist convergence theories I myself have critized, I would say that while, there, the capitalist enterprise system is being complemented with the first two economic types; here, the latter appears as socialist enterprise alongside the other two which ruled alone until now. (But this analogy is an oversimplification, and does not effect very important dimensions of social life. For instance, the former development retains in essence, bourgeois private property, while the latter does away with it completely.)

Even from what I have said so far, it becomes already quite clear that the concrete economic systems* which have developed in the European societies contain — assuming healthy progress — all three types. The question therefore, is above all which one of the different methods of economy and types of institution should be given preference in *the different branches and different historical periods* and which one should be given a dominating role taking specialities into consideration in the different branches. In this way, for me the conscious heterogeneity of a concrete system of economy would seem to be a victory of rationality over the experimenets toward homogeneity which were ideological in character and today seem already irrational.

* Those socialist countries where primary accumulation, together with a forceful limitation of fundamental necessities must be yet carried out in the future, raise a completely different problem, and thus the conclusions analyzed in my study do not refer to them in any way.

If we start off from the heterogeneity emphasized within a concrete system of economy, then the types raised earlier may be distinguished from one another only as categories for analysis, while in practice they appear jointly, though with different weight, within the concrete economic systems of the individual countries. The character of this alloy is influenced beyond the struggles of social forces with different interests by a series of objective factors (the weight of foreign trade, the role of the production of war materials, etc.).

Fundamental types of systems of economy, and the institutional system

From the social point of view the three fundamental types of economic system demand the development of control agencies of very differing character even on the highest level of management — the ministerial level.

a) When the first type is dominant, guiding bodies are stamped with the mark of government administrative activities, with a particularly great role given to planning bodies and various budgetary directive and control departments. The emphasis, as I have already said, is on planning, accounting, and distributing everything, and this requires the creation of an inflated central apparatus. These form a hierarchic order with the central planning office at the summit.

b) When the second type receives a dominant role, the economic ministries assume an industrial management character and along with indices now expressed terms of money, different types of financial economic management and control bodies come to the forefront, substantially increasing the role of central pricing, price control bodies, and accounting sections in the ministries. Within the hierarchy of central economic management bodies, the central planning office and the ministry of finance share the first place.

c) In cases where the third type is dominant, the industrial management character of ministerial agencies disappears, and gradually the ministries are no more responsible for the enterprises under their supervision but only for the main guiding lines of development for the various branches. This means that the economic ministries increasingly engage in economic policy, and their activities in actual guidance are completed primarily through indirect methods.

Due to a particular division of labour, the rivalry between the central planning office and the ministry of finance disappears, for the former gradually reduces its interference with the everyday practice of economic management (this role is given to financial managing bodies), and in its activities long-term planning obtains a central role.

Perhaps the change is even greater — and in practice can more easily be recognized — in the social character of enterprise management. In the

first type, the head of the enterprise or institute is, in fact, the government official number one. (This definition was given by Stalin.) In the second type technical and economic work becomes stronger within enterprise management, thus under this economic system the technical and economic qualification of enterprise managers receive increased emphasis. However, in the third type, socialist enterprises need managers who, along with their technical and economic knowledge — or often even at the cost of these — must have a broad-scale knowledge of the market, together with high-level coordination capabilities and experience, who are able and not afraid to make definite decisions, even in cases where grave risks must be taken. (We can say that this type of manager is in keeping with the ideal picture drawn of the socialist manager.)

Regarding institutions, we must be able to feel yet another important change, which has a tremendous effect on economic life. This is the difference in the character of direct economic ties among institutions in the fundamental types described earlier. The "natural" administrative system of management is dominated by vertical ties, while in socialist enterprises the ruling form is the horizontal, and in this field, too, the system built on independent accounting is between these two extremes.

Changes in the sub-systems of the concrete economic system

The three fundamental systems of economy sketched out — primarily to serve analytical purposes — naturally determine the major features of the economic, and economic control sub-systems operating within them.

A careful study of these is particularly important for functional specialized management, whose work includes creation of the economic sub-systems. Yet, the working methods of central control and management bodies are substantially different, depending on which of the economic systems plays a dominant role in the given field, or which system it would be most purposeful to apply. In order to show this I would like to provide a very sketchy — and, therefore, no doubt very exaggerated — review of changes in the sphere of activities of only three functional special territories. They are: planning, financial management, and labour management, or in a broader sense the field of labour.

In the administrative management system, *planning* — as I have already stated — takes place with care extended to everything, and this to a great extent is marked by a striving to calculate everything in physical units, with emphasis much more on accurate fulfilment of directives for distribution and production, than on foreseeing opportunities, or on expert choice of the means necessary for setting and meeting goals. Even if there are longer-term goals,

they are determined far more by political and ideological motives, than by economic calculations. Money, and indices built on prices play a comparatively small role. A natural concomitant of this system, if it becomes predominant, is a striving for autarky, and its tacit aim is to satisfy calculated needs through home production, as far as possible, which means that planning also strives for a physical balance in the autarkic sense.

The introduction of the principles of independent accounting — if it is truly introduced, not only declared — relieves planning from a number of detail jobs, letting questions of perspective, and together with it, the viewpoint of economic efficiency, come to the forefront. In this system money begins to play its own role in economic management, but its function is still strongly limited, for all indices expressed in money are tied to producer and service prices determined by administrative agencies, which means that administrative management decisions dominate over economic factors.* For this reason it is almost by necessity that — when illusions regarding the role of money are not fulfilled — planning returns to its former methods, and even if it does not use as many indices, or plan figures issued as compulsory ones, but simply as guides, it would again like to regulate economic activity in detail, by using physical indices. (In the 1960's when, in essence, the independent accounting system was the ruling one, this was how the production target expressed in physical terms returned again and again, and how the methods of material allocation in physical units survived in the most important respects.)

So we can conclude that only the realization of the principles of the new economic control system truly relieves planning from work on details, enabling it to deal with truly long-term planning and questions of perspective, instead of bringing about equilibrium in the balances. This becomes *an actual possibility if the autarkic, physical-balance approach in planning is replaced by a striving for dynamics, and economic manegement* gives up autarky not only in its declarations but in reality as well.

The particular feature which distinguishes the three systems of economy with respect to *financial management* is perhaps even more significant.

In the administrative management system financial management's role is no more than carrying on budgetary economy. Based on detailed presciptions it has to ensure that directives in all fields of the economy be fulfilled. The emphasis is — similarly to planning — on detailed accounting, on prescriptions extending to cover everything, and on controlling their fulfilment. However, financial control in the strict sense of term is nevertheless frequently driven to the background by the emphasized role of physical indices, and is in fact often directly tied to them. (A good example for this is how the well-

* By saying this I certainly do not mean to deny that in certain cases administrative prices can approach economic and market prices, but the essential features of the system prevent this from becoming prevalent.

known relative wage fund control was tied to production plans measured primarily in physical terms.)

In the system built on independent accounting, management of the financial economy of enterprises operating on the "khozraschot" principle becomes separated from the financial management function dealing with budgetary institutions — which is still valid where the administrative management system is retained. This is the beginning of the advance of financial specialized agencies at the expense of the planning apparatuses which had almost total power in the administrative management system. Conforming to the character of the economic system, determination of production prices, based on *ex-ante* and *ex-post* calculation of production costs, on which the entire independent accounting system is built, come to the forefront. Profits, reduction of production costs, increasing productivity are all tied to the specialized management function of pricing. This system cannot be understood without reviewing the mechanism of pricing itself, together with its actual and undeclared consequences. This is the reason why even in the independent accounting system, financial management may appear to the enterprises as a true and direct power. In general, producer and service prices are the results of bargaining between different institutions. Financial plans are coordinated at *direct* talks, where maximum or close to maximum bonuses and profit shares are aimed at. During the year, or by end-year corrections, actual reality is approached to this concept. But this is still hidden, distinguished management, and aside from that, it may appear that the old hierarchy has remained unchanged on the different levels of management, with the planning offices at the summit.

Only the third economic system, based on socialist enterprise, can create the opportunities for financial bodies to use the following dual function too, to manage economic life, openly and without covering up:

1. by working out so-called indirect control solutions, and together with this, by working out economic tools which, when applied, make it possible to realize the aims developed during the process of planning, and along with this;

2. by the use of financial operations (for instance by granting credit) which do not automatically follow plans going into every detail, but require special economic decision from financial bodies.

One of the very fundamental effects of the new system of economic control is that the planning function is concentrated — as I stated previously — to a great extent on perspective planning, and within this, primarily on defining aims, while it gives to financial specialized management and control apparatus the job of working out the tools needed to realize the aims, together with the practical performance of economic transactions which are necessary for production and distribution.

In the latter respect, however, a special contradiction develops between the socialist enterprises operating under the principles of the new economic system, and the banks, since the latter continue to operate under the administrative management system. So while a, by no means unimportant, part of the companies develops into true enterprises, bank organization remains a budgetary institution.

A solution of this contradiction can hardly take place without the creation of enterprise-banks, which will not break the government's financial monopoly, just as the foreign trade monopoly does not suffer from the extension of export-import rights to enterprises of different character. In this respect it is worth-while to distinguish government and institutional monopoly.

But perhaps the effects of the three economic systems can be more clearly seen in the field of labour management, *and manpower and wage economy.* A necessary consequence of the administrative management system is the formation of the so-called tariff-system combined with fixed staff numbers which, in fact, tries to realize its aims through prescription and control of physical indices. In practice this means that central plans not only prescribe staff number data for enterprises and institutions but, in the form of compulsory presciptions, they also centrally determine the different tariff groups and, in the same way, the maximum and minimum wages payable to each group are stipulated, while regulations fix the applicable wage forms, and attempts are made to work out so-called norm-bases centrally. In Hungary this system was valid until 1956, that is, as long as the physical administrative management form played the dominant role in the concrete economic system. Following this, largely because the principles of independent accounting began to become valid in Hungarian industry, the average-wage control system was introduced. This system can fit into the economic system in a coherent way, for it gives the enterprise comparatively great independence in wage economy, and it also ensures, through average-wage prescriptions, a regulated level of wage costs proportionate to production prices — which come about in the decision process of specialized management agencies and are the foundations for independent accounting. It is quite obvious that average-wage prescriptions can not yet be dispensed with in a system based on independent accounting. This is not a question of "good" or "bad" as it has been raised in economic debates, but simply a necessity which cannot be avoided; without changing the essence of the economic system only retreats to different kinds of more detailed regulators can be made (for instance staff number prescriptions which are frequently repeated.) This has occurred in every case when it has become obvious that within the given economic system the regulating role of money in the economy has not produced satisfactory results precisely because of administrative price setting.

The change-over to the new system of economic control, where the

principles of socialist enterprise can be realized, is the only means to create the opportunity for economic management to give up centrally prescribing average wages and even more detailed regulations, including staff number prescriptions.

The fact that this "giving up" is still a very slowly moving process even today indicates that the effects of the new system of economic control are asserted only to a small extent, and because of this, together with attachment to the accustomed — which is frequently met — the realization of new solutions only takes place slowly. Above all this is the reason why the implementation of the principles of labour-power and wage economy under the new system has not yet been achieved. The process is also slowed down by fears felt in the labour affairs apparatus — which by necessity has become oversized under the administrative management and independent accounting economic systems — of losing their functions.

From what we have explained above, it can be concluded that since, by necessity, our industry contains elements of all three economic systems and there will continue to be — even in longer perspectives — fields where one or the other system plays the dominant role; and planning, financial and manpower management will also remain equally heterogeneous (just as will the the systems of investments and technical development not discussed here); we will be able to find elements of all three solutions — for instance in wage economy the tariff system, the average wage prescription, and planned manpower and wage economy, through indirect means. *Experiments at homogenization* — which we can find with respect to just about every economic subsystem — are not in accordance with actual necessity or with principles of rationality.

Development of economic consciousness and fundamental types of economic systems

The interest relations of the economic management which have developed in the different institutions and enterprises differ substantially in the three systems of economy which, naturally, is expressed in the ideologies they represent. The latter permeates economic thinking, in other words, economic consciousness.

Perhaps it will be more expedient to start from the world of appearances which everyone has experienced, and is therefore easily proven, and approach the sphere more difficult to reach, interest relations, and to prove the fact of the particularity of specialized management, so difficult to accept.

In order to simplify this world of appearances, which is so complex, even in its way of existence I have tried to find the most important economic

guiding principles motivated by the ideology of all three systems of economy I have sketched out.

If we wish to compress the characteristic features of the individual economic systems in single expressions, then we can say that

the administrative management system is characterized by the *quantitative approach*,

the independent accounting system by strivings toward *reducing production costs and improving the quality of commodities*,

and the socialist enterprise by the aim of increasing enterprise and national economic *efficiency*.

Economic thinking mixed with ideology — which has always emphasized its own scientific and rational foundations — is not only a consistent part and a product of the individual economic systems, but is in close connection with the socio-economic positions of the individual socialist countries.

The post-war reconstruction period, unexploited opportunities stemming from the extensive development of industry, the underdeveloped character of the specialized management and control system were all factors in favour of the victory of the administrative management system, and the role of the quantitative approach. I do not mean to say that there were no other possible alternatives, but under these circumstances there can be no doubt that this solution had the best chances. The "quantitative approach" and its qualitative supplement, the principle of "planned proportionate development" sprouted the mistification of trying to ensure the physical autarkic balance at all costs and, as a direct result of all this, the striving for autarky.

Emergence of the independent accounting system — whether in theory or practice — is connected with a change in socio-economic circumstances, with the arrival of a situation demanding to economize on labour, and with specialized apparatuses capable of realizing higher level management. Under such circumstances, in the economic system built on independent accounting, the question of reducing production costs almost automatically came to the forefront, and within this, indices intended to express efficiency: enterprise profits, production value per worker or per man-hour (it has been economically proven that neither one nor the other expresses the actual social efficiency of the work). All of these indices — as experience has richly proven — can be substantially improved by deteriorating the quality of the products and — if the market does not have the power to prevent it — this phenomenon will advance despite all bureaucratic control. This is how the joint demands for reducing production costs and improving product quality become tied together as an indication of the effort to overcome the contradictions between them.

This ideology, in comparison to the quantitative approach, brought the economic sciences to development, to a true flowering. But the essence of pricing (specialized administrative pricing) remained a taboo, and distorted

indices intended to indicate productivity, profits, and national economic efficiency into fictive numbers. These, at the same time changed the economic–mathematic methods, which had won international fame, often into senseless abstractions.

The criticism of practice proved to be stronger than that of theory (though the latter too was expressed with increasing definiteness — in Hungary perhaps, first in the works of Tibor Liska), which increasingly demanded that a distinction be made between enterprise profits, growth in productivity, etc., taking place under administrative producer and service prices, on the one hand, and actual enterprise efficiency as appearing with market (economic) prices, on the other.

Development of practical criticism was aided by the general recognition of the fact that the economy was not sufficiently effective regarding the dynamics of development. This process of realistic self-analysis was aided by the circumstance that a comparatively important proportion of our products are exported, which means that the actual social usefulness of enterprise activity is revaluated in the strict sense of the term in different foreign trade transactions, and particularly in western relation. It became tangible day by day, just how large unequal quantities of labour we were exchanging at our own expense. In this respect no small difficulty was caused by the fact that the role of foreign trade enterprises in the institutional structure made this confrontation a strongly indirect one, difficult to feel for a long time.

Ideological and practical realization of socialist enterprises whose effectivity is no longer measured by specialized administrative (bureaucratic) but market (economic) prices, gave a new direction to the development of economic thinking, and rise to the appearance of the "informed economist" who either directly or indirectly demands a radical revision of economic thinking, and of the ideology which to a great extent determines it (he even attacks theses formerly considered completely unshakeable, such as securing full employment or preferences asserted in the prices of fundamental consumer goods).

This — if we look at only this segment of advance — may perhaps look dangerous from the aspect of working out and realizing the socialist alternatives of social progress. Nevertheless, the appearance of this trend in economics is promising a comparatively rapid escape of socialism from the depressing rule of economic necessity. This development projects the development of relations under which increased dynamics will be the factor creating the material foundation for the increased realization of the principles of socialism.

Nevertheless, we must also take note of the fact that the economic systems of the European socialist countries — if they are built up purposefully — cannot be homogeneous, but by necessity must retain the elements of all three systems of economy. They appear, and play essentially different

roles depending on the different national economic and industrial branches and the specialities of the branches. For economic thinking this means that all three ways of approach mentioned previously will be retained and reproduced, by necessity, but none can become totally dominant.

We assume that in the future progress will not appear in the form of one direction being substituted for the other, but that they will develop in confrontation with one another, without the possibility for the emergence of a monopoly and — despite contradictions with one another leading to sharp and frequently serious conflict — they will serve in the final analysis the reinforcement of the realization of socialist values and the rational point of view.

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ЭКОНОМИЧЕСКИЕ РЕФОРМЫ И ОСНОВНЫЕ ТИПЫ ХОЗЯЙСТВЕННОЙ СИСТЕМЫ, СЛОЖИВШЕЙСЯ В СОЦИАЛИСТИЧЕСКИХ ОБЩЕСТВАХ

А. ХЕГЕДЮШ

В статье автор продолжает развивать мысль о вопросах прежней статьи в историческом аспекте. Там основное внимание уделялось состоянию хозяйственной системы социализма «in statu nascendi», здесь же сопоставляются три основных типа, рассматриваемых как последовательные системы.

Автор — первую очередь в качестве категорий, употребляемых при анализе, — различает: *а)* систему государственного управления, основывающуюся, по существу, на натуральном хозяйстве; *б)* систему хозяйствования, строящуюся на хозрасчете, в которой натуральные показатели замещаются стоимостными, связанными, однако, с ценами на продукты и услуги, устанавливаемыми органами управления, и, наконец, *в)* систему хозяйствования, строящуюся на социалистическом предпринимательстве, где методы прямого управления заменяются косвенным воздействием, и вместо цен, устанавливаемых органами управления, действуют рыночные (экономические) цены.

В статье анализируются расхождения, проявляющиеся в различных хозяйственных подсистемах (финансовой, снабжения, оплаты труда и т. д.) вышеперечисленных основных типов.

Автор считает, что в европейских социалистических странах ни один из основных типов не следует применять в качестве доминирующего для всей экономики. Каким образом, совмещать различные основные типы должно решаться структурной и функциональной спецификой отдельных отраслей.

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T. NAGY

ON THE EXPEDIENT FORMS OF REALLOCATING CAPITAL IN THE HUNGARIAN ECONOMY

The article discusses what new forms should be created or what combinations of existing new forms should be developed in the Hungarian economy to promote a more rational allocation, a planned flow and a more efficient utilization of capital within the framework of the existing model of economic mechanism.

It is an important and highly debated problem for both theory and practice to find the best forms of regrouping capital* in a socialist economy — more precisely in its form where planned central control is organically linked up with the functioning of the market mechanism — necessary for a rational allocation and efficient utilization of means in the interest of society.

The economic concept of capital regrouping is not exactly defined. What I consider a regrouping (flow or movement) of capital is *any change in the distribution of the total (real) capital of society among the individual enterprises,* excluding the investment of self-earned capital by any enterprise into itself. Thus, without wishing to give an exhaustive enumeration, a regrouping of capital** occurs in socialist economy when

— the state grants capital to enterprises or financial institutions from its different budgetary revenues (mostly originating from the partial withdrawal of incomes formed in enterprises);

— enterprises obtain credit through the bank system or transfer means to other enterprises in the same way;

— unions of enterprises reallocate capital among their enterprises;***

— enterprises transfer capital directly to each other in money or in kind with a final or temporary character;

— enterprises join for certain purposes or perhaps create joint enterprises;

* Unfortunately, no unequivocal or generally accepted term has developed for denoting the values invested or to be invested in production and distribution under conditions of socialist commodity production (that is, for the equivalent of "capital"). The denominations of assets, funds and capital are usual. Though under capitalist conditions the notion of capital is inseparable from exploitation and its use may thus give rise to misunderstandings, English-speaking readers will find it easier to follow the article if the term is retained in spite of its above connotation.

** I do not distinguish regrouping from regroupment. I consider, namely, as incorrect the view which wishes to reserve the latter concept for the movements of capital which are centrally determined (prescribed) by society, because it considers only the latter to be "conscious" processes, and denotes the other "spontaneous" movements by the word regrouping. I believe that the concept should be discarded which believes that only those processes are conscious that are going on according to central prescriptions and everything else is spontaneous.

*** The Hungarian unions usually have no such right.

— new enterprises are created or existing ones amalgamate, or one fuses with other, or existing enterprises are broken up into smaller units.

In my opinion, it would not be expedient to discuss the forms of capital reallocation (flows) under socialist conditions and the improvement of the existing forms independently of the realistic possibilities given by the situation. I do, obviously, not mean thereby to belittle the importance of research and analyses of a wider horizon which are indispensable for scientific "foresight". Yet, what practically matters now is to formulate a correct approach to the expedient improvement of existing forms under the present and future conditions of our economy. This is a highly important task if we want to "complete" our economic mechanism, now more than two years old, and to implement more consistently the basic principles of the reform. In this place I intend, therefore, to deal with improving the forms of capital reallocation within the framework of the present model of the Hungarian economic mechanism.

Improving the forms of reallocating capital is, in itself, of course, not sufficient. The deficiencies of the systems of income regulation and material stimulation, the weaknesses of the price system, the rather general lack of competition among sellers, the great central drain on the investment resources of the country, and the excess demand on the market of investment goods act against the efficient use of capital and do not favour the development of new forms of capital reallocation, the favourable effects expected from them. Thus, we must take steps in several fields to implement the basic principles of the new economic mechanism, and this can be done without changing the model.

The fundamental problem in further developing the forms of capital reallocation is this: *what new forms and what combinations of existing and new forms is it expedient to develop in order to promote a more rational allocation of capital in the economy, its better planned flow and more efficient use.**

Some interrelations between capital reallocation, the price system and the system of income control

Enterprise capital is created by turning incomes into capital. The development of enterprise income and the possibility of turning it into own capital, however, depends on the price system and on the system under which enterprise

* In the autumn of 1968, the Division for Economic Policy of the CC HSWP commissioned a working group to develop proposals for more flexible forms of movement of social capital and for methods of regrouping the decentralized development resources. The working group submitted its proposals to the Economic Working Panel of the CC HSWP where it was duly discussed in October 1969. When writing this article, the author used the proposal in question as well as written documents prepared later by government agencies on promoting the flow of capital, in the course of work aimed at improving the control system.

incomes are taxed away by the state, or complemented, and on how their use is regulated in general. That is precisely why the problems and expedient forms of capital reallocation cannot be judged irrespective of the system of prices and income control underlying the flow of capital.

The most important interrelation between the reallocation of capital and the price system is that a good price system is a precondition for a rational allocation of capital and for the capital movements promoting it, and that without the latter a good functioning of the price system cannot be secured.

The proportion of capital *formed* in enterprises and branches does not coincide with that of the capital *to be invested* there, even under the "best" price system, that is, best suited to an advanced socialist commodity and monetary economy in which plan and market are organically united. The least the factual equilibrium prices prevailing on the market can be expected to do is to express (and this is by no means little) the *present* differences in the efficiency of various economic activities through the deviations among the profit rates of enterprises and branches. Investments, however, point to the future, and so, when deciding on them, the *future* prices and profit rates must be taken into account if the most efficient allocation of capital is to be approached. Thus, the deviation in capital formation due to present differences in the profit rates may be small in one place, but in another place it may be considerable as far as the most efficient allocation of investment is concerned. This means that reallocation of capital is necessary anyway — even with the "best" price system.

If, however, the price system is such that there are many random factors in the dispersion of profit rates over groups of products and enterprises, if many prices are not equilibrium prices and the dispersion of the profit rates contained in them often fails to express the differences in the economic efficiency of activities, then this price system artificially exaggerates the extent of necessary capital reallocations and does not sufficiently promote a rational allocation of capital either with its present or with its future prices. This is the situation with our present price system.

This can and must be changed gradually, by creating conditions for enterprises under which the equilibrium prices developing on the internal market (mainly the producer prices) approach the proportions of export and import prices on the world market. This process could be facilitated by the development of a market integration among the CMEA countries, by the unfolding of the active role of commodity and money relationships in their international economic relations, in the course of which also the price proportions of this regional market so important for us would come closer to the world market price proportions.

Another deficiency of our price system, and an important one for the

rational allocation of capital and the capital movements promoting it, is that — owing to the low price level and to the partially free allocation of foodstuffs and services — the price level of the total consumption by the population in our country is artificially low compared to that of the means of production in countries on a similar level of development and carrying on a (capitalist or socialist) market economy. The first thing this involves is that the economic activity and development going on in these fields is regularly subsidized, and the budgetary revenue necessary for this purpose is drawn away from the net income of enterprises in other fields. The second is that the nominal wages and thus live labour is too cheap for enterprises (even with the 25 per cent tax on wages to be paid by them) in comparison to the prices of investment goods — particularly machinery —, which renders mechanization difficult and puts a brake on intensive investments.*

The system of income regulation must, quite obviously, meet many kinds of — partly contradictory — requirements. One of them, and an important one at that, is that the system should promote and not hinder the rational allocation and regrouping of capital. In this respect some essential weaknesses of our present system of income regulation are conspicuous:

— The present method of regulating wages (personal incomes) does not secure a satisfactory interest of the enterprises' collective in an efficient utilization of labour and of the means available, or in increasing productivity, or in an intensive enterprise development, in fact, it exerts an adverse influence, in a certain sense, on rational labour management and investment activity. This must and can urgently be changed.

— Most state supports (grants and preferences) serve the maintenance of less efficient productive activities, allowing an unduly long time of grace, that is, they act as a conservative force.

— The obligatory division of enterprise profits into sharing and development funds in a predetermined proportion prevents the enterprise from using its profits in different proportions for increasing personal incomes and investment even if this were favourable for its functioning and development in a given period, on the one hand, and, on the other, it may lead to the formation

* There is a certain amount of misunderstanding about this problem, even among specialists. Let us, therefore, illustrate our statement "with a model". In a closed socialist country, where the rate of social net income comprised in producer prices is the same in every branch of production, there is no taxation, no improductive sphere, producer prices are equal to consumer prices and the workers buy everything they consume at such prices with their nominal wages. Thus, the whole net income is used for accumulation in the country. Let now the situation change in so far as the workers may obtain part of their consumption at reduced prices or free of charge, while the producer prices and the other consumer prices do not change. This is possible only if the nominal wages of the workers are *lower* than in the previous situation, and so are the production costs of the enterprises but the social net income realized by the totality of enterprises is greater and part of it is taxed away by the state to finance the free consumption or that offered at reduced prices. The second case is characteristic for Hungary.

of redundant development funds in some enterprises or even branches and may necessitate higher product prices for securing these funds.

We are not in a position to eliminate all these disadvantageous features of our systems of prices and income regulation overnight. Some longer time would be needed for that. During this period the improvement of the forms of capital regrouping, the spread of new forms and the unfolding of their advantageous effects are also restricted.

The role of the state budget in the reallocation of capital

In a socialist system of economy the regrouping of capital directly or indirectly *through the state budget,* including the enterprise sphere of the economy,* is necessarily a task of considerable importance. Without it, the total investment process cannot be centrally controlled and influenced according to plan, while this is one of the most important features of the planned development of the economy.

Concerning investments, the (central or local) government decision may be aimed at:

— the obligatory implementation by enterprises of certain concrete investment projects;

— state support to certain development objectives and, through that, at influencing the investment decisions to be taken by enterprises.

The state budget

— may entirely or partially finance the investment projects on which government decision has been taken;

— may influence investment subject to enterprise decision, by preferences and grants;

— may boost and later complement the funds from which the bank system can grant investment credits (and perhaps offer other kinds of capital allocation).

Today we can not yet safely tell what the share of government-decided investments should be in the enterprise sphere and *what* role the state budget should play in influencing the enterprise-inspired investments under advanced socialist commodity and money relations. It may, however, be stated that *it is expedient to reduce the present proportion of government investment in the enterprise sphere and, simultaneously, to change the methods by which the socialist state performs its task in influencing enterprise investments through the budget.*

* The enterprise sphere should be understood to mean that part of the economy where economic activity is organized in the form of enterprises (including cooperatives). The "fiscal" (State Railways and Post) and the "communal" enterprises (water and gas supply, public sanitation, etc.) are border cases.

For the purpose of centrally influencing enterprise-inspired investments, differentiated methods of budgetary support (preferences and grants) should be worked out. These may include tax reductions augmenting the enterprise development funds, reduction of amortization to be paid into the budget, exceptionally also state grants increasing development funds to enterprises taking part in implementing development objectives determined by the government. Efforts should be made that enterprises compete for such supports. It would not be correct to couple these state measures with individual concrete investment projects since this would essentially amount to a centralization of the decision authority, and enterprise responsibility would be restricted.

The correctness of this standpoint may be supported by the following reasoning:

— in the course of improving the economic mechanism — with the help of the indirect regulators, without concrete and obligatory investment decisions — the socialist state will be more and more *capable* of influencing the investment activity of the enterprise sphere in directions favouring the planned development and structural changes of the economy;

— by applying indirect measures of control it can be better secured that the development tendencies favouring planned economic growth should be implemented through efficient (profitable) investments;

— the central determination of the desirable development directions themselves and the way of their implementation will be closer controlled by the present and future market, and the danger of voluntarism will be reduced;

— responsibility for investment decisions will increase.

In the enterprise sphere it seems desirable, for the time being, to restrict the *individual major investment projects* (which are approved by the government and are entered with their major indicators as instructions in the national economic plan) essentially to the emphatic development of the extraction of raw materials, of the production of basic materials and energy and of some other fields and to finance these as has been done up to now. It seems correct to restrict also the *lump-sum government investments* to the field of infrastructure. It is not desirable to include into this scope investments of a productive character and thereby to isolate them from market effects. Even with these ideas imposed, the proportion of investment projects decided by the government remains high enough in the period of the 4th five-year plan; it is estimated to amount to about half of the total investments in the economy (owing to the growing proportion of non-productive investments, including housing) and to about two-fifths of all industrial investments (owing to the great share of government investments in the projects already started and still in process).

The role of investment bank credits in the regrouping of capital

The granting of investment bank credits will enable

— the credited enterprises to concentrate their investments, to bring them forward in time and thus to raise production, to reduce costs or to change their production pattern, etc. *earlier;*

— the enterprises and branches regularly alimented with credits *constantly* to use additional capital.

Unlike other forms, the reallocation of capital by investment bank credits has the advantage for the national economy of combining the autonomy of enterprises in decisions on investment and their correctly assessed material interest with the possibility of centrally surveying and influencing the investment process. We must, therefore, make efforts to impart *a much greater role than at present to bank credits in financing investments, in the regrouping of capital in compliance with the principles of the reform.*

There are, however, limits to the capital-regrouping capacity of bank credit. The restricting factors are the following:

— Part of the total social surplus value (social net income) meant for investments is centralized by the budget and is spent directly on investment financing. The greater this proportion, the lower the value of surplus value remaining with the enterprises and the smaller the proportion of credit in investment financing.

— The propensity of enterprises to incur debts by raising investment loans, and the rational measure of this indebtedness. The shorter the expiration of the credits, the more the enterprises become indebted with an identical sum of credit, and the longer the term of credits, the more credits they are able and inclined to raise.

— The expiration of the investment bank credits. If the bank does not extend longer-term credits or grants only small volumes, then those cannot or can hardly be used for investment projects which yield relatively slowly returns or which are too big in comparison to the existing capital of the enterprises.

— The capacity of the system of bank credits to regroup capital and to promote the realization of the most efficient investments is limited also if the profitability of the project weighs little in the competition for the investment credits and if too much weight is attributed to the size of the development fund, formed in the enterprise independently of the investment, in comparison to the sum to be invested. This is the situation in our country at present. The "poor" enterprises cannot obtain long-term credit even if the project promises high profits. The main reason lies in the small total volume of long-term credits that can be granted by the bank, and this causes sharp competition for claiming credit. For a claim to be met by the bank it is by far not sufficient, e.g.

if the enterprise undertakes to amortize the credit asked for an investment project with 20 per cent (that is, sufficiently high) profit essentially from the increment of the development fund accumulating as a result of the investment in question and contributes to amortization from other money sources only in small amounts.* In this case, namely, the long term of repayment it can offer will disqualify it in the competition for credit.

If we consider the system of income regulation as given, and as determining the rate at which the development fund of enterprises grows with growing profits, then the possible extent of expanding the credit band in the next plan period (that is, the share of credit financing within total investments) is *fundamentally* determined by the possibility and expediency of reducing the proportion of budget-financed investments in the enterprise sphere. It depends, namely, on the latter, to what extent the purchasing power of enterprises for investment goods can (and may) be additionally increased by increasing the volume of investment credits at the time of expanding the credit band, considering that this purchasing power grows at any rate owing to the growing development funds of the enterprises.

According to calculations corresponding to the approved concept of the fourth five-year plan — which, however, rely on rather uncertain foundations for the time being — the share of credits in financing industrial investments may considerably exceed the small proportion of 1969. This would enable the bank, in the first place, to grant credits for 24—30 months — according to the directives of the reform of the economic mechanism — and thus to satisfy the claims on medium-term credits of creditworthy enterprises essentially without limitations. Secondly, it seems, that the average amortization period of long-term investment credits could be extended to 7—8 years in general, to which about two further years should be added, during which investments will start being implemented, credits granted, but no repayment will be due as yet.

This extension of the expiration of long-term investment credits will — even if the present system of income regulation and credit ranking is maintained — increase the weight of the profitability of planned investments in ranking claims for credit and thus in allocating additional capital through credit. The extension of the due-date from 5 to 8 years involves that, e.g., with an investment project promising 20 per cent profits, the share of the increment of the development fund due to the investment will rise in the amortization from 50 to 80 per cent and the share of the development fund independent of the investment will shrink from 50 to 20 per cent in the amortization.

* In the present system of income regulation, an investment project yielding 20 per cent profit secures only such increment in the development fund for the average enterprise as will enable it to repay the investment credit within no shorter a period than about 10 years.

The extension of the credit band may involve, of course, not only favourable effects but may — beyond a certain limit — invoke the danger of enterprises incurring too great debts. If, namely, the amortization of investment credits and other obligations were to immobilize too great a portion of the enterprise development funds, the remaining free funds would not be sufficient for enterprises to carry out quickly and flexibly the necessary changes in fixed assets, modernizations, smaller development on their own decision.

The considerable extension of the credit band and, simultaneously, the lengthening of the period of repayment of long-term investment credits are preconditions for bank credits to have their say in capital reallocation. The share of bank credits in the total investments of the enterprise sphere during the 4th five-year plan depends fundamentally on the portion of the total investment capacity of the country claimed by the individual major investment projects and lump-sum investments which the government will decide upon. This depends, to no small extent, on how the state organs called upon to take decision can withstand the pressure of branch interests and conceptions. The growth of the credit band also depends on the development of decentralized sources of credit, that is, on whether the enterprises, councils, etc., immediately utilize their development funds or rather keep them in the form of money.

The task of investment credits to regroup capital for financing investment projects promising highest profits is restricted by the system of credit quotas and credit preferences. Since in the coming plan period the functioning of the market will still be rather imperfect, and the differences in the profit rates shown by prices will, in many cases, not yet express real differences in efficiency, it will not be possible in the future to dispense with credit quotas and strong credit preferences. Attention must, however, be called to the fact that too detailed and rigid quotas in allocating credits and preferences for too many objectives considerably mitigate the selection of objectives that qualify as efficient on the basis of performances in the competition between enterprises.

Direct reallocation of capital among enterprises

In developing the forms of capital reallocation it is an important task to expand the possibilities of *direct* regrouping among enterprises (i.e. without the intervention of the budget or the credit system) and to find new forms. Without this, no satisfactory flexibility of capital reallocation can be achieved, nor can it be readily adapted to the changing demands in our economy. The scope of movement of enterprise initiatives should also be expediently expanded in this way, with an eye on ensuring social interests by regulating the forms of such capital movements and of interest relations.

The most important things to be done in this field are: adopting new rules for the association of economic organizations; allowing enterprises to transfer — finally or temporarily — their development funds to others for investment purposes; partially introducing commercial credits; expanding forms enabling the reallocation of the physical elements of enterprise fixed funds.*

It seems expedient to develop two fundamental forms for the *association* of economic organization (as against the many existing ones at present) according to the intensity of relations, and depending on whether or not the association results in a separate legal entity.

a) The simpler form is the *simple association*. The members conclude an association contract to achieve a common goal claiming economic activity, to cooperate and to make the necessary material assets jointly available to this end. If the association contract contains no other provision, the profits or losses deriving from the economic activity of the association are distributed among the members according to their financial contribution made. The members of the association divide the untaxed profits among themselves and pay taxes according to their own financial system. The capital used and the wages paid are accounted by the operating firms.

It will be expedient to extend the scope of those entitled to bring about associations to the economic organizations which operate within the broadly interpreted "enterprise system". Accordingly, association contracts may be entered into by enterprises, cooperatives and by budgetary plants linked to the budget with their net surplus, but not by the councils and the ordinary budgetary bodies. Namely, the profit motive and the risk of losses cannot be reconciled with the tasks of these latter bodies, nor do they possess the means necessary to cover losses.

b) A higher form of association — equally created by contract — is the *joint enterprise*. This is an autonomous legal entity. It enforces its rights and performs its obligations autonomously, the founders are not directly responsible to third parties. The fixed and working capital of the joint enterprise is covered by the founding members from their development funds and they may hand over also part of the fixed and circulating assets from their own stock.

It will be expedient to establish the scope of those entitled to found a joint enterprise in a way to make it identical with the scope of those entitled to bring about a simple association. It follows that state enterprises and cooperatives may also create joint enterprises. In principle, it would be correct if the system of financial conditions of such joint enterprises and of those created exclusively by cooperatives were identical with that valid for the

* At the time of writing this article, the competent government bodies have already taken decision in these questions.

state-owned enterprises in the same branch. This would be the only way to secure equal economic requirements and conditions of competition for each economic unit in its activity. Since, however, the associations created under the law on producers' cooperatives were not formed on this basis, and since it is an important social interest to avoid any break in this movement, it seems expedient to work out and apply compromises, taking care that no unjustified advantages should follow from the differences in the systems of conditions.

With a view to maintaining the guiding role of the state in economic control, it should be stated that joint enterprises cannot be founded without the preliminary consent of the Minister of Finances and the permission of the competent minister. It is also necessary to enter the joint enterprises into the enterprise register and into the trade register as soon as the enterprise is classified in a branch of the economy which determines, at the same time, the system of financial conditions under which it is to operate. The right of supervision and control exercised by the founding state body over other enterprises is exercised by the founding members over the joint enterprise. The members share in the profits of the joint enterprise in the manner and to the extent determined in the foundation contract. If this allows it, the founders may extract part of the profits of the joint enterprise before taxes, augmenting thereby their own profits (equally before tax).

It is, however, important to secure that the joint enterprises should have their own financial interests, or else disturbances would emerge in their functioning. It should, therefore, be stated that the founders must not tap the sharing and reserve funds of the joint enterprise, and also the extent of profits to be extracted by the founders should be limited.

The new rules of regulation outlined above relate exclusively to associations with domestic interests. The problem of joint stock companies and limited liability companies with partial foreign interest, of the rules governing their possible foundation and functioning must be investigated separately.

Obviously, association for joint economic activity is not the only expedient form of direct capital regrouping among enterprises; another form is when enterprise A transfers, finally or temporarily, monetary means (money capital), for purposes of investment,* to enterprise B already functioning and the investment is realized in the framework of enterprise B.

Such *final* transfer of capital is now legally not permitted in Hungary (except in respect of foreign-trade companies) but is tolerated in the form that enterprise development funds are transferred for investment. The unsettled legal status causes problems, namely, in respect of economic advantages which the enterprise may stipulate for its finally transferred capital. *Temporary* transfer

* That is to increase fixed assets and working capital.

(that is, the granting of credit) is neither permitted by law nor tolerated in practice.

In order to promote the rational allocation and utilization of capital *the enterprises should*, in the future, *be allowed both in practice and by law to transfer their development funds for investment purposes either finally or temporarily.*

A final transfer of development funds for investment may become necessary in cases, when, although enterprise *A* does not want to associate with enterprise *B* for joint economic activities, the size of its development fund makes it possible, and the development of production relations, the establishing of necessary cooperation or other advantages make it desirable to contribute to the investment necessary in enterprise *B*. In return, enterprise *A* may, of course, also stipulate to share in the profits of enterprise *B*.

A *temporary* transfer of development funds for investment (lending) differs from final cession inasmuch as the parties agree on the amortization and repayment of the capital and, instead of sharing in the profits, on the payment of interest.

By allowing temporary transfer, the relations between enterprises permit a quicker and more flexible satisfaction of certain development needs — which are difficult to assess centrally — than does a regrouping of temporarily free monetary means exclusively through the deposit-collecting and crediting activities of the bank system. Nevertheless, the monopoly of the socialist bank system in regular crediting activities is, naturally, maintained.

It is reasonable to impose legal restrictions on the final transfer of enterprise capital because state-owned enterprises should not be allowed to cede capital with a final character for investment to cooperatives without the consent of their supervisory bodies. Temporary cession, however, should not be conditioned by permission even in this relation.

In connection with allowing both final and temporary transfer of capital the anxiety may arise that some socialist enterprises may draw a rent-like income from other enterprises. This danger is negligible and need not be feared. First of all, there are plenty of good alternatives for investing the — mostly scarce — development funds within the enterprises and every enterprise — both socialist and capitalist — naturally concentrates on its own growth and development. Secondly, the alternative of depositing the monetary means with banks always "compete" with investing into another enterprise. On long-term deposits the bank pays an annual interest of 7 per cent. Thus, if the enterprise were exclusively interested in the size of the interest obtainable (or in that of the profit share, in the case of final transfer), it would surely not cede its capital to other enterprises for less than 7 per cent; in fact, — since it takes a greater risk by transferring capital than by keeping its money in the bank — it would ask for more, say 9 per cent. However, the investment must not result in a reduction of profitability in the enterprises receiving the capital either, if only

because this would have an unfavourable effect on personal incomes. Thus, the newly invested capital must earn a profit sufficiently large to cover a 9 to 10 per cent profit for the receiving enterprise over and above the share of the ceding company. This raises the requirement of achieving at least an 18 per cent profit on the capital transferred, which is not easy to achieve in reality.

Thus, what is likely to prompt enterprises to transfer their capital finally or temporarily, will not be the possibility of obtaining a rent-like income. Cession will be resorted to by enterprises maintaining production or trade relations with each other or by those wishing to establish such relations, if this involves other economic advantages for the one making the cession. The advantage may be of many kinds: enhancing or improving own production through cooperation, greater safety of production and sales, cheaper procurement possibilities, achieving technological development by joint efforts, etc.

The introduction of a *commercial credit* which has not been allowed up to now in our country may also be mentioned as a form of direct capital regrouping among enterprises. This would enable productive enterprises to grant commodity credit to their purchasers and help the selling of their products by financing the need for working capital necessary for that purpose.

In our present economic situation, however, it is doubtful whether or not it is correct to unfold commercial credit on a large scale and simultaneously to permit a refinancing by the banks of the commercial credits granted by enterprises. The objections are these: our domestic commodity markets are sellers' markets, and the needs of enterprises for circulating assets cannot be satisfied without imposing restrictions; with commercial credit becoming general, the efficiency of the necessary central control over the financing of circulating assets would be weakened, and the superiority of the sellers on the market would be further increased, since they would also use the possibility of granting commercial credit for making their purchasers buy the goods less in demand and thus conserve their undesirable pattern of production.

This argument really needs consideration. Therefore, the *introduction of partial (restricted) commercial credit*, that is, the granting of commercial credit by productive enterprises *from their own development funds* might be the only safe thing to subscribe to for the time being — and for a transitional period. The volume of goods placed in this way through commercial credit comes nearer to the final user, since it forms a stock with the buyer (and this is advantageous also for the national economy), while the credit financing, the keeping of stock reduces the other possible uses of the development fund of the producer. For this reason, and also because such crediting involves also risks, it may be assumed that the producers will be most circumspect in availing themselves of the possibility of granting commercial credit. Thus, commercial credit to be granted from development funds will usually not augment the power of the sellers on the commodity markets, but may, in some fields.

improve the harmony between demand and supply by solving the contradiction between continuous production and seasonal sales, and between great production series and wide range of choice.

The introduction of partial commercial credit must, of course, not affect the validity of rules relating to money circulation and to the order of effecting payments. Thus, if no credit agreement has been concluded between enterprises, the obligation to pay within 30 days continues to prevail.

As regards the direct reallocation of the *physical elements of fixed assets* (machinery, equipment, etc.) the state enterprises and cooperatives may, at present, transfer them to each other against payment (that is, may sell them), lease them or cede them for use also without payment. The selling of fixed assets is legally regulated, but there are unsettled legal problems in connection with leasing and cession for use. Since January 1st, 1968, the enterprises have not been given the possibility to cede fixed assets without payment (the so-called transfer through book credit) unless they apply for special permit.

It seems thus justified to *regulate the trade in the physical elements of fixed assets anew by complex law*. The lease of the physical elements of fixed assets should be allowed without any restriction, since this may facilitate the utilization of superfluous assets and may promote the creation of enterprises which would engage exclusively in the lending of fixed assets.

It is also expedient to allow the cession of physical elements free of charge — pending on permit in the case of cession between state enterprises and cooperatives. If cession against payment were the only form allowed, this would hinder transactions — on account of insufficient development funds in the receiving enterprise or because the price does not cover the net value recorded by the ceding enterprise which is obliged to charge the difference against profits — and hamper thus the regrouping of some obsolete fixed assets to fields with lower requirements.

Bonds and shares

In present-day capitalism the issue of bonds and shares is an essential form of capital regrouping. The first serves a temporary, the second a final regrouping of capital. Both are tradeable securities that can be bought and sold on the market.

With the aid of the *bond* its issuer (the state or other public body, big corporation, financial institution) obtains long-term credit. It is obliged to repay the loan to the owners of the bonds after some longer term and to pay interest on the loan. The traditional bond bears fixed interest to the owner. Recently, however, also bonds with varying yield are spreading (depending on the profitability of the enterprise), constituting thus a certain transition

from the traditional bond to the share. The issuer of the *share* (big corporation or financial institution) obtains non-repayable capital through the share. The owner of the share (its buyer) becomes partial owner of the enterprise issuing the share: in the form of dividend he shares in the profits and has the right to participate in determining the business policy of the enterprise.

It is interesting that the self-financing capacity of European capitalist enterprises is generally smaller than that of US companies, yet the procuring of capital by directly issuing securities plays a relatively small part in their financing. In France, e.g., on the average of the last years roughly two per cent of the investments of the so-called competitive sector was financed by issuing bonds and a further 6 per cent by shares (while bank credits served to finance 15 per cent and credit obtained from the government-controlled financial institutions amounted to 6 per cent of the total financing resources). In 1956, the total direct issue of securities (bonds and shares) constituted 8 per cent of total enterprise financing in West Germany. It is similarly interesting to note the great importance of bonds and the small importance of shares among the newly issued securities on the Western stock exchanges.*

	France	Sweden	Austria	USA[a]
	1968	1960—1968		1960—1965
Shares	27.5	21	25—30	15
Bonds	72.5	79	75—70	85

[a] Only the issue of private corporations.

The bond as a method of capital reallocation can be made into an organic part of our economic mechanism. Its main advantage is to reduce the liquidity of the national economic monetary resources, that is, to engage the available money resources for a longer time. The reallocation of capital by means of bonds becomes, of course, even more favourable if the monetary sources for investments of national-economic importance can be increased, that is, if those voluntarily signing the bonds renounce consumption or some investment which is not desirable (or efficient enough) from the point of view of the national economy.

The *issuer* of bonds may be the state, definite (regional) groups of councils, large enterprises, centres of cooperatives and financial institutions. Domestic buyers of bonds may be economic units (enterprises, cooperatives), the councils and private persons.

Decision on permitting the issue of bonds should be taken by an authority of the financial system with due regards to the purpose of the loan, to the

* Distribution of newly issued securities by types, in percentages.

expected efficiency of the investment, on the one hand, and, on the other, to the foreseeable volume of long-term money supply. A precondition for successfully issuing bonds is to secure a greater material advantage for the subscriber than what depositing in the banks offers. Such advantages are: higher interests and (in the case of individual subscribers) the payment of interest in the form of premia.

Bonds should be mobile. The form of domestic mobility may be selling or raising credit on the bond. Mobilization could take place through the financial institute authorized. Economic tools (e.g., interests and premia growing with time) can be used to counter massive mobilization.

Permission to issue bonds may not be expected, for the time being, to result in major regrouping of capital. It seems expedient to allow it first as an experiment, in a narrower scope and mainly for meeting local (communal) needs.

By issuing shares, a newly created capitalist enterprise, or one already functioning — particularly if it is sufficiently big and its functioning promises success — may obtain a capital which it need never repay (as opposed to the capital obtained in the form of credits). This permits a more intensive flow of capital into successfully developing enterprises and branches, and this is advantageous for a differentiated development of the economy.

Relying on these and other considerations, the question arises: would it not be possible to utilize the *shares* also in a socialist economy?

The genuie share assumes the existence of the stock market where anybody (thus also private persons) may appear as buyers and sellers, and postulates that shareholders are entitled to partial ownership in the given firm.

It is thus obvious that *the genuine share — apart from relations with capitalist countries — cannot be fitted into our present model of economic mechanism, that it cannot be an expedient form of capital reallocation in this system.* In my opinion, it is perfectly justified to object to the genuine share, even in the long run, because it would increase and institutionalize speculation and — what is even more important — would lead to a separation of labour and ownership which is undesirable from a socialist point of view.

In relations to be established with capitalist enterprises, it seems expedient to create domestic joint-stock companies in which capitalist firms would also have a share, in order to promote the import of operating capital. This special problem should be separately investigated.

Nevertheless, there are conceptions advocating the possibility and desirability of a restricted, mitigated market of shares and system of shares that would not harm the basic features and principles of the socialist economic system. According to one of them, the actors in this stock market would be the socialist holding companies or banks (the shareholders of the enterprises)

excercizing the "functions of the owners", furthermore the enterprises themselves in so far as they would issue new shares and offer them for sale. [1]

It may be assumed that there will be much discussion about the usability of shares under socialism. For the time being, however, I believe that the construction mentioned above relies on an overestimation and idealization of the role of the stock exchange under capitalism in respect of the rational allocation of capital and the correct evaluation of the enterprises, on the one hand, and, on the other, it outlines an economic mechanism of socialism that would not promote the realization of a really efficient central control, but would strongly restrict the autonomous management of the enterprises, the scope of their free decisions, their financial possibilities, the material interests of the enterprise collectives and would make it *ab ovo* impossible for the enterprise collectives really to participate in the management of the means of production and in the control of the managerial staff.

Creation of a Development Institute

Certain problems of capital flow cannot, or can only unsatisfactorily be solved by applying the forms and methods of capital reallocation hitherto discussed and proposed. Such problems are the following:

— The practical application of differentiated methods for subsidizing investments, the concrete implementation of state control over investments.

— The "raising of the capital stock" becoming necessary in certain enterprises, that is, financing of development which is too big for the existing capital of the enterprise.

— The continuous creation of small and medium-sized enterprises (or the liquidation of such), which requires allottment (or extraction) of capital and involves rather great risks.

Functional ministries, supervisory bodies and banks granting credit are only to some extent suited for these tasks, and so are the methods of direct budgetary subsidies, financing and bank credits.

Therefore, in my opinion, it seems expedient to bring about a new institution for these tasks in the framework of the bank system, a Development Institute. This Institute would have two fundamental functions:

1. To organize and implement state control over investment processes (financing government-decided investments, granting budgetary preferences and subsidies, etc.), according to centrally set objectives.

2. To support the foundation of new enterprises or substantially to raise the capital of the existing ones, by granting capital against sharing in the profits. In this way it would promote the utilization of particularly profitable investment possibilities and a more flexible adaptation of supply to demand in a

centrally controllable manner. The greater risk involved by granting of capital in this way (as compared to credit) justifies the Institute's share in profits.

The expediency of this conception, the complicated problems related to the foundation and functioning of such an institute should, of course, be subject to further thorough analysis, just as should also a desirable system of banks and other financial institutions in our economy in general.

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О ЦЕЛЕСООБРАЗНЫХ ФОРМАХ ПЕРЕГРУППИРОВКИ СРЕДСТВ В ВЕНГЕРСКОМ НАРОДНОМ ХОЗЯЙСТВЕ

Т. НАДЬ

В статье рассматривается, какие новые формы перегруппировки средств, а также какие сочетания имеющихся и новых форм целесообразно применять в венгерском народном хозяйстве в интересах более рациональной аллокации средств, их более планомерного перемещения, более эффективного использования, оставаясь в рамках настоящей модели экономического механизма.

Автор считает перегруппировкой (переливом, движением) средств все те случаи, когда — помимо вложения средств, неравномерно образующихся у различных предприятий, в те же предприятия — происходит изменение в распределении всех средств (реального капитала) общества между отдельными преприятиями.

Сохраняя большую роль государственного бюджета в государственном управлении общим процессом осуществления капиталовложений, желательно в сфере предприятий (то есть там, где хозяйственная деятельность организована в форме предприятий) сократить, по сравнению с настоящим положением, долю капиталовложений, решения о которых принимается государством, и которые частично или полностью финансируются за счет бюджета. Зато в интересах государственного воздействия на капиталовложения, входящие в компетенцию предприятий, следует создать дифференцированные методы субвенцирования за счет бюджета (предоставление льгот и дотацию).

Следует стремиться к тому, чтобы в финансировании капиталовложений банковский кредит — в соответствии с основными принципами реформы — приобрел большую, чем в настоящее время, роль, так как перегруппировка средств посредством банковских кредитов имеет преимущество, заключающееся в том, что самостоятельность предприятий в принятии решений в сфере капиталовложений и их материальная заинтересованность сочетается с возможностью центрального обозрения процесса осуществления капиталовложений и воздействия на него.

В интересах достижения надлежащей гибкости перегруппировки средств, а также быстрого приспособления к изменяющимся потребностям следует предоставить больше пространства непосредственной перегруппировке средств между предприятиями, при государственном регулировании, обеспечивающем соблюдение общественных интересов. Следует при помощи соответствующих юридических и финансовых норм облегчить предприятиям создание простых объединений для осуществления определенной хозяйственной деятельности, а также создание совместных предприятий. Следует допустить, чтобы предприятия могли передавать друг другу с целью инвестиций свои фонды развития окончательно или же в форме возвращаемого кредита. Желательно ввести ограниченный коммерческий кредит, то есть, чтобы преприятия могли предоставлять друг другу товарный кредит за счет своего фонда развития. Необходимо юридически регламентировать передачу и сдачу в аренду различных машин и оборудования одним предприятием другому.

Облигация как средство перегруппировки может стать органической частью настоящего экономического механизма. Выпуск облигаций целесообразно сначала допустить в экспериментальном порядке и главным образом для удовлетворения местных (коммунальных) потребностей.

Подлинные акции — за исключением связей с капиталистическими странами — не отвечают принципам настоящего экономического механизма и в этой системе не могут стать применимой формой перегруппировки средств. По отношению к ним даже в длительной перспективе справедливо то возражение, что их применение привело бы к увеличению и учреждению спекуляции и кроме того к неприемлемому для нас разделению труда и собственности.

Автор ставит вопрос об изучении целесообразности создания в рамках банковской ситемы нового учреждения — Института развития. Такой институт, с одной стороны, мог бы в соответствии с центральными целеустановками организовать и осуществлять государственное управление инвестиционным процессом, а с другой стороны, предоставлять на основе участия в прибыли определенную долю капитала для создания новых предприятий или же значительного расширения имеющихся и, таким образом, способствовать использованию возможностей вложения средств в особенно рентабельные области.

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F. PERROUX

LE THÉORÈME HECKSCHER–OHLIN–SAMUELSON ET LA THÉORIE DU COMMERCE INTERNATIONAL*

L'auteur dans son discours inaugure le colloque des économistes franco-hongrois sur le théorème Heckscher—Ohlin—Samuelson, et donne une analyse objective et détaillée pour déterminer les vertus et les obscurités du théorème H.O.S.

Les caractères contemporains de l'économie mondiale et le théorème H. O. S.

L'économie de la planète, depuis la fin de la seconde guerre mondiale, se développe dans des conditions toutes différentes de celles qui formeraient un marché unitaire de concurrence libre.

Elle se compose de nations qui affirment chacune sa réalité propre au sein de groupes de nations qu'elle s'efforcent de constituer par des voies politiques. *Le National Bureau of Economic Research*, par la voix d'H. B. Wolley a, dès longtemps, dressé la matrice du commerce international, qui consiste en échanges *polarisés* autour de pays-foyers. Au delà, nous visons la tendance universelle à constituer des groupes de nations qui soient plus intenses que les *free exchange areas* ou les unions douanières; on a compris l'époque de l'industrialisation par les grandes unités que les techniques qui viennent d'être évoquées ne suffisent pas à procurer un accroissement de l'avantage collectif d'une nation ou de l'ensemble formé par plusieurs d'entre elles. Dans les groupes de nations en voie de se faire (ainsi dans l'Europe des Six), l'intégration s'opère par la triple manoeuvre des marchés, des investissements et des institutions. Dans l'ordre des faits et des espoirs, la politique d'un ensemble ne se borne pas à favoriser des échanges commerciaux: elle vise à agir sur la *production* par l'orientation des techniques de co-production utilisées par les unités privées (sociétés multinationales) et par les Etats. Si l'on s'assigne un objectif commun concernant l'ensemble multinational, c'est une préférence de structure pour l'ensemble considéré, servie par des *macro-unités* (des unités complexes à pouvoirs hiérarchisés) et par des règles du jeu *mixtes* en ce qu'elles concernent les enterprises privées et les collectivités publiques. [1]

A l'intérieur de chaque nation et entre nations règnent les formes les moins orthodoxes de la concurrence, les régimes d'oligopoles, de monopoles, de concurrence hétérogène comportant des coûts de vente. Tels qu'on les rencontre dans le commerce entre nations, ces régimes présentent les modalités sur lesquelles l'analyse jette le moins de lumière puisque ce sont celles des

* Texte un peu abrégé

unités à produits multiples et différenciés, et bénéficiant d'aides patentes ou dissimulées des Etats. Les phénomènes parétiens du type II [2] jouent, dans tous ces cas, un rôle privilégié. Dans une analyse dynamique, les unités, — simples ou complexes —, qui ont pour elles la dimension, la nature d'activité et le pouvoir de négociation exercent, sur d'autres, des actions asymétriques d'influences, de dominations partielles et de dominations étendues.

Il n'est donc pas surprenant que même chez les théoriciens de formation néo-classique [3], on observe une baisse de confiance dans la spontanéité de l'établissement et du rétablissement des équilibres intérieurs et extérieurs et une meilleure attention accordée à la conception voluntariste des rapports entre individus, entre industries, entre nations. En termes concis — et sauf spécifications: on agit couramment aujourd'hui sur les *structures* pour modifier les *prix*, au lieu d'attendre que les prix (supposés répartiteurs omniscients et incorruptibles des ressources) modifient les structures. Ce n'est certes pas que les coûts et les prix soient devenus négligeables: mais les concentrations variées, les politiques de groupes, les interventions préférentielles par le crédit et par le fisc, les stratégies soumises à programmes et les plans indicatifs, c'est à dire un grand nombre d'opérations hors marché se combinent partout avec les conséquences des marchés très imparfaits. En outre, les *external economies* sont envahissantes à un point tel que dans les économies «libérales« d'Occident, le calcul *collectif* commence à soutenir et à prolonger manifestement les calculs individuels. [4]

En ce point de l'histoire du commerce international, le théorème *Heckscher—Ohlin—Samuelson* (H.O.S.) est-il *de saison?* On en pourrait douter si l'on accueillait une impression générale ou si l'on cédait à l'intuition; mais c'est l'analyse objective et rigoureuse qui importe pour déterminer le contenu de ce théorème et savoir s'il permet de comprendre la réalité.

Les «imperfections» massives de la concurrence et du marché, visibles, dès les débuts de la présentation du théorème et aggravées depuis, n'ont pas empêché qu'il se construise par apports successifs et reste fidèle à l'inspiration initiale.

Eli *Heckscher* (1919) pose le principe dans le célèbre article d'Economisk Tidskrift, *The effect of foreign trade on the distribution of income.* [5] Bertil *Ohlin* (1933) le développe dans un grand ouvrage: *Interregional and international trade*, avec peu de géométrie et de mathématiques sauf dans l'appendice I. [6]

P. A. *Samuelson* procure des instruments géométriques et mathématiques simples dans un exposé (Juin 1948) très connu tant par son contenu propre que par les discussions qu'il a soulevées et l'influence durable qu'il exerce. [7]

Harry G. *Johnson* que l'on peut saluer comme l'un des porte-parole de l'école de Chicago et qui a en quelque manière prononcé un Key-note speech au Congrès de Montreal en Septembre 1968, prend le théorème comme axe de ses explications, le lave de reproches qu'il dit injustes, lui reconnaît des vertus

pour orienter la politique pratique, constate qu'il est d'une interprétation «flexible» et qui s'enrichit chaque jour, et le tient, somme toute, pour une pièce maîtresse de la théorie dynamique du commerce extérieur «en train d'éclore».

La résistance du théorème H.O.S. est-elle un signe du succès ou de l'échec de la théorie moderne quand elle interprète l'échange international? Montre-t-elle qu'on persiste à interpeller les grandes unités monopolistiques et les pouvoirs inégaux en termes de marchés parfaits et de concurrence complète? Ou que, malgré des apparences contraires, ce sont les forces des marchés et de la concurrence censées interprétées correctement par les modèles traditionnels qui expliquent l'économie internationale et mondiale?

Nous montrerons que le théorème H.O.S. est *un témoin* et *un «acteur»*.

Un témoin: il résume et reprend le passé des interprétations ricardiennes, sans omettre le facteur demande (J. S. *Mill*) mais en n'en tirant que *quelques* conséquences et en retenant une notion de structure mutilée; peu intelligible et inopérante parce qu'elle est ramenée à des dotations inégales de deux facteurs.

Un *«acteur»:* il est un exemple remarquable de ces *conceptualisations implicitement normatives* qui procurent un cadre de pensée conformiste, servent inconsciemment les partenaires forts et puissants et privilégient l'économie *de marché* dans un domaine où les inégalités de *pouvoirs* et les opérations *hors marché* ne peuvent pas être omises.

II. Le contenu essentiel du théorème H. O. S.

L'héritage de D. *Ricardo* et de J. S. *Mill* au moment où le théorème H.O.S. commence à être élaboré pose trois questions entre elles liées.

1. Pourquoi des coûts comparatifs? Le théorème répond: ce ne sont pas les éléments derniers: ils découlent des dotations, de facteurs de la production, inégales suivant les pays.

2. Quelle est la cause et la mesure de l'échange international? La réponse est: les coûts comparatifs égaux aux prix, les coûts-prix découlent de la rareté relative des facteurs.

3. Comment se fait l'optimation de l'avantage collectif mondial? par l'égalisation du prix des produits échangés et des rémunérations des facteurs; cette égalisation est la conséquence directe de l'échange entre nations munies de dotations inégales de facteurs.

Donc, à trois questions, une seule réponse tirée de la dotation inégale en facteurs de production, de leur inégale rareté relative entre nations.

Sous des conditions qui vont être précisées, le théorème tient en deux propositions:

I–Les dotations relatives en facteurs de la production déterminent les *couts* et les *prix* (prix = coûts) relatifs, des produits échangés.

II–L'échange des produits est le substitut parfait de la mobilité des facteurs.

Rappelons rapidement la géométrie (et l'algèbre) simples de ces propositions.

Soit deux Pays I et II et deux produits Acier, Blé. L'un des pays I a une dotation de capital plus élévée et un rapport capital-travail K_I/T_I plus grand que ceux de l'autre pays K_{II}/T_{II}.

On a:
$$\frac{K_I}{T_I} > \frac{K_{II}}{T_{II}}$$

Le premier pays a une supériorité relative dans la production du bien pour lequel il faut relativement beaucoup de capital *(capital intensive)*, l'acier: il l'obtient à un coût et le vend à un prix plus bas que celui qui peut être pratiqué par le pays II. Les propositions inverses sont vraies pour le blé, pour la production duquel il faut relativement beaucoup de travail.

Les pays échangent aux prix-coûts que leur imposent leurs dotations relatives et facteurs. L'échange se poursuit jusqu'à l'égalisation des taux marginaux de substitution des deux marchandises; sur les courbes de production possible, jusqu'au point de tangence des deux droites à angles égaux:

$$\alpha \text{ en I} = \alpha \text{ en II}$$

La figure 3 rapproche les deux figures 1 et 2 pour faire lire plus facilement l'égalité des pentes.

Pays I (capital intensive) *Pays II (Labour intensive)*

Les corollaires des deux propositions sont les suivants:

1. L'échange des produits est, indirectement, un échange de facteurs relativement abondants contre des facteurs relativement rares.

2. Par l'échange, *le bien-être potentiel (potential welfare)* (celui qui peut découler pour les populations de la disposition de biens matériels en quantités plus grandes ou en quantités égales à prix plus bas), est augmenté. Si le «monde» est représenté par les deux pays, son niveau de bien-être potentiel est haussé par l'échange international.

3. Le prix des facteurs de production s'égalise.

4. La spécialisation ou division internationale du travail se fait par l'action du prix: celui-ci distribue au mieux les ressources entre les pays comme il le fait à l'intérieur d'un même pays.

Il suffit de reprendre une à une les propositions du théorème pour comprendre qu'il n'est démontrable que si toutes les *conditions* suivantes (incontestées par quelqu'analyse rigoureuse que ce soit) sont remplies [8]:

1. Les marchés des facteurs et les marchés des produits sont les uns et les autres en régime de *concurrence complète* (pure et parfaite).

2. La mobilité des facteurs est *totale* à l'intérieur d'un pays, *nulle* d'un pays à l'autre.

3. La courbe de production possible est concave par rapport à l'origine des axes. Les facteurs de la production sont substituables les uns aux autres mais partiellement.

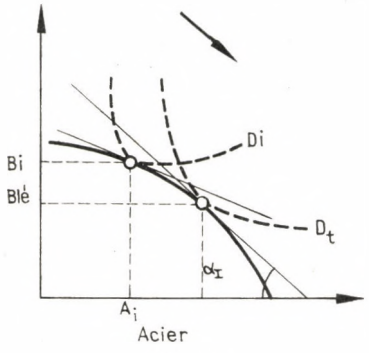

Fig. 1

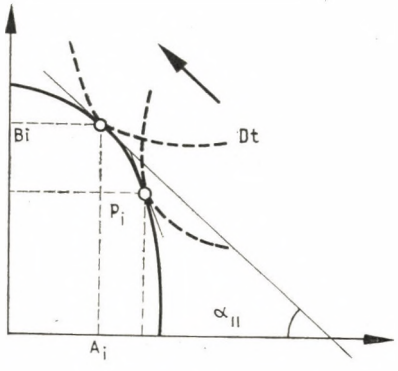

Fig. 2

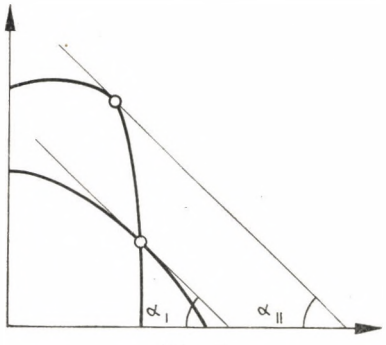

Fig. 3

4. Les techniques de production de biens identiques sont les mêmes dans chaque pays. Les mêmes quantités de facteurs matériels, appliqués à une production déterminée, donnent la même quantité de produit dans l'un et l'autre pays.

5. Les fonctions de production pour chacun des deux biens sont linéaires et homogènes. Les rendements des facteurs sont donc constants par rapport à l'échelle.

6. C'est l'intensité par rapport à un facteur, pour obtenir un produit déterminé qui distingue les fonctions de production; on peut *classer* uniformé-

ment tous les biens d'après leur intensité par rapport à un facteur. Un bien qui contient relativement beaucoup de capital dans le pays I en contient relativement beaucoup dans le pays II.

Un bien classé comme tel *(capital intensive)* le demeure quel *que puisse être le prix* du capital par comparaison au travail. Les *prix* relatifs des facteurs ne doivent avoir aucun effet sur la classification des biens.

7. Les facteurs de la production sont de *qualité* identique dans les deux pays.

8. Les montants des facteurs qui composent la dotation sont *fixes* et *complètement employés.*

9. Chaque pays a une dotation en facteurs différente de celle de l'autre pays.

Ce rappel succinct est suffisant pour la critique que nous présentons ici dans le dessein qui a été indiqué (cf. supra). Mais, plus détaillé et plus complexe, il ne dissiperait pas trois obscurités qui sont inhérentes au modèle et le déparent dès le premier examen.

III. Les trois obscurités liminaires

L'apparente simplicité du théorème et de sa géométrie ne peut dissimuler a) les difficultés conceptuelles et b) les difficultés de mesures qu'il soulève.

1. Que signifient exactement des propositions générales telles que: l'Angleterre a relativement beaucoup de travail et de capital mais peu de facteurs naturels (terre) tandis que l'Australie a relativement beaucoup de facteurs naturels et peu de travail et de capital. Ou encore des propositions telles que: l'acier contient relativement beaucoup de capital et le blé relativement peu.

Dans un seul et même pays, il est à la limite du possible de mesurer le capital total *indépendamment* de son prix et par conséquent, de tous les prix dans un système d'interdépendance théoriquement générale. Le nombre des tonnes d'acier cher à N. *Kaldor* est un piètre expédient: tout le progrès du calcul de capital global dans une fonction globale de production, tel qu'il est proposé par L. *Pasinetti* consiste à considérer une quantité de capital *d'équilibre* (l'équilibre ne pouvant pas être conçu abstraction faite du prix).

Pour ce qui est du travail, depuis les premiers efforts pour rendre opératoires les conceptions marxistes, on sait qu'il n'est pas possible de ramener un travail *complexe* à une *combinaison* de travaux simples, sans tenir compte du prix du travail (salaire), et, que même en le prenant en compte, la tentative reste vouée à l'insuccès.

N'attendons donc pas qu'on puisse mesurer le capital total et le travail total qui font un pays ou un produit *capital intensive* ou *labour intensive.*

Mais il s'agit de *comparer* deux dotations et deux produits, si bien que l'impossibilité de la mesure, — (*en dehors* des considérations de *prix* des facteurs qui sont exclus par construction —), apparaît plus manifestement encore.

Le capital en unités physiques, le travail en unités physiques sont dépourvus de sens économique. Celui-ci n'émerge pas avant que les quantités physiques soient *économiquement* employées, c'est-à-dire reçoivent un prix. Or ce sont des propositions bien connues de la théorie moderne que celles qui, — pour des quantités données et constantes des facteurs, K et T, par exemple —, définissent l'innovation *neutre*. Au sens de J. R. *Hicks*: pour des quantités relatives données de facteurs, l'innovation neutre augmente également la production marginale du capital et celle du travail. Pour R. F. *Harrod*, l'innovation neutre augmente le produit pour un taux d'intérêt constant et pour K/P constant. Ainsi, compte tenu de la théorie élémentaire de l'innovation, il n'est pas *possible* de mettre en relation pure et simple le courbe de production possible en I avec K_I/T_I et la courbe de production possible en II avec K_{II}/T_{II}. En cas d'innovation *neutre*, c'est l'effet de l'innovation en I et en II qui doit être pris en compte, dans chaque cas respectivement, avant de suggérer une comparaison entre eux. En termes plus généraux, personne ne doute qu'une même *quantité* de K et de T donne suivant le niveau des prix et de nombreux autres facteurs, des produits différents.

Disons donc que pour des fonctions de production *rigoureusement identiques*, les dotations relatives de facturs en I et en II sont très difficiles à mesurer. Disons aussi que l'hypothèse de fonctions de production rigoureusement identiques, qui fait violence à l'observation, est étrangère à l'innovation même sous ses formes où elle ne concerne pas les quantités respectives de facteurs.

On a déjà compris que K et T *représentent*, ou mieux: sont *censés représenter*, dans le modèle, des combinaisons de K et de T sectoriels. Mais la pire des représentations est celle qui fait disparaître les originalités, les spécificités des combinaisons de secteurs dans des économies globales prises deux à deux. Avec une même dotation globale K_I/L_I, K_{II}/L_{II} l'une quelconque des économies peut avoir, à un moment donné, des courbes de production variées, et, d'une période à l'autre, des accroissements variés de ces courbes. La *structure* du capital de production est plus significative que son montant, dans une économie prise en elle-même ou comparée à une autre.

Le théorème et sa géométrie sont présentés pour un instant donné (ils sont *timeless*). Que devient l'action prépondérante des dotations relatives de facteurs dans *une suite de périodes?* Ou bien, l'on considère ces *dotations* à la fin de chaque période successive, sans chercher ce qui les a déterminées et ce qu'elle détermine: et l'on est rejeté dans une statique comparative très médiocrement expressive. Ou bien, l'on interprète les dotations «fixes» du modèle comme des dotations qui se modifient lentement: il faut alors définir la période par référence à laquelle on apprécie cette variation lente et l'on est

confronté à ces «périodes de développement» que les tenants du modèle *excluent*. (Cf. Infra)

On conviendra donc que ces dotations différentes et fixes de facteurs de la production dans deux sous-ensembles ne correspondent pas à des entités conceptuellement univoques et économétriquement maniables.

2. Sommes-nous plus au clair quand on nous propose pour mesurer le gain résultant de l'échange international et par conséquent la maximation du produit multinational ou mondial, le *bien-être potentiel* (potential welfare) c'est à dire le déplacement vers la droite de la courbe de production possible, ou pour un même tracé un abaissement du coût en facteurs d'une production donnée. [3]

Il est évident qu'on est en face d'une des innombrables applications de la neutralité éthique (ethical neutrality), article de foi d'une certaine école et qui met exactement sur le même plan l'alimentation d'un enfant affamé et l'accroissement de loisir d'un directeur millionnaire. Nous nous garderons ici de contester cette position. Nous *supposerons* au contraire, — bien que nous pensions le contraire —, que cette «ophélimité» *meurtrière* est acceptable en termes de science.

Il faut alors savoir ce que signifie cet accroissement instantané de bien-être potentiel, sans considération de structure. L'augmentation des biens disponibles quels qu'ils soient en t_0, peut-on lui attribuer une signification, quelle qu'elle soit, pour l'augmentation ultérieure de ces mêmes biens, quels qu'ils soient, en $t_1, t_2, \ldots t_n$? La réponse est assurément négative. Un même accroissement de produit en t_0 peut conduire à des accroissements ultérieurs inégaux de produits en $t_1 \ldots t_n$. La différence tient aux structures de la consommation et de la production.

Du point de vue «neutre» des biens matériels accrus *(more commodities)* la statique ou la statique comparative incluse dans le modèle est un instrument bien insuffisant pour interpréter la réalité ou pour la modifier normativement. Sous ce rapport encore, la combinaison en une structure des éléments composants du capital global (K) et du travail global (T) importent plus que leur montant absolu.

3. Allons plus loin et demandons purement et simplement ce que signifient ces courbes de production possibles que l'on *attribue* à des pays I et II, ou à des *nations*. Rien dans leur forme ni dans leurs implications théoriques ne renvoie à quoi que ce soit que l'on puisse nommer *pays* ou *nation*.

Ces courbes n'impliquent aucune dimension territoriale. Elles sont tracées pour un univers spaceless (où les coûts de transport sont égaux à zéro) et *timeless* (où le temps de l'activité humaine n'a aucune place); il en est ainsi, on le sait, de toutes les figures de l'équilibre traditionnel.

D'autre part, ces courbes n'impliquent aucune dimension *d'organisation*. Pour que les prix relatifs soient souverains, pour qu'ils règlent sans conteste

l'emploi des provisions de facteurs, il faut que la concurrence complète et pure règne partout; elle évacue toute organisation *quelle qu'elle soit.*

Il serait donc difficile de considérer l'entité I et l'entité II comme des «industries» si l'on admet qu'une «industrie» entraîne quelques *external economies* et comporte une certaine organisation des firmes qui la composent si souple et si lâche soit-elle.

A dire vrai, les défenseurs du théorème reconnaissent bien qu'il existe deux grands concepts de nation, l'un ricardo-ohlinien, l'autre faisant appel à la souveraineté.* Mais ils oublient la seconde pour décrire une sorte d'univers marchand à base de purs échanges où la concurrence entre enterprises privées et le marché sont censés être les substituts avantageux de *toute organisation* dans et par les groupes *privés* ou *publics.*

Est-il légitime de commencer par évacuer la nation pour analyser le commerce international?

IV. La destruction du phénomène en examen par la fausse «rigueur» du théorème

Pour évaluer *la sorte* particulière de rigueur à laquelle on nous convie, le mieux est de grouper les faits, les *réalités* les plus incontestables de l'échange extérieur, (faits et réalités non pas observables seulement, mais susceptibles de symbolisations, de formalisations et de quantification statistique) en les opposant point par point aux conditions qui sont toutes nécessaires pour que le théorème puisse être énoncé et prouvé:

1. L'échange international est pour plus grande part, le fait des *grandes firmes;* elles usent communément des coûts de vente; elles fondent fréquemment des ententes ou y participent. L'échange international est pénétré de concurrences monopolistiques, sous les plus variées de leurs formes. En outre, quand les grandes firmes ou leurs groupes appartiennent à de grandes et puissantes nations, les avantages éventuels de la dimension, de la nature d'activité et du pouvoir de négociation de l'unité privée et de l'ensemble politiquement organisé auquel il appartient, se combinent et se renforcent.

2. La mobilité interne des facteurs n'est pas totale: une nation est composée d'espaces polarisés; de plus elle *s'organise* moyennant des règles du jeu qui, dans une bonne mesure, influencent la mobilité des facteurs.

* Voir tout le début de l'article de l'Encyclopédie par H. G. *Johnson*, cité en [3] "A nation may alternatively be distinguished by its political sovereignty, which entails both a special concern for nationals, as distinct from foreigners, and the existence of intervention in economic relations with other nations."

La mobilité externe des facteurs n'est pas nulle: elle est fortement croissante, au cours du siècle écoulé, pour l'information, l'innovation, le capital financier et monétaire: elle tend à s'élever en ce qui concerne l'énergie et les machines.

3. La production et la productivité, en dynamique, dépendent des combinaisons multisectorielles; [9] les coefficients de capital sont fortement variables suivant les secteurs; l'évolution du coefficient de capital global comporte des changements sur longues périodes.

4. Pour produire des quantités égales de biens *analogues* — (jamais, à rigoureusement parler, identiques) — les pays mettent en oeuvre des techniques différentes les unes des autres; pour une combinaison analogue de quantités analogues de facteurs de production, on enregistre des produits variables suivant les milieux économiques et culturels.

5. Les économies globales contiennent des points de rendements croissants. La croissance du produit global, dans les pays les plus avancés, est imputable, statistiquement pour plus de 60% au progrès technique. [10]

6. Les produits ne peuvent pas être classés uniformément selon leur intensité par rapport à un facteur (K/P, T/P); pour une même intensité les différences de qualité ne peuvent jamais être négligées, non plus que les conditions de l'environnement pour chaque facteur et chaque combinaison de facteurs.

7. Les facteurs de la production sont de *qualités* très différentes suivant les pays; ces différences sont sensibles même quand la comparaison porte sur des pays industriels depuis longtemps développés. Un facteur de la production à l'échelle globale ne peut jamais être évalué avec rigueur s'il l'est globalement et isolément; il est essentiellement formé de sous-ensembles entre eux hétérogènes et qui, en eux-mêmes et par leur combinaison, sont multidimensionnels quant à leurs coûts et à leurs effets réels. Les *external economies* sont importantes et fréquentes dans les ensembles industriels, nations, régions, groupements de nations.

8. Les dotations de facteurs ne sont pas fixes; elles changent de dimension et de forme par le double effet des actions spontanées des unités privées et de la politique des pouvoirs publics. [11] Les facteurs ne sont pas constamment employés à plein; les économies ne fonctionnement pas constamment au niveau de la capacité du capital installé et du plein emploi de la main-d'oeuvre.

L'opposition entre les données de l'observation et les conditions sous lesquelles le théorème se prouve est si flagrante sur tous ces points fondamentaux, que l'on ne peut éviter la question: l'échange entre nations est-il *expliqué* ou *détruit* par le théorème? . . . .

V. Le déplacement ingénieux de l'intérêt analytique

H. *Johnson* dont nous ne mettons pas en doute l'orthodoxie doit bien le reconnaître «les théoriciens auront à s'occuper de deux aspects des relations économiques internationales qui ont été, jusqu'ici *relativement* négligées: l'influence de la *concurrence monopolistique* sur la *localisation* et sur les *échanges* et le contenu et l'influence des politiques protectionnistes». [12]

Le même auteur constate: [13] Il est clair que le théorème «ne sert pas à grand-chose pour expliquer la composition du commerce en *produits industriels* — produits intermédiaires ou produits finis — entre les nations industrielles avancées qui représentent une part majeure du total du commerce international».

Les espoirs sont donc permis. Si l'on est *très* attentif aux suggestions d'Harry Johnson on portera attention à des phénomènes que l'analyse jugée hétérodoxe parce qu'elle est scientifique a mis depuis longtemps en évidence: l'action sur les échanges internationaux des *types* d'industrialisation, des différences de structures industrielles, des unités et organisations monopolistiques, des stratégies concertées des Etats et des producteurs, des politiques discriminatoires de transports et de diffusion de l'information, etc . . . etc. . . . Car la *concurrence monopolistique* et *l'industrialisation suffisent à ruiner le théorème H. O. S.*, — pourvu qu'elles soient *pensées jusqu'au bout.*

Or, elles risquent de ne pas l'être du tout si une autre suggestion d'Harry Johnson est écoutée, celle qu'il adresse aux congressistes de Montréal (1968) [14] «Fondamentalement, le théorème *n'est pas* une prédiction concernant le monde réel. Il doit être interprété plutôt comme une *énumération*, déduite par le procédé d'abstraction théorique, des facteurs qui sont présents dans le monde réel et qui *empêchent* la réalisation de *l'égalité des rendements des facteurs*, égalité qui *caractériserait* l'efficience économique mondiale . . . .»

VI. Les services rendus par la conceptualisation implicitement normative

L'examen des énoncés successifs du théorème H.O.S. et le mince bilan des connaissances qu'il procure laisse l'impression d'une disproportion entre l'ingéniosité de la formalisation et l'exiguité des résultats acquis.

En fin de compte, la dotation relative en facteurs n'est qu'une réalité *entre plusieurs autres* qui explique le commerce international; — la preuve n'est pas faite qu'une influence *prépondérante* lui revienne.

Pourtant on ne rendrait pas justice au théorème H.O.S. en lui refusant de toutes autres vertus: il n'explique pas la réalité, il ne procure pas les outils rationnels qui la modifieraient, il n'oriente pas utilement la recherche d'autres

interprétations, mais il est une *organisation habile* des concepts implicitement normatifs: à cet égard, il est et sera longtemps une pièce très appréciée dans l'outillage intellectuel que les nations riches et puissantes emploient pour leur discours et leur praxis à l'égard des peuples moins favorisés; en outre, entre pays industriellement avancés, le théorème, bien qu'il soit moins facilement applicable, permet encore de détourner le regard de tout ce qui menace les stratégies, déployées sous le couvert d'un libéralisme conventionnel. . . . .

Dans un pays très insuffisamment développé, sans infrastructure de transports et de services publics, sans industrie de base, sans technique et sans capacité économique des populations, que signifient les coûts comparatifs *présents?* Le coût comparativement le plus bas est celui de la marchandise qui est obtenue par la main-d'oeuvre relativement la plus misérable. Ce n'est pas la dotation relative de facteurs, en termes de quantités globales, qui explique cet échange international, c'est la différence massive entre les techniques, les qualités des sujets, l'étendue et l'urgence des demandes résultant des «goûts» des consommateurs. Bref ce sont *deux structures économiques et sociales* en présence qu'il faut comparer pour comprendre la nature, l'étendue et les coûts-prix des opérations qui forment l'échange international. Chaque unité de production et de consommation particulière possède, dans cette rencontre de structures inégales, des coordonées dépendant directement de la structure nationale ou quasi-nationale à laquelle elle appartient.

En dynamique, ce n'est pas à l'égalisation pure et simple des rendements des facteurs pris isolément que l'on doit tendre, *même du point de vue de la maximation de la rentabilité en longue période*, c'est à des changements structurels qui puissent permettre de parler de part et d'autre d'une économie de *marché*.

Si l'on se fie au théorème H.O.S., qui met en forme l'approvisionnement relatif des facteurs, globalement apprécié en régime de concurrence complète, pure et parfaite, on détourne l'attention de l'essentiel qui est le changement de la structure de l'économie en voie de développement.

Le théorème est-il pris comme «l'énumération» des conditions qui font défaut pour réaliser un optimum de deux nations couplées ou de l'économie mondiale? Alors, les curiosités ne sont pas orientées dans la bonne direction: les monopoles et les systèmes de monopoles qui s'imposent aux sous-ensembles satellisés, les groupes dominants sur un domaine particulier ou dans une vaste zone d'influence, les unités motrices (industries ou entreprises) aux effets ambigus, sont des réalités aux conséquences très complexes: comment en surveiller les activités *hic et nunc*, en rectifier le fonctionnement et éviter qu'elles n'engendrent des effets négatifs en chaîne? Le théorème ne peut rien dire sur ce point.

Si l'on suggérait qu'il recommande de *remplacer* les monopoles, les grandes unités motrices ou (et) dominantes par de petites unités sans informa-

tion et régies par un prix mondial, on éluderait la tâche essentielle qui est de *préserver* les dynamismes inhérents aux grandes unités et de réduire les profits de monopole et autres «nuisances» dont elles font payer leur capacité d'innovation et d'entraînement.

Pour les relations entre *pays industriels*, les insuffisances du théorème H.O.S. sont manifestes et reconnues: encore sa vertu comme conceptualisation implicitement normative reste-t-elle entière. Son acceptation évacue la structure et donc la politique au service des structures préférées; elle élimine la considération des inégalités de techniques; elle détourne l'attention des actions de monopole et des actions asymétriques exercées entre nations et industries inégales; elle cache les effets des polarisations et des cartellisations dans les «marchés communs».

Or, quand plusieurs nations développées décident de former une Communauté Economique, lorsqu'elles résolvent, d'autre part, de pratiquer une politique collective à l'égard d'ensembles moins développés, ce n'est pas l'énumération des conditions sous lesquelles les rémunérations de facteurs s'égalisent, qui importe; c'est bien plutôt le choix et la mise en oeuvre d'investissements moteurs, d'industries motrices et l'aménagement judicieux des relations entre ces centres de développement et leur environnement. Ainsi se dégagerait un programme ou plan de développement collectif dont le théorème H.O.S. ignore les conditions et dissimule *l'intérêt proprement économique*. . . . .

Pourtant une idéologie implicite, la préférence accordée une fois pour toutes, au marché et à la libre entreprise est intime à une conceptualisation neutre en apparence et censée rigoureuse, surtout lorsqu'elle se glisse dans un système d'équations.

La même idéologie implicite est présente au théorème H.O.S., à ses géométries et à ses algèbres simples; elle rend compte d'une part non négligeable de sa longévité et de son succès.

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ТЕОРЕМА ХЕКШЕРА—ОЛИНА—САМУЭЛЬСОНА И ТЕОРИЯ МЕЖДУНАРОДНОЙ ТОРГОВЛИ

Ф. ПЕРРУ

На состоявшемся в июне 1970 года в Будапеште коллоквиуме венгерских и французских экономистов автор изложил суть теоремы Хекшера—Олина—Самуэльсона (сокращенно Х. О. С.) и критически проанализировал ее с точки зрения условий современной экономики.

Автор ставит вопрос: действительна ли теорема Х. О. С. при новых условиях, сложившихся в мировом хозяйстве после второй мировой войны, когда сформировались замкнутые экономические группировки, внутри стран властуют монополии и рыночные элементы в большей или меньшей мере заменяются планами государственного вмешательства.

Одно из основных положений теоремы Х. О. С., что товарообмен между странами ведется по ценам издержек, определяемым сравнительной редкостью факторов производства (сравнительными издержками) в отдельных странах и дотациями различной величины. При таких условиях товарообмен продолжается до тех пор, пока оборот по товару, представляющему предмет обмена, не выравнится при предельных ценах.

Последствия обмена по ценам издержек:

1. обмен товарами означает косвенный обмен факторами производства
2. обмен увеличивает материальное благосостояние
3. цены производства (издержек) выравниваются
4. международное разделение труда и специализация осуществляется через цены: цена распределяет ресурсы между странами, как внутри одной страны.

Согласно автору, все это было бы справедливо лишь тогда, если, например, на рынке факторов производства и товаров осуществлялась чистая и совершенная свободная конкуренция, движение факторов производства внутри страны было полным и то же время вполне изолированным от других стран, технические условия производства, производственная функция каждого товара и т. д. были такими же во всех странах. Этих нескольких перечисленных условий достаточно для доказательства того, что теорема Х. О. С. довольно-таки оторвана от действительных хозяйственных движений, от факторов настоящей национальной экономики.

В заключение профессор Перру указывает, что теорема Х. О. С. является хорошим примером ловкой формулировки в виде постулата какой-нибудь директивной концепции. Сторонники теоремы, т. е. богатые страны будут еще долгое время ссылаться на нее в своих отношениях со странами с менее благоприятными условиями.

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A. NAGY

APPROXIMATION OF THE FOREIGN TRADE OPTIMUM

Having studied the existence problem of the optimal volume and pattern of foreign trade and its relations with the rate of exchange in an earlier paper [1] the author compares in this article from an optimization point of view the system based on foreign exchange allocation and minimization of costs with the one based on the prescription of exchange rate and the maximization of profits. Consequences of selecting exchange rates of various magnitudes and types are compared too for the sake of finding an optimal export-import program.

In this article I continue the reasoning taken up in two of my articles published five years ago [2]. At that time I sought an answer mainly to the question whether at a given moment there is at all an optimum volume and pattern of foreign trade for some country, and if so, what its relation is to the various criteria used in optimum calculations and in economic regulatory systems. Our positive answer to the first part of the question was more exactly formulated in an article written together with J. Stahl and published in Econometrica [1]. However, several problems have remained open as regards the ways in which the optimum volume and pattern of foreign trade might be approached and what the consequences are of applying various criteria in optimum calculations and economic mechanisms.

The existence of the optimum volume and pattern of foreign trade was illustrated in said studies with the aid of a simplified model comparing the various feasible export and import programs in a given country at a given date, meaning by programs the vectors of those export and import activities which may be performed with the existing conditions of the national and world economy. E.g., a feasible *export program* for 1970 means the production and export of goods in given quantities made possible by production and marketing conditions. Each program may be conceived of as a plan variant.

However, the interpretation of the feasible *import programs* is not so obvious in our model: it denotes not only buying activities abroad, but also the domestic production of all those goods which could be imported as well. Thus, each feasible import program implies a choice: what commodities and how much of them will the country in question produce domestically and import in the given period.

The number of feasible export and import programs is infinite, since the production of or trade in individual products may be increased or decreased, included or omitted. However, the sets of programs are bounded: productive capacities, natural resources and limits of labour are given at any date and the world market puts also several limitations on marketing and purchasing possibilities. Exports, imports and import substitution activities not only cannot

grow "to the sky", but they cannot be reduced to zero either: they are also bounded from below. Consumption, employment, capacity utilization, the "staying in the market" all have a minimum level, "below" which the feasible programs cannot sink.

In the earlier articles it was also expounded that, from the export and import programs interpreted in the above sense, feasible program-pairs can be chosen. These may be characterized, among other things, with their total domestic inputs and their foreign exchange balances. The first is composed of the domestic production and marketing costs of export goods, and of those expended on the production substituting imports and on import purchases; the latter is arrived at as the difference between the foreign exchange earnings in exports and the foreign exchange outlays for imports. Accordingly, from among the feasible program-pairs usually such an optimal one can be selected which has minimal domestic inputs with a given balance of foreign exchange, or which has the most favourable balance of foreign exchange with a given total of domestic inputs.

We proved in our article that (under certain conditions) there exists such an optimal program of foreign trade which needs a minimum of domestic inputs while securing a *prescribed* balance of foreign exchange. It was also shown that to this solution belongs a uniform marginal rate of exchange which enables comparison of domestic inputs with foreign exchange earnings and outlays. It was equally demonstrated that both total domestic inputs and the optimal marginal rate of exchange thus interpreted may be considered as functions of the trade balance: a higher surplus of the balance prescribed involves greater domestic inputs and a higher rate of exchange belonging to the optimal program-pair.

This brief survey of our earlier conclusions shows that little has been solved from among the scope of problems related to the optimization of foreign trade. It is good to know that — under certain conditions — there exists theoretically in every given period a feasible optimum volume, commodity and market pattern of foreign trade. The really exciting problem is, however, how to attain or, at least, approach these.

Our strongly simplified method, though unsuited to give a detailed answer to the question, may yet enable us to draw some remarkable conclusions.

Cost minimization or profit maximization

Let us assume such mechanism of socialist planned economy where there are rather wide possibilities to prescribe obligatory tools of regulation for enterprises, but where it is up to the latter to decide on most detail problems of production for export, of imports and of import substitution (commodity pattern, market distribution). What consequences does it involve for the at-

tainment of the optimal pair of foreign trade programs if this aim is pursued by cost-minimization or profit-maximization?

The selection of the optimal pair of programs means to solve the following problem:

$$\left.\begin{array}{r} \mathbf{x} \in \mathbf{X} \\ \mathbf{y} \in \mathbf{Y} \\ d_e(\mathbf{x}) - d_e(\mathbf{y}) \geqq \delta \end{array}\right\} \quad r_e(\mathbf{x}) + r_i(\mathbf{y}) \to \min \tag{1}$$

where **X** and **Y** are the set of feasible export and import programs and **x, y** are the individual programs; further, to each program **x** and **y** there belongs a function of foreign exchange earnings and foreign exchange outlay, denoted with $d_e(\mathbf{x})$ and $d_i(\mathbf{y})$, as well as a function of domestic inputs, denoted with $r_e(\mathbf{x})$ and $r_i(\mathbf{y})$. δ denotes the balance of foreign exchange prescribed. Solution of the problem thus means to find the program-pairs $\mathbf{x}^*$, $\mathbf{y}^*$, the balance of foreign exchange of which is not smaller than the one prescribed and whose total domestic inputs are at minimum.

Solution of this problems must be found in a breakdown by export and import activities, and, within that, by enterprises. If we intend to solve the problem by minimizing costs, the following breakdown will be arrived at:

$$\left.\begin{array}{r} \mathbf{x} \in \mathbf{X} \\ d_e(\mathbf{X}) \geqq \delta_e \end{array}\right\} r_e(\mathbf{x}) \to \min \text{ and} \qquad \left.\begin{array}{r} \mathbf{y} \in \mathbf{Y} \\ d_i(\mathbf{y}) \leqq \delta_i \end{array}\right\} r_i(\mathbf{y}) \to \min. \tag{2}$$

That is, the prescription for the balance of foreign exchange is broken down into a lower bound on export earnings (δ_e) and an upper bound on import outlays (δ_i) and we have to minimize inputs separately for each. The prescription for δ_e and δ_i obviously must satisfy the conditions that their difference should be equal to δ.

If instead we wish to use maximization of profits, the problem (1) will be broken down in the following manner:

$$\left.\begin{array}{l} \mathbf{x} \in \mathbf{X} \\ \mathbf{y} \in Y \end{array}\right\} \begin{array}{l} N\gamma_e(\mathbf{x}) = \gamma_e d_e(\mathbf{x}) - r_e \to \max \text{ and} \\ N\gamma_i(\mathbf{y}) = \gamma_i d_i(\mathbf{y}) + r_i(\mathbf{y}) \to \min \end{array} \tag{3}$$

where N denotes profits, γ_e the export rate of exchange, γ_i the import rate of exchange.[1] In this case, instead of prescribing foreign exchange earnings and

[1] For the sake of brevity, the problem of the type (3) is called profit-maximization whereas, e.g. in the case of import substitution the task is to minimize total (foreign exchange and domestic) inputs. However, substituting domestic production for import involves maximization of profits for the enterprise, since the domestically produced product competes with imports and the producer makes efforts at maximizing the difference between his own inputs and revenues; the latter is, however, proportionate with savings in foreign exchange.

outlays, the rate of exchange is "only" prescribed, but it must be such as to secure the desired balance in case of profit-maximization.

Thus, a breaking down of the common problem into separately optimizing exports and separately imports involves that we must prescribe, instead of the condition for the balance of foreign exchange connecting the two, either the volume of trade, or the rate of exchange. If this prescription was correct, the enterprises can attain the optimal program-pair by minimizing costs, or by maximizing profits. A common optimization thus necessitates such

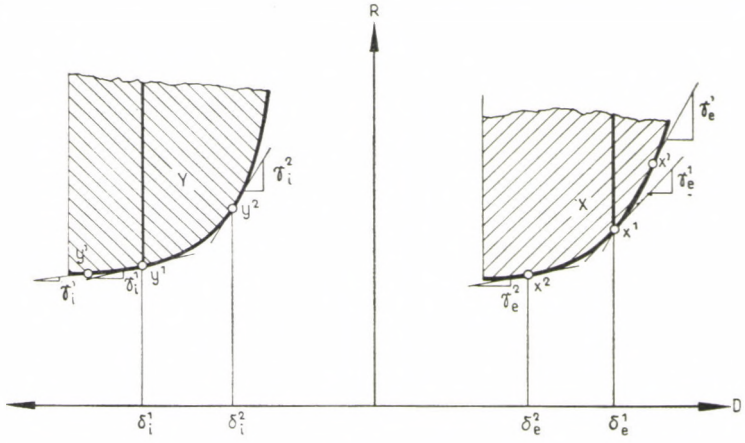

Fig. 1

prescriptions in the centre as will secure, according to the given economic mechanism, the realization of the program-pair conforming to the desired balance of foreign exchange and to the minimum of total domestic costs.

The difference between the two procedures may be well illustrated on the two-dimensional plane of domestic inputs and foreign exchange earnings, or outlays (see Fig. 1.).

The horizontal axis shows the export earnings and import outlays of individual programs in terms of foreign exchange, the vertical one the domestic inputs. **X** denotes the set of feasible export programs and **Y** that of the import programs. It can be easily seen that the programs corresponding to points of the set near the line traced thickly — let us call them *efficient* programs — are generally more economic ones than those corresponding to the internal points of the set, according to the obvious principle of partial ordering that program x_a is more efficient than program x_b, or y_a is more efficient than y_b, if

$$\begin{aligned} &d_e(\mathbf{x}_a) \geqq d_e(\mathbf{x}_b) \text{ and } r_e(\mathbf{x}_a) \leqq r_e(\mathbf{x}_b), \text{ or} \\ &d_i(\mathbf{y}_a) \leqq d_i(\mathbf{y}_b) \text{ and } r_i(\mathbf{y}_a) \leqq r_i(\mathbf{y}_b), \end{aligned} \tag{4}$$

but at least in one place in both cases inequality does prevail.

The optimal programs and program-pairs corresponding to various trade balances and criteria of optimization can be obviously found only among the efficient export and import programs. In the case of strictly convex sets[2] the efficient export and import programs can be determined as optimal programs by parametric programming, changing the values of δ_e and δ_i parameters in case (2) and those of γ_e and γ_i in case (3). This can be easily read off Fig. 1: if, e.g., the prescription for export foreign exchange earnings is δ_e^1 and the bound on import foreign exchange outlays is δ_i^1 the feasible programs will be situated along the thick vertical lines and the optimal one from among these will correspond to $\mathbf{x}^1$ and $\mathbf{y}^1$, resp., since their cost is the lowest. Changing the values of the δ_e and δ_i parameters in the feasible interval, all export and import programs will become feasible and all efficient programs will become "optimal".

The situation will be similar if, according to the problem broken down as in (3), by changing the γ_e and γ_i marginal rates of exchange for exports and imports, the various efficient programs become optimal ones. Comparing on the basis of the rates of exchange γ_e' and γ_i' the foreign exchange earnings and outlays with domestic inputs and maximizing profits, every program of the given sets are feasible, but only programs $\mathbf{x}'$ and $\mathbf{y}'$ are optimal. By gradually changing the rates of exchange each of the efficient programs can become an optimal solution.

Accordingly, the problem can be solved by changing the corresponding central prescriptions, i.e. by "feeling out" in an iterative way the optimal solution conforming to the prescribed balance of trade or its satisfactory approximation. Should we prescribe, conforming to case (2), the volume of trade, the prescriptions should be continuously modified until the marginal rates of exchange belonging to the solutions coincide. In the case of δ_e^1, δ_i^1 this obviously does not hold, since $\gamma_e^1 > \gamma_i^1$. By reducing the volume of trade in the direction of δ_e^2, δ_i^2, the difference between the marginal rates of exchange will diminish. If the prescription corresponds to δ_e^2, δ_i^2 the situation will be the reverse, since $\gamma_e^2 < \gamma_i^2$. When maximizing profits as corresponding to case (3), we prescribe not the volume of trade but the rate of exchange, separately for exports and for imports. In the studies mentioned it has been clarified that the condition of finding an optimal program-pair is the prescription of a uniform rate of exchange. The prescription of a uniform rate of exchange does not, however, secure — as opposed to the direct determination of the volume of trade — that the trade balance requirement of the common problem should be met. Therefore, the prescribed rate of exchange must be modified depending on whether the balance is higher or lower than the desired one. If, e.g., $\gamma_e^2 = \gamma_i^1$ and this is the prescribed rate of exchange, then the program-pair $\mathbf{x}^2$, $\mathbf{y}^1$ cor-

[2] Some features of the linear and non-convex cases have been dealt with in our earlier studies. It was pointed out that these cases of the efficient programs may be considered quite probably as exceptional ones in the short run.

responding to the profit-maximum will not satisfy the prescription for the trade balance (a deficit of the magnitude of $\delta_e^2 - \delta_i^1$ will emerge) justifying a raising of the rate of exchange. Prescription of an all too high rate of exchange (e.g. $\gamma_e^1 = \gamma_i^2$) will lead to an opposite result, an undesired surplus in the balance, pointing in the direction of reducing the rate of exchange.

From what has been said, it may appear that there is no major difference between the two kinds of approach to the optimal solution, both are equally good or bad. But this is true only if the solution is considered merely as a problem of computation. Both procedures may be, however, also considered to be a system of economic control and management, where, owing to the size of the task, the possibilities of information flows, the decentralization of decisions and other reasons, a solution by computer is excluded anyway. It should be obvious that case (2) is related to a system based on obligatory quantitative instructions while that of (3) to a system based on enterprise autonomy and interest in profits. If the two procedures approximating the optimal solution in the above sense are compared from this point of view, two essential differences will emerge:

a) the foreign exchange prescriptions relating to the volume of exports and imports must be at least as detailed as there are economic units, enterprises. But prescribing export obligations and import foreign exchange quotas involves further secondary quantitative prescriptions for the suppliers of materials and parts of export products, for the secondary, tertiary, etc. users of import products, that is, for almost every enterprise and usually for a wide scope of products. Prescription of the rate of exchange not only does not require but does not tolerate such detailed instructions.

b) Foreign exchange prescriptions relating to export and import volumes "secure" fulfilment of the stipulation regarding the trade balance (provided that we succeed in making the enterprises observe the prescriptions). As opposed to that, an approach by prescribing the rate of exchange cannot promise a constant observation of the desired balance since it is precisely the deviations from these that enable a correction of the rate of exchange. The procedure which minimizes costs does not, however, secure in each step a uniformly efficient utilization of inputs and, therefore, an iterative improvement of the prescription occurs on the basis of the deviating marginal rates of exchange of the efficient programs belonging to the volume prescriptions.

Thus, owing to the unavoidable details of volume prescriptions, it is rather the system based on profit-interests, and from the point of view of observing the prescription for the trade balance the one relying on obligatory plan instructions that seems more advantageous. Why can it be yet stated that only the management system based on a uniform rate of exchange and on profit-maximization is suited for optimizing foreign trade in the above sense and the one based on quantitative foreign exchange prescriptions is not?

To accept this, it will be surely sufficient to review how can be found in practice the programs of exports and imports with the lowest total costs if foreign exchange earnings and outlays are prescribed. Obviously, the prescriptions relating to total foreign exchange earnings and outlays must be broken down to enterprises, the resources must be accordingly allocated among them in such a way which corresponds to the smallest total input. This allocation of obligations leads in itself to an optimization problem: every prescription relating to volumes of exports and imports involves their distribution among enterprises and a related optimization of resource allocation. It is hardly conceivable that the optimum allocation of foreign exchange obligations and resources among enterprises could be solved even with the must up-to-date computers owing to the immense size and information requirements of the problem. It is probable that some iteration procedure, a step-by-step approach would be needed, re-allocating resources among enterprises according to the efficiency they show in earning and saving foreign exchange.

If this optimization of resource allocation is neglected or cannot be performed, we cannot know about the program with the lowest total cost whether it is efficient at all, whether a better one could not be found by re-distributing the foreign exchange tasks among enterprises in some other way. In such cases there is no possibility to correct the prescriptions on the basis of the marginal rates of exchange, because we do not even know whether the prescription should be corrected or not.

From what has been said it follows that a method based on the prescription of foreign exchange quotas and on cost-minimization — meaning in essence a mechanism with plan instructions and a strong stimulation for the reduction of costs — would involve three procedures:

1. Prescriptions of the foreign exchange quotas relating to exports and imports and their continuous correction, on the basis of approximating the marginal rates of earning (saving) foreign exchange belonging to the programs corresponding to the minimum of domestic inputs.

2. A procedure for allocating resources among enterprises according to the export obligations and import quotas, which corrects the allocation of resources on the basis of informations regarding the efficiency of the enterprises

3. Such an incentive system of the enterprises which secures the observation of central prescriptions relating to foreign exchange and stimulates cost-minimization.

It hardly needs proving that in the foreseeable future it cannot be hoped to find or approximate the optimum program-pair of foreign trade in this way. Each step of the above outlined procedure is a task requiring information, time and calculations in such dimensions that their repeated harmonized performance on a national level must be qualified as entirely unrealizable for the purpose of short-term decisions.

As opposed to that, the superiority of the procedure relying on the prescription of the rate of exchange and on enterprise interests in profits seems obvious, even if — as has been mentioned — this can secure the satisfaction of the prescription relating to the trade balance only after a certain number of corrective steps. The superiority derives, in addition to those said, also from the fact that too many quantitative prescriptions hinder a flexible adjustment to changes in the domestic and world economy. The fewer prescriptions belonging to the system based on interest in profits may substantially enhance the adjustment of enterprises and may thus shorten the whole iterative procedure.

Optimization and the magnitude of the exchange rate

Let us thus assume that for finding the optimal foreign trade program-pair we choose the system based on the prescription of the rate of exchange and on the enterprise interests in profits. The question arises on what level to establish the uniform rate of exchange, what is the effect of this choice on the path on which the optimal program-pair might be attained or approached. Up to now the optimization problem has been handled that one, the best solution must be found from among the infinite number of feasible and efficient programs. In reality, however, the scope of choice is much narrower, because — relying on past activities — we must always start from an "inherited" export-import program-pair and have to improve it gradually. The real task is to find the "best path" by which the existing programs can be improved, i.e. to find the "shortest", most efficient, minimum-cost path leading to the optimal solution. The transformation of the commodity- and market-structure can naturally only be gradual and takes some longer time, since every effort at a change meets with the rigidities of both the domestic and the world economy. The path to "hitting the target" takes the more time, the farther the inherited solution from the optimal one, and the quicker, the shorter the road chosen and the faster we can proceed on it.

The statement will not seem to be too bold that the inherited pattern of foreign trade by countries or commodities is by far not optimal or efficient in the above sense. The system of plan instructions with its obligatory quantitative prescriptions prevailing for a long time, the tense planning carried out with the aid of commodity balances, the consequences in foreign trade and in the balance of payments of many tensions in the economy, the pushing into the background of the efficiency aspect have all led to a situation where the possibilities for an improvement of efficiency remained to a considerable extent unused. The lack of a common criterion that would have made productive and foreign trade activities unequivocally comparable — simultaneously with

pressures and efforts at improving the balance of payments at any price — have led, of course, to very expensive solutions.

Application of this to our above model involves that it may be assumed with high probability that the actually realized program-pair is somewhere "deep" in the interior of the feasible export and import program sets. Thus, the task really consists in how "to get out" to the efficient extreme solutions of the set and how to find the most favourable one among them. Let us assume that we may think in terms of the time horizon of a medium-term plan and

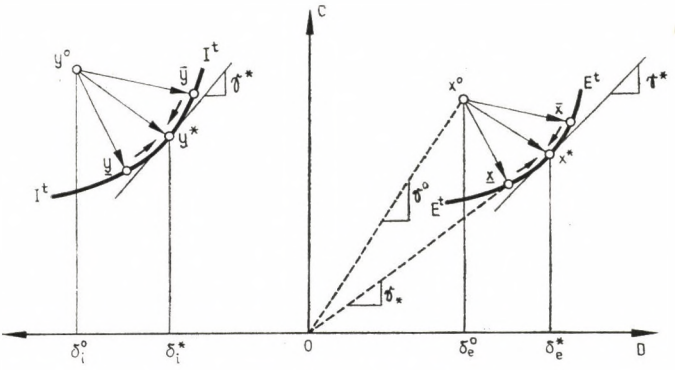

Fig. 2

wish to find the optimal program-pair on the basis of prescribing a uniform rate of exchange and relying on enterprise interests in profits. This case is illustrated in Fig. 2. The efficient export and import programs which can be attained in period t are denoted by E^t and I^t, respectively, while x° and y° denote the "inherited" actual programs, both deep inside the set of feasible programs. Let us assume that this program-pair does not meet the condition relating to the positive $\hat{\delta}$ balance of foreign exchange, since $/\delta_e^\circ/ < /\delta_i^\circ/$. It may be seen that the same balance or even a better one of foreign exchange could be attained with much smaller total inputs, and with the same inputs a considerable foreign exchange surplus could be achieved. Let us assume that in period t the optimal program-pair is x^*, y^*, the total inputs of which are minimal and the condition relating to the balance of foreign exchange is met $(\delta_e^* - \delta_i^* = \hat{\delta})$.

Before passing to a discussion of the consequences of choosing different rates of exchange, and their comparison, it is worth-while to call attention on the basis of our model to the much debated problem whether the rate of exchange should be determined on the basis of the average or the marginal cost of earning foreign exchange. The average cost of earning foreign exchange in a program is the quotient of total foreign exchange receipts and total domestic costs. This can be represented as the slope of the line connecting the point corresponding to the program with the origo. (In our figure, the dotted

lines $x^{\circ}O$ and $x^{*}O$, while the average rates of exchange are γ° and γ_{*}.) In the case of efficient programs, the average cost of foreign exchange is usually lower than the marginal one; in the case of the optimum program x^{*} it can be e.g. seen that $\gamma_{*} < \gamma^{*}$. But if we compare non-efficient "internal" points with efficient extreme ones, obviously no such interrelation will exist. E.g. the average cost of earning foreign exchange belonging to the actual program x^{o} may be *higher* than the marginal cost belonging to the optimal program x^{*}: $\gamma^{\circ} > \gamma^{*}$. The worse, the more inefficient is an "inherited" actual program, the higher its average cost of foreign exchange and if it is "sufficiently" bad, this average cost may be higher than the marginal cost of the optimal or several efficient programs.

In the debates about the average and the marginal rates of exchange this interrelation remained for the most part unclarified. It gave rise to misunderstandings when the average and the marginal costs for non-efficient actual programs were discussed. By the latter the cost of earning foreign exchange through the least efficient products was understood. It was left out of account that a non-efficient program has no marginal cost, only an average one, since the raising of foreign exchange receipts can be done not only by selling more of the least efficient products. In reality, the average cost of earning foreign exchange in non-efficient (usually actual) programs should have been compared to the marginal cost in non-existent, planned efficient or optimal programs (the latter was called in the discussion "sound marginal rate of exchange"). Relating to this, however, it cannot be stated unequivocally that the average rate of exchange is always lower than the marginal one since this depends largely on how "bad" or inefficient is the non-efficient program or what improvement possibilities we hold or deem implementable. In this sense, the adherents of the average rate of exchange might be considered to be "more optimistic" than those who advocated the marginal rate of exchange, insofar as they assume that for the uneconomic goods we can substitute in foreseeable time other ones which are more economic than the present average cost of earning foreign exchange.

Let us come back to the problem on what paths we can arrive from an existing non-efficient program at an optimal one, that is from x^{o} to x^{*}, and from y^{o} to y^{*}. Three such possibilities will be compared (see Fig. 2):

a) the *direct path* ($x^{o} \rightarrow x^{*}$ and $y^{o} \rightarrow y^{*}$), corresponding to applying the optimal rate of exchange of period t.

b) an *upper roundabout path* ($x^{o} \rightarrow \bar{x} \rightarrow x^{*}$, and $y^{\circ} \rightarrow \bar{y} \rightarrow y^{*}$) characterized by a quicker increase of export receipts and decrease of foreign exchange outlays for imports, i.e. by a quicker improvement of the trade balance and which corresponds — at least in the beginning — to applying a higher rate of exchange than the optimal one (the tangent belonging to programs $\bar{x}$ and $\bar{y}$ is greater than γ^{*}).

c) a *lower roundabout path* ($x^o \to \underline{x} \to x^*$ and $y^o \to \underline{y} \to y^*$) where the trade balance is improving slowlier than in the first two cases and the rate of exchange is, for some time, lower than the optimal one.

Of course, several other paths are conceivable, e.g., such which have more than one breaking points, which consist of non-linear sections, or which oscillate around certain paths, etc. But the majority of the cases may be reduced to these three simpler ones. The different paths may be also interpreted as corresponding to different concepts of economic policy. The difference consists, among other things, in the importance attributed to individual objectives of national economy, (e.g. improvement of the trade balance, increase in efficiency, reduction of costs, smooth development, etc.).

It seems to be logical to regard the direct path (a) as superior, more advantageous than all the others. It may be assumed that it leads quicker to the optimal program-pair, or with lower costs, e.g. in the sense that the total costs of arriving there are lower than in any other case. If we accept this assumption, several important conclusions will follow. E.g. if we conceive of the problem of optimization as one relating to several periods (thus, to a five-year plan), then it will be expedient to apply through every period some long-term optimal rate of exchange, even if it deviates from the optimal rates of the intermediate shorter periods. Such difference among the individual periods may arise from the different configuration of the sets of feasible programs of the shorter period, that is, from the fact that the expansion over time of constraints on production capacities, and of marketing and procuring possibilities does not take place in equal proportions. Such differences may arise also from changes in the requirements relating to the trade balance, which may be a consequence, e.g., of changes in international credit conditions.

This leads us to the question how far the statement, that the direct path is the best one, is valid. Instead of comparing the various alternative paths solely on the basis of their "speed", or total costs, perhaps it would be better to compare the quicker improvement in the trade balance to the possible decrease of "speed" or to the additional costs offered by other paths. If, e.g., there is a strong preference for improving the trade balance (as can be experienced in our country and frequently also in others), it may turn out that an upper roundabout path of the type b) can be considered to be more favourable than the direct path. If, e.g., we assume that we may proceed with equal "speed" on paths a) and b), then, following the latter one, our foreign exchange receipts will grow quicker, our outlays diminish quicker than in the case of choosing the former. True, this has a price: costs will decrease slowlier along path b) than along a). To judge whether it is worth-while to pay this price, belongs to the field of competence of economic policy.

In addition, there is reason to think that the "speed" of progress is not identical on the two paths. Application of a higher exchange rate than the

long-term optimal one involves not only that also such goods can be exported or such import goods substituted by domestic production which would cause losses with lower exchange rates. It means also that the profit margin of all products exported or substituted by home production generally increases and consequently there is more to accumulate and invest: to expand production, to increase technical progress, more funds will be available for market research and expansion. All this may add up to a quicker advance on the paths above the direct one and every driver knows that it is often worth-while to choose a longer way if it allows greater speed.

Under certain conditions, it may thus turn out that even if path b) is "longer" than a), it will not lead slowlier to the goal and using it the improvement in the trade balance will be definitely quicker. Against these advantages of path b) it must be weighted that it is costlier than the direct path. This means partly that, owing to the higher rate of exchange, the earning of foreign exchange is more expensive. True, a part of this difference only augments enterprise profits, that is, it may be considered as re-allocation of the social net income; another part, however, serves to cover the production costs of such export goods (or the substitution costs of imported articles) which would not have been turned out with a lower rate of exchange. But the application of a higher exchange rate is more expensive not only on this account. In such cases, namely, expansion of production takes place not only by a better utilization of capacities, but also new capacities are created, with such ones among them that should be considered to involve losses in the long run, that is, in view of the long-term optimal exchange rate. Such investment projects started with a view to the temporary high exchange rate mean a definite loss to the economy and in some cases this may be quite considerable. This shows that "quicker" progress and a "quicker" improvement of the trade balance has its price and, maybe, not a low one.

In case the third c) lower roundabout way is applied, the rate of exchange used will be lower than the long-term optimal one. On the basis of the arguments above it should be clear that choosing this path the approximation of the optimal program-pair and the improvement in the trade balance will be slower than on other paths above it. Prescription of a rate of foreign exchange that is lower than the optimal involves, namely, that several such production and investment activities which belong to the optimal programs, will not be started. Proceeding along this path means that a slower improvement in the balance of payments (that is, e.g., a longer maintenance of indebtedness) involves smaller total domestic inputs — at least in the beginning — than in the other two cases. In other words: for some time, smaller results require smaller inputs.

It is thus rather surprising that in our country, but also in capitalist countries, several financial experts advocate firmly the reduction of the ex-

change rates, or their keeping on a low level, even if it necessitates the application of elaborate systems of restraining imports and stimulating exports. From the point of view of economic policy, a low rate of exchange might be argued, saying the maintenance of indebtedness or its increase is desirable. In this case, however, the prescription for the balance of foreign exchange should be changed. In a queer manner, frequently the same persons who propose the keeping down of the exchange rates, are also against a policy of incurring debts.

If not only administrative prescriptions or moral incentives are used to curb imports and to boost exports, but these are complemented also with other economic tools coupled with the exchange rates (customs duties, subsidies, extra taxes or exemptions, fixed prices, etc.) then we can no longer speak of a uniform rate of exchange. The customs duties, import dues, or fixed import prices are aimed at deflecting the domestic prices of some import goods or of goods arriving from certain markets in comparison to the rate of exchange applied and thus have the same effect on import substitution as if the rate of exchange were differentiated. Similarly, subsidizing exports to a different extent by commodities or by countries in any form (subsidy, tax exemption or price levelling) is equal in its effect to applying several exchange rates.

On the basis of our model, some statements may be made regarding the effect of applying differentiated exchange rates on the improvement of the present commodity and market pattern of trade and on the approximation of the optimal program-pair. Even without a deeper — otherwise highly desirable — discussion the followings seem highly probable:

1. Application of differentiated exchange rates and of profit incentive results in selecting such path for moving from the actual program as would come about if the weighted average of the differentiated rates were applied.

2. The extent of movement is smaller, that is the proceeding along the path thus emerging is slower than if the uniform rate corresponding to the average had been applied.

3. Apart from the exceptional case when the weighted average of import duties and export subsidies check out each other, the movements in the set of feasible export and import programs will be of different direction, that is, they will be such as if different export and import rates of exchange had been applied. Presumably, this will further hinder the finding of the optimal program-pair.

4. Since a differentiation of the rate of exchange amounts to the application of higher and/or lower rates than the optimal one (most probably: both), in this case new capacities may come into being which will cause later losses or/and the creation of such capacities will be neglected which would be later profitable. Thus, this path shows the disadvantages of path b) or/and of c) as regards the starting of investments.

These two latter statements can be easily followed on the basis of what has been said. Understanding of the first two statements will be facilitated if the application of differentiated exchange rates is illustrated — on Fig. 3. — with the help of a case where the point corresponding to the inherited program is affected by vector forces of different direction. If, e.g., two kinds of rates are applied, a lower one (γ) and a higher one ($\bar{\gamma}$), movement ($x^\circ \rightarrow x^{\circ\prime}$) will take place in the direction of the sum of the two vectors, that is, in the direction of the average rate of exchange ($\hat{\gamma}$), but it will be always smaller, than if the

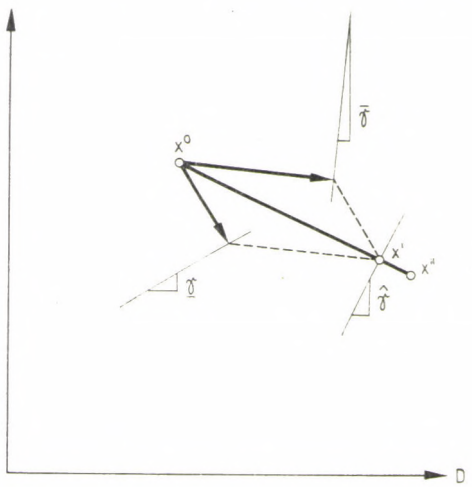

Fig. 3

sum of the two forces had acted in the same direction ($x^\circ \rightarrow x''$). But this example borrowed from mechanics is the less apposite, among other things because in our case the size of the "force" exerted is not independent of the direction. The magnitude of the exchange rate affects, as has been mentioned, the "speed" of movement along the corresponding paths. Thus, the size of the movement's distance develops as an average of "speeds" depending on the directions, that is, on the rates of exchange.

Finding the optimal program-pair by applying differentiated rates of exchange is slower and costlier not only because it puts a brake on proceeding along the corresponding paths and makes it more expensive mainly from the investment aspect, but also because — as has been mentioned under **3** — the averages of the export and import rates are generally different and this renders a proper correction of the exchange rate based on the balances of foreign exchange extremely difficult. If e.g. the average of the differentiated rates coincides with the optimal one on the export side and thus the program x^* according to Fig. 2 is realized but, as opposed to that, owing to the application of a lower rate of exchange on the import side, an $\underline{y}$ program develops,

then one cannot know from the unsatisfied balance prescription on which side must a change be made to approach the exchange rates to each other. Should the exchange rates be changed on both sides, this would divert the export program from the optimum already found and would thus obviously slow down the correction process.

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ПРИБЛИЖЕНИЕ ОПТИМУМА ВНЕШНЕТОРГОВОГО ОБОРОТА

А. НАДЬ

Статья представляет собой продолжение опубликованного ранее труда, занимавшегося вопросами оптимальности объема и структуры внешнеторгового оборота и их взаимосвязи с валютным курсом. Автор с точки зрения оптимизации сопоставляет систему, базирующуюся на валютных предписаниях и минимализации расходов, с системой, основанной на предписании валютных курсов и максимализации прибыли. При этом указываются преимущества системы заинтересованности в прибыли.

Автор останавливается на последствиях выбора между различными курсами инвалюты с точки зрения нахождения оптимальной экспортно-импортной программы. С новой стороны освещаются им последствия выбора между средним и предельным курсами инвалюты и эффект применения дифференциального курса.

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GY. VARGA

LONG-TERM PLANNING IN THE HUNGARIAN ENTERPRISES

This paper is based upon a lecture delivered by the author at the International Conference on Industrial Economics held in Budapest this April. The author summarizes the data of a survey covering 22 industrial enterprises. The actual situation of long-term enterprise planning is described and major aspects of the same, as business strategy, time horizon and alternatives of planning, as well as preconditions for further improvement are treated.

Planning is not a new task for the Hungarian enterprises: ever since the introduction of planning the national economy, plans have formed the basis of enterprise activity, although the contents and the objectives of planning have changed during this period, especially since the introduction of the new economic mechanism in 1968. Prior to this, the enterprise plan contained that part of the central economic plan which had been allocated as compulsory instructions to the specific enterprise.

In the new management system of the national economy, the enterprises are independently preparing their own plans. They do it in their own interests and on their own responsibility. Planning becomes one of the important instruments to explore enterprise reserves and to utilize resources in a rational way. Well-founded strategy is necessary for a rational plan and I therefore start by discussing questions of enterprise strategy.

The strategy of the enterprise

While the state is raising economic requirements set to the enterprises, their existence and survival will be increasingly dependent on how they prepare for the future. Moreover, besides their pure existence and survival, they have to ensure even their growth and competitiveness; this, indeed, is partly a function of the development guidelines of the enterprise: i.e. whether or not the enterprise, considering the environmental factors, has already explored the major trends, the objectives, the resource requirements and the methods of development. The strategy of the enterprise and the long-term planning activity based on this strategy, have become more and more the essential conditions of the competitive survival of the enterprise.

An additional reason why the role of strategic decisions is increasing is the recognition that the economic activity of the enterprises — especially of the large ones — is accompanied by extensive social effects, whereas their existence, at least in the socialist countries, is strongly influenced by the ideas, objectives, political, social and economic considerations and priorities defined

in the national plans. A long-term strategy is required by the high rate of the technical progress (and of obsolescence) as well as by the fact that certain markets become saturated within a relatively short thime. Due to the gradual decrease of the life-time of products, the former stability of markets of certain products has been shattered during the past two decades. It can be added that science is also expanding at a high rate and the body of knowledge once acquired needs to be refreshed more and more frequently; demand for flexibly convertible knowledge is increasing. To keep abreast with technical development large volume of research and development investments are required nowadays.

All these unavoidably push the solution of strategic problems into the foreground of the management activity.

In cooperation with the research workers of the Institute for Industrial Economics of the Hungarian Academy of Sciences we made an investigation in the fourth quarter of 1969 by personal interviews concerning the role and place of long-term planning. Our investigation covered 22 industrial enterprises and 4 factory units. Considering the circumstances, the data of the survey,[1] the size of the sample, and the shortcomings of the method applied, it would not be justified to draw too far-reaching conclusions from the results.

The 22 enterprises included in the survey are of different size, they belong to various branches of industry and their internal organization is also divergent. One part of the enterprises are of medium size (the number of employees is 400—700 persons, annual turnover 40—100 million Forints), whereas the other part, the majority of the enterprises, is of large size (the number of employees is over 1000 persons and annual turnover exceeds 100 million Forints).

Our point of departure in the survey was that long-term planning requires first of all the formulation of a general development policy, and the definition of strategic ideas. The subject of the strategic decision is the long-term development of the enterprise.

The comprehensive long-term plan and the coordinated partial plans can — and indeed must — be compiled on this basis.

Elements of enterprise strategy in practice

First among the elements of strategy, the production (servicing) task and function of the enterprise should be mentioned. The definition of the product to be produced, the profile or product-mix i.e. the physical side of the product is of secondary importance: the main point is to delimit those pro-

[1] A new plan period will start in 1971 and the formulation of guidelines and hypotheses of the medium- and long-term national economic plan is just under way.

ductive activities the enterprise can get engaged in for the longer term. Since 1968, legislation enables the enterprises to enlarge or modify the profile easier in the future, (earlier the adjustment of the production profile was subject to a rigid bureaucratic procedure). To perform a function adequately means constant and flexible following of the changes in technology and in the market, moreover, creating through active measures demand for the services arising from the function.

Limits to adjusting the function of enterprise under our conditions are in some way narrower than in the capitalist countries. Narrower in the sense that it is not possible here to create such a high-degree of diversification as in the so-called conglomerates; and also, possibilities or deliberate freezing of certain activities are limited. This limitation of enterprise function cannot be considered as unfavourable, since the fundamental types of activity of the enterprises form an integral part of the national economic proportions, of the planned equilibrium of demand and supply. Through direct and indirect allocation of resources the national economic plans exert influence, stimulate or limit in the long-run the possibilities of certain enterprises or industries for manoeuvring (and growing).

We can say without exaggeration that in the case of Hungarian enterprises the primary task is the realization of the existing market possibilities and the adequate performing of the functions — in some cases by their skilful combination — laid down in the foundation document. There are, however, enterprises in Hungary which — taking advantage of provisional subsidies — too heavily relying on production traditions or just out of mere habit, under the pretext of protecting consumers' interests, insist on sticking to their traditional production profile, whereas changes in the size of profitable production volume (size of batch or series) or structural shifts in the market, etc. have made the production of a particular product economically — and perhaps technically too — unreasonable and outdated.

State subsidies[2] to such enterprises will not stimulate, they will not be conducive to perspectivic thinking or to a well-based development policy. We have companies, employing several thousands, offering products which are uncompetitive (albeit not necessarily because of their fault) and unsaleable. These companies could not survive without state subsidies; and yet, some of them make much weaker efforts in order to find a new and proper function than other, healthier enterprises which are profitable and capable of standing on their own feet.

When defining the function of the enterprise, it is desirable to determine simultaneously the market and also the methods of reaching it (through the wholesale distributors, or direct contacts with users). According to our survey

[2] Subsidies will be reduced gradually from 1971.

more than half of the enterprises in the sample have specified their ideas concerning this subject. It should, however, be noted that in this respect the unfavourable consequences of excess demand over supply still have a very strong influence; certain enterprises — primarily those supplying the domestic market and being in monopolistic position — adjust their market contacts to their production possibilities.

Certain companies considered their technical readiness alone and started developing new products on a high technical level; it turned out, however, in the course of the interviews, that neither the total resource-requirements of the development nor the long-term market possibilities were taken into account. E.g. one enterprise plans to carry out a considerable computer-production program, but according to all indications, they have no idea yet of the selling possibilities of their future products and even if their programme can be realized, they count on state support. The supply of skilled workers for the production seems also unsecured. Consequently, it appears that the development objectives and the internal and external conditions of realization have not been properly coordinated.

A further element of the strategic decisions is the determination of the policy and methods of financing of the undertaking as well as the organization which is capable of realizing the development objectives, i.e., the internal mechanism of the enterprise (management, information system, optimal workshop size, etc.), its character, division and the principles of its activity.

On the question "Has the enterprise any strategic scheme constituting the basis of long-term development?", 16 of the 22 participants gave a positive answer. This seemed to be rather a good result. Of the four workshop divisions, one had an independent development scheme. We asked also, whether the strategic scheme in question had been put down in writing and documented. It is noteworthy that 11 of the respondent enterprises wrote them down. At two of them documentation concerned only the investments and at one of them the objectives put down in writing were not of long-term character. In conclusion, therefore, we may say that 8 of the 22 enterprises had comprehensive strategic schemes which may be analysed.

"If any, what is included in the scheme?" — this was our next question, namely:

(a) Definition of the production/servicing function of the enterprise, formulation of the profile and structure.

(b) The future markets of the enterprise and the connection with them.

(c) Major directions of production and product development.

(d) Major directions of modernizing the structure and the organizational pattern.

(e) Financing policy (liquidity, own resources, etc.).

Of the 22 respondents, positive answers have been received:

to question (a) from 16 enterprises
to question (b) from 12 enterprises
to question (c) from 16 enterprises
to question (d) from 8 enterprises
to question (e) from 6 enterprises

From these we may conclude that one part of the respondent enterprises have certain schemes concerning the future, even if these do not comprise, for the time being, every field of enterprise activity.

It seems that it is the production function of the enterprise that stands in the foreground of development policy. Several enterprises indicate that they are looking for possibilities enabling them to create a more efficient product structure. (The number of positive answers given on question (a) and (c) is equal!) It cannot be said that other elements of strategy are treated with the same weight. It is true that the elaboration of market strategy, contrary to the former production-type approach, is a rather new task. The formulation of an appropriate financial policy is a question which exceeds the competence of the enterprise (the change of resources at the enterprise's disposal is dependent upon state regulations, etc.). It is true that nowadays enterprises prepare short-term liquidity plans, but this serves primarily for the purpose of day-to-day operations. There are few indications as yet that enterprises have recognized the role of liquidity in business management. This is shown by the fact that — according to our survey — the majority of development plans do not take into account the additional requirements of working capital.

Components of strategic activity

The formulation of strategy implies — in my opinion — the following activities:

(a) Recognizing the possibilities in the environment of the enterprise, exploration of danger zones (probable change in the pattern of material consumption, appearance of monopolistic tendencies in the market of purchased products, counter-actions of the competitors, etc.) estimation of the risk arising from the possible alternatives. In planned economies, national economic plans, the state's long-term economic policy, directly or indirectly inform the enterprises of the major directions of changes in environmental conditions.

(E.g. long-term national economic plans concerning the reduction of mining output and increasing the efficiency of production, the production and consumption of hydrocarbons, the state's efforts for increasing the application of chemicals may obviously serve as guidelines for a number of enter-

prises, when formulating their own long-term development plans; such long-term guidelines of economic policy may provide important indications in an indirect manner for other enterprises — for the suppliers of machines, appliances etc. of the former enterprises.) No less important are the long-term targets of national economic plans concerning the social and employment structure and the level and pattern of incomes, because these help consumer industries and their suppliers to explore possibilities and limitations inherent in the environmental factors.

(b) Before an enterprise makes a decision (i.e. choosen from among possible alternatives) it has to consider carefully whether its resources — capital, know-how, marketing ability, management experience, technical expertise, etc. — permit the exploitation of the assumed possibilities, and the acceptance of the risk and uncertainty involved.

Let me quote the experience of an engineering enterprise to show the importance of one particular aspect, usually not considered as self-evident. This enterprise started developing a technically high-standard automatic machine system suitable for mass production. The intellectual and material basis for this development were available and the program was successfully completed. The enterprise planned to sell this machine at competitive price abroad. Their efforts ended in failure. Where did the enterprise make the mistake? They missed to examine before the program started, how the buyers think of them, what is the "image" of their enterprise in these markets. As it was found later on, such machines are purchased by engineering enterprises engaged in mass-production where the working reliability of the machinery, the security of a servicing network, etc. have a decisive influence; therefore these enterprises have confidence in nobody else but their traditional suppliers and purchase such machines almost exclusively from these companies. In the end, the good Hungarian machine had to be withdrawn from the market. The lesson to be learn is that the analysis of what buyers in the market think of the competence of the enterprise, in other words its "image", is of foremost significance, and where necessary even its systematic creation or strengthening constitutes an integral part of the long-term marketing strategy.

(c) When defining the strategy of the enterprise it is advisable to take into account subjective factors as well. Most important in this area are the personal preferences of the top managers and their closest assistants. In the final selection of objectives subjective judgement, personal desires, and individual ideas have also their part to play. Therefore, when making strategic decisions it is customary to take into account what the managers of the enterprise intend to do. The concept of strategy has a sociological element too, i.e. how attractive are the goals chosen for the managers and the workers, to what extent are they clear to them, are they enthusiastic about these objectives or they are executing them in a make-believe manner. Attractive stra-

tegic goals have a mobilizing influence and in such cases management can surely rely on the employees of the enterprise.

Naturally this implies that we should select carefully the persons participating in the formulation of the strategy and the strategic guidelines have to be made known in the widest possible circle. As to the first question, experience suggests that in the foundation of strategic guidelines technical-production considerations and interests still have rather a strong influence and are reflected in the composition of the staff who take part in their formulation. As to the second problem, it is a widely experienced fact that development ideas are known primarily to the top-level managers of the enterprise.

At some enterprises there is a strong belief that the whole concept of strategy is a matter for top-level management, and for nobody else. We have also met with views which said that "workers are not interested in strategy and therefore we do not inform them of development policy".

Finally, strategic decisions have ethical aspects as well. When selecting strategy, the written and unwritten standards of social behavioural patterns should be considered. Neglecting these standards may — in the long run — jeopardize the existence of the enterprise (e.g. protecting the cleanliness of the air, performing certain cultural and social tasks, protecting the quality, fair business practice, etc.).

Defining the four components of the strategic activity one by one — (1) possibilities in the environment of the enterprise, — (2) the resources and competence of the enterprise, (3) subjective judgement and — (4) social responsibility — is a smaller problem than their joint application in a selected system of objectives. The art of strategic planning lies just in coordinating and keeping these components in a dynamic equilibrium. (Considering individual elements *separately* one may get different results.)

Long-term planning

Let us now turn back to the results of the survey mentioned earlier and examine the answers we received one by one. This leads to the second part of our subject-matter: from the foundation of the strategic guidelines to the field of long-term planning. By way of introduction I remark that though strategy and long-term planning are closely connected, the two cannot be identified with each other. The elaboration of the strategy and the long-term plan may coincide in time, but the two are not identical. The time-horizon of strategy — or rather of the alternative strategies — securing the future of the enterprise are determined primarily by technical characteristics (the length of technological cycles, durability of products, research and de-

velopment requirements, etc.). The time-horizon of the long-term plan is better adjusted to that of the national economic plan and the information flow to the enterprises through the channels of the economic-political management.

As different from strategy, the plan defines in a complex manner the future development of the enterprise — for a given period — and in general also the resources required.

On the basis of answers received on the comprehensive questions concerning planning the following statements may be made:

(1) 70 per cent of the enterprises and workshops have comprehensive long-term plans, this ratio being approximately equal to that of enterprises having their strategy laid down in writing. In most of the cases those enterprises have no plans which have no written strategic guidelines either.

(2) Experience shows that, depending on production characteristics, the size of the enterprise and on the various activities, enterprises prepare their plans for different periods. The majority of them plan for a period of 3—4 years, though certain enterprises prepare plans even for 10—15 years ahead. There are, however, enterprises which plan for 2—3 years only — especially producers of consumer goods.

It would not be reasonable to standardize the time-horizon of planning on the basis of certain considerations. Production technology, product-mix, the character of the market, supply of information, factors of uncertainty, risk — these are the factors which determine the realistic time-horizon of projection. There may be branches, where the realistic time-horizon of long-term plan is 30—50 years. However, such cases are rather few; to my knowledge the only example is forestry. Contrary to this, in the fashion-industry and in piecemeal production satisfying special requirements, according to our survey the possibility of realistic projection extends to no more than 2—3 years. In the mass production industries plans are prepared in general for 5—10 years. In most branches of basic material production the necessary and possible planning period is estimated to be 10—15 years.

I tried to point out certain connections between the period of planning, the character of production, capital intensity, the size of the enterprise and the sensitiveness of the enterprise to the market. The character of production has been found as decisive. The share of export, transportation, the channels of distribution or sale have no influence on the time-horizon of planning; the behaviour of enterprises examined in the survey does not show any regularity in this respect. It may be that the number of enterprises included in our sample was not sufficient to assess such regularity; it may also be that this reflects the impact of the remains of the earlier production-oriented attitude.

It may be supposed that, apart from production-technological characteristics, these factors will have a stronger influence in the future on planning and the period of planning. As far as I can judge it on the basis of literature

and my own experience, this unambiguous *increase* in the time-horizon of planning cannot be experienced abroad. This is due to three factors:

(a) the capital requirements of research and development, playing more and more important role in growth, are increasing at a high rate; enterprises therefore are increasingly attracted rather by development activities which promise results within 3—5 years, than by very long-term research programs demanding large volume of capital,

(b) with the time-horizon increasing, risk and uncertainty grow. One part of these factors originate from outside the economy and planning their influence is especially complicated,

(c) modern information techniques permit the more frequent updating and adjustment of the plans.

(3) The majority of plans aim at reaching a specified volume of profit or maximizing the sharing fund. Relatively few think of strengthening the competitiveness, the market position of the enterprise and of growth.

It is not very much reflected in statistical data, but was clear from the interviews that the actual internal elements of long-term planning are influenced primarily by interest in maximizing profits.

(4) In connection with sub-plans, we have got the impression that the majority of enterprises prepare plans concerning the volume of production, product-mix, investments, profits, labour force requirements and production and product development. In connection with the latter, many enterprises sketched the direction of development in general terms only. E.g. one of the big plants of the machine tool industry could not give any information either as to the specific direction of development or the probable growth of the market. A smaller part of the enterprises prepares plans concerning the purchase and sale of licence and know-how, and price policy. It seems that the enterprises intend to utilize rather the *opening* possibilities and opportunities but are less keen on *creating* new chances and possibilities (demand) by way of dynamic business policy and appropriate adjustment of structure.

Stock policy, financial equilibrium of the enterprise, development of organizational, management and also of the information system and even ideas concerning replacement of obsolete equipments, are all pushed into the background in the course of planning.

For the time being, few enterprises plan to scrap obsolete machinery. This means that the instinct of capacity preservation, the interest attached to reaching specified volumes of production is still strong even if machines and equipment are already obsolete. Planning the replacement activity can make the financial policy, the purchase of machines and the management of floor area more systematic, and it constitutes an integral part of planning the production and material consumption structure.

Methods for the elaboration of plans are similar to those applied in case of strategic guidelines. Plans are prepared in the head office of the enterprise. They are mostly based on the sub-plans of the individual functional units of the enterprise. These units are seldom given guiding principles for securing consistency. Some enterprises have set up special groups charged with the preparation of plans — thus removing the partial interest of the functional organizations. The method of preparing plans is highly centralized. There are few enterprises, where plans are made on the basis of plan proposals handed in by the works-units or divisions, moreover works-units, which have independent long-term plan, are quite scarce though some of them included in our survey employ over thousand persons.

Elaboration of alternatives

In connection with planning, it is necessary to underline that only a small proportion of enterprises prepared *alternatives*. Even among these, some were related to certain specific objectives. It is true that working out alternatives requires much time and labour as well as planning expertise — a skill difficult to define and still lacking in the majority of our enterprises. We are told by one of the big exporter enterprises that "we have the alternatives only in our mind because elaborating them would have demanded too much labour". New planning on the basis of *consistent* alternatives should be established in the future. The importance of alternative planning is justified by the uncertainty of environmental factors. Admittedly, there is an opinion according to which this is just the reason why one cannot prepare such plans. This anxiety, however, — in my opinion — does not restrict the formulation of long-term guidelines, since in case of decision of strategic character the precise quantification of our information concerning the future is not desirable. It cannot be generally prescribed what are the functions for which alternatives are required — this depends on the peculiar situation of each enterprise. Future alternative possibilities of the development trends of the company's products may belong here as well as alternatives enabling the enterprise to keep pace with these trends (e.g. R & D programmes within the enterprise and at research institutes, variants of bought-in know-how and licences), or in numerous aspects of marketing. If an enterprise is capable of identifying the functions which qualitatively delimit its area of operation in the long run, it can plan its alternative lines of development as well, even if these prognoses do not present a closed and quantified system. The more uncertain the future, the more inevitable it is to survey what may happen or what is likely to happen, the more necessary it is to analyse the probability of events that may occur. Especially important is this for enterprises with production subject to

rapid technological development and with a product structure sensitive to changes in the market. Therefore, it is necessary to work out such a strategic plan, which *satisfies several* (future) *requirements* and secures satisfactory results. Thus, it is more expedient to follow the suggested method than to prepare a strategy, the success of which depends on the realization of *one* specified system of environmental conditions. (It seems as if the medium — and short-term plans prepared for maximizing or optimizing profits do not consider this aspect at all, or not sufficiently.)

It provides, at the same time, certain flexibility to the enterprise. One can hear frequently: "I cannot do it because my hands are tied by the plan" or "I have already committed myself for the next 5 years". However, in economic life, flexibility, the utilization of unforeseen possibilities may be more important than keeping to a "fixed" plan. Therefore, a strategic plan must not be so rigid as to leave unexpected and unforeseeable possibilities unutilized. Consequently, conditions of flexibility in respect of financial resources, capacity, stock, etc. should be secured in planning.

It is said in general — and we were told this opinion during our survey — that planning is practically unfeasible, since in the new economic mechanism the economic "climate" (the system of environmental conditions) is uncertain. Some half of the respondents were of the opinion that when laying the foundation of the future of the enterprise the economic regulators cause the highest uncertainty.

This subject was dealt with by Professor *J. Wilcsek* at the session of the Industrial Section of the Hungarian Economic Association in December 1969. I agree with his views and would like to add some remarks:

(1) Long-term planning is necessary just because of the uncertainty of economic life and the future; if we could foresee the future exactly planning would probably be unnecessary.

(2) The existence, survival and competitiveness of the enterprise are influenced primarily not by those factors of uncertainty which are referred to by the enterprise managers. Consequently, it is not the conditions of credits or the modification of price regulations that the future of the enterprise depends on. (I think that in this respect uncertainty is considerably higher in countries without planning.) The long-term development of the enterprise or its prospects for growth are determined in the first place by technical development and changes in domestic and international markets of the products. The object and the instruments of strategic decisions are different from the tactical decisions influenced more strongly by elements of economic control which constitute the subject of short- and partly of medium-term plans.

However, it is a justified requirement that at least regulators having strong influence on medium-term development should *not* be modified too frequently. Such modifications cause uncertainty, make forecasting impossible

and reduce enterprising spirit and willingness to risktaking to a minimum. It is expedient therefore, to determine for a longer period certain basic elements of economic control — taxation, exchange rate, foreign exchange management, reserve rate, wage management, etc.

(3) One thing is sure, — and this is what the enterprises refer to as "uncertainty" factor — *that the impulses called forth by the prevailing economic management, control and incentive system, act as short-term stimuli.* (This is the very reason why I do not consider it an advantage that long-term planning is motivated, at present, by short-run profit incentives or a minimal profit level.) The source of troubles is not in the *individual* regulators but in tendencies and expectations suggested by the *whole* of the regulation system. This, at least, may be inferred from the *typical* enterprise behaviour that is reflected nowadays in the widely known insufficiency of enterprising and risktaking and in orientation on annual results. I think that the "uncertainty complex" of the enterprises takes its origin from the very fact that the present system gives priority to short-run decisions, at the cost of long-term ones.

Long-term planning is a process of thinking which breathes life into ideas, creates models and objectives. Planning is *preparation* for the most efficient utilization of resources. Long-term planning is nothing else than the realization of the fact that the "decision intensity" of economic life is increasing and therefore the entrepreneurs should always have suitable *alternatives.*

The manager cannot "play chess" so that he should be left with only one possible move; similarly to the chess game he should have various alternatives in respect of the various positions in order to be able then to select the best possible alternative to match the actual position.

In strategic planning, the judgement of uncertainty and the preservation of flexibility is undoubtedly a complicated job, however, without meeting these basic requirements, strategy cannot be considered as well-founded and decisions built on it may lead to serious errors. What is needed, is the *dynamic equilibrium* of considerations constituting the basis of strategy, strategic guidelines which develop gradually in the direction of a constantly improving coordination of enterprise resources and possibilities arising from the environment. Formulation of a strategy which is *optimal* in respect of the above requirements, demands much circumspection and experience. This experience can be ensured by the manager only through close cooperation with fellow-workers.

According to the evidence of our survey, a considerable part of the enterprise carried out *continuous* planning. This seems to confirm that our enterprises begin to recognize the fact that not the plan document is important but the planning process and the constant readiness for decision.

There are some enterprises holding the opinion that long-range development guidelines and plans should be modified and adjusted every year. This indicates that the source of uncertainty at these enterprises is the lack of firm-

er ideas on development or their insufficient foundations. One of the characteristics of the long-range conceptions is just their relative *stability*. Long-term (strategic) planning is an "abnormal" process. Problems, possibilities or ideas which have radical influence on the development of the enterprise emerge irregularly and not according to a time-table prepared in advance. Therefore, — in my opinion — overstatement of *systematic methods* in strategic planning is an action that may be contrary to the nature of economic processes. (As against this, short- and medium-term planning and management require more systematic, scheduled work of administrative character, etc.).

The point is that what is needed to be revised and modified annually — or semi-annually — is either the *insufficiently founded* long-term conception or — what may be rather assumed — one or the other of the short-term decisions, not unfrequently of technical nature.

Available information, forecasts and modern planning methods have important role in the foundation of long-term plans.

To our questions: "What source of information do you rely on in the first place?" we have got the following answers listed in order of importance:

— supervising bodies (ministry, etc.)
— buyers and suppliers
— literature
— financial institutions

Answers to the question "Do you consider available information as satisfactory?" in the form of percentages of all respondents:

Information considered satisfactory concerning

	per cent
— own enterprise	57
— own industry	46
— the national economy	38
— economic regulators	34
— competitors	26
— economic policy	26
— foreign markets	23

Enterprises wish to *expand* information, in the first place, concerning the economic regulators, then foreign markets and then conceptions of economic policy. No doubt it is desirable to increase the informative and consultative activity of the supervising bodies.

There is quite a lot to do in developing the internal mechanism of the enterprise. According to the present survey, there were 5 such enterprises which were not satisfied with their information system but it may be assumed

that the former reporting system — geared primarily to plan-fulfilment — has not been transformed everywhere into a new integrated information system, necessary to perform complex economic activity.

About one third of the enterprises conducts regular *market research* (though not covering the entire product range) sales forecasting and technical prognosis.

While need for market research is a function, primarily, of supply-demand relations, the necessity of forecasting is connected to the interest in long-range development.

Modern planning-technical and mathematical methods, first of all linear programming methods, trend and optimum calculations are applied by about one third of the enterprises. The main purpose of the application of these methods was the optimization of profit. Only a smaller part of these enterprises regard mathematical methods as normal instruments for the preparation of decisions. One of the respondent enterprises is going to purchase a heavy-duty computer in the near future. A separate group has been set up to elaborate tasks stemming from organizational and operational questions connected with the computer.

Conclusions

We are deeply interested in creating long-term mentality, long-range development policy and planning at our enterprises. Domestic and international experience indicate that long-term development guidelines bring economic benefit since they increase the stability, flexibility and competitiveness of economic organizations. Long-term planning is an important instrument of management. Sufficiently founded development concepts encourage enterprising and risktaking and they stimulate the analysis of the effects of present decisions in the long run and also their comparison with the long-term interests of the enterprise.

Conditions of creating long-term mentality and long-term planning are the following:

(1) *At the level of the national economy:*

(a) elaborating long-term concepts of economic policy and development,

(b) influence demand and supply relations so as to strengthen the buyers' market, to limit monopolistic tendencies and to create healthy competition in the domestic market, forcing thereby the enterprises to manage the quantitative and qualitative composition of supply in accordance with the effective demand, to increase their efficiency, and to make them recognize that these aspects determine their existence and survival;

(c) establishing a system of incentives which makes managers interested in the foundation of the long-term development of the enterprise, which stim-

ulates for rational risktaking even if inputs will not be paid off in the first year, but later. A well-aimed system of incentives may give momentum to product and production development, to research and development activity, to long-run personnel policy, to the improvement of the internal mechanism of the enterprise, etc. i.e. to all the hitherto neglected activities, which explicitly require long-term mentality and planning.

(2) *At the level of enterprises:*

(a) first of all personal conditions should be created (socialist business experts of entrepreneurial type, and planners should be trained, who do not "plan" in the exclusive technical sense of the word — and also forecasters, programmers and analysts);

(b) the internal management system of the enterprise should be modernized, with the possible consequence of long-term development questions getting into the foreground of the management activity;

(c) establishing technical conditions, partly within the enterprise and partly outside (computer centers, consultants, etc.) and creating simultaneously an information and planning system, geared to development policy.

Finally: the quality of economic activity at enterprise level is, among others, a function of its theoretical foundations and of *microeconomic* research. The work started in this field in the socialist countries may contribute substantially to the scientific foundation of the management of enterprises.

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ПЕРСПЕКТИВНОЕ ПЛАНИРОВАНИЕ НА ВЕНГЕРСКИХ ПРЕДПРИЯТИЯХ

Д. ВАРГА

Автор суммирует результаты исследования, проведенного на 22 предприятиях Научно-исследовательской группой экономики промышленности Венгерской Академии Наук. В качестве исходного положения он утверждает, что разработка предприятиями стратегий и основывающееся на них перспективное планирование становится все более обязательным условием конкурентоспособного существования предприятий. В установлении общей концепции развития и стратегических соображений первичная роль принадлежит определению функции преприятия в сфере производства (услуг), причем таким образом, чтобы оно всегда могло приспосабливаться к изменениям техники и рынка.

Автор в своей статье — детально проанализировав полученные от предприятий информации — отмечает, что предприятия разрабатывают соображения по развитию лишь в отношении отдельных частных областей их деятельности и пока еще не развертывают согласованной системы целей и средств.

Далее автор детально излагает основные компоненты стратегической деятельности предприятий, то есть систему, позволяющую сформировать политику развития. Он различает т. н. стратегию «последователей» и стратегию «пионеров». Анализируя возможности стратегии последователей, автор констатирует: эта стратегия не должна ограничиваться простой реконструкцией прежних изделий предшественников. В этом случае обосновано и необходимо перепрыгивать через определенные фазы развития.

Перспективным планом — в отличие от стратегии — комплексно определяется развитие предприятия для определенного отрезка времени. Большинство предприятий разрабатывает перспективные планы на 3—5 лет. Нет необходимости в единой регламентации горизонта времени. На планирование прежде всего влияет краткосрочная заинтересованность в прибылях. Планирование на основании увязанных альтернатив практикуется пока еще в очень ограниченном кругу. Автор оспаривает правильность стремлений, направленных на уточнение перспективных планов; по его мнению, целесообразно разрабатывать такие планы, которые удовлетворяют нескольким возможным (будущим) условиям.

Опираясь на результаты проведенных на предприятиях исследований, автор останавливается и на влиянии экономических регуляторов на планирование, а затем — в заключительной части статьи — определяет те макро- и микро-экономические условия, осуществление и развитие которых могло бы способствовать развитию и укреплению перспективного планирования и перспективного образа мышления.

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T. ERDŐS

SURPLUS VALUE AND ITS RATE IN CONTEMPORARY CAPITALISM*

The author re-examines some aspects of the Marxian theory of surplus value and arrives at the conclusion that there is no rule according to which the rate of exploitation ought to grow unconditionally.

In our universities, where political economy is being taught, modernization of the pertinent curriculum is an important item on the agenda. However, the modernization of political economy must not be restricted to studying so-called modern problems, such as e.g. capitalist integrations, the contemporary problems of the reproduction cycle or the present-day economic growth of capitalism. I believe it is necessary to re-examine also some fundamental categories, money, surplus value, the rate of surplus value, profits, production price, the profit rate, etc., since, with the development of capitalism, these or their interpretation have undergone certain modifications. The teaching of political economy cannot really be up-to-date without understanding these modifications and finding adequate forms to impart them to the students.

The material of political economy constitutes, namely, an organic whole. For instance the investigation of the cycle, of economic growth, will help to understand problems related to certain basic categories, and conversely, without understanding the new problems related to certain basic categories it is impossible wholly to understand the so-called modern questions, as e.g. the contemporary market mechanism, the contemporary crisis phenomena, the reproduction cycle, the economic growth of capitalist countries, etc. If, e.g., the nature of contemporary capitalist money is not clarified, the economic activity of the monopol-capitalist state cannot be properly treated either. Similarly, unclarified problems related to the contents of the surplus value make it difficult for us to understand the entire contemporary reproduction process, economic growth, and, within this, to clarify the actual economic role of the capitalist state. Subjects should not be preconceived as modern or non-modern; every subject is modern, and we have to speak about the present throughout education. If we wish to teach correctly, we must treat, let us say, the surplus value in a way that it should correspond as exactly as possible

* In this article I wish to outline only the problems related to the contents of the surplus value and to the shifts in its rate — following an article by *L. Bertóti* [1] and partly carrying on his reasoning.

to the empirical facts of our days, to the results of Marxist scientific research, and should directly prepare the ground for the interrelations reviewed in the course of discussing e.g., economic growth.

Concept of surplus value

According to our textbooks, the surplus value is nothing else but the product turned out by the worker during the surplus working time, which, under capitalism, is at the same time the value expropriated from the working class, that is, the result of exploitation. The production of surplus value, as taught in the curricula, also means exploitation. Undoubtedly, in some productive enterprises, the part of new value exceeding the wages may be called surplus value, inasmuch as it is the surplus of new value, remaining after wages are paid. Together with L. Bertóti, however, I doubt if this surplus value — of course, the surplus of new value above *net wages* — is entirely the result of exploitation. The share of variable capital, that is v, may be higher on a social level than the share of wages in the new value created in productive enterprises. Variable capital should, namely, be understood to include the sum of transfer-payments going to the working population. On the social level, variable capital is thus augmented by pensions, sick-pay, unemployment aids, the supply of medicines free of charge or at reduced prices, medical treatment, hospitalization, maternity benefits, etc.

The sum of wages paid in the state sphere deserves particular attention. The wages paid by state-owned productive enterprises belong, naturally, to v but so does a considerable part of other wages paid by the state. A decisive part of the wages and salaries of postmen, teachers employed by the government, etc. should be assigned to v since most of them perform services for the working population. But I do not consider the salaries of soldiers, gendarmes, policemen as part of variable capital, since these are the maintenance costs of the oppressive apparatus; I assign them to the surplus value. It is a very complicated task to rank government-paid wages into the surplus value (exploitation) and into the variable capital. What should happen to the wages of those working in government administration, in the legal apparatus, etc.? Insofar as the oppressive apparatus is concerned, the wages may be considered as part of the surplus value. But the government bodies serve not only capitalist oppression. The pursuit of criminals, the organization and control of the economy are, at the same time, socially useful activities, in this respect the wages are not characterized by exploitation. At any rate, the pay of soldiers and policemen should be deducted from the government wage disbursement and be assigned to the surplus value characterized by exploitation. This will be denoted S_2 in order to show that part of new value above the wages of pro-

ductive workers — S_1 — cannot be regarded as deriving entirely from exploitation.

The state budget has also material expenses. Such are the purchase of armaments, government investments into productive enterprises, roads, public buildings, including the building of schools, hospitals, but the material expenses also comprise the building of barracks, military airports, in general, military projects. I consider the overwhelming part of material outlays as belonging to S_2. Their purpose is mainly the maintenance of the capitalist order, and these outlays are not part of the income of the working population. But the qualification of material expenses is not always as simple as that. The situation is quite clear with respect to building schools and hospitals in countries where schooling or hospitalization is provided free of charge or at reduced rates. Or let us take road construction. In our days the network of roads serves both production and consumption. It serves consumption inasmuch as it is used today largely by private cars. Since a great part of the stock of passenger cars is owned by the working population in developed capitalist countries, it is open to argument whether road building should be entirely classified as S_2. Particularly so if no extra charge is to be paid for the use of roads. The examples could be multiplied, but it should be clear also from these that the breakdown of the material expenses of the state is no easy task. Thus, for the sake of brevity, I will simplify the investigation and classify all material expenses of the state as belonging to S_2.

Development of the rate of surplus value under capitalism

What do we teach about the development of the rate of surplus value? We say, relying on the *Capital*, that its trend shows a more or less stable rise. The rising trend is mainly due to the growing productivity of labour. The growth in productivity reduces the value of labour power, and this is why the share of S grows within the new value. The value of labour power diminishes also as real wages grow, since productivity increases quicker than real wages. Since the rate of surplus value is nearly always bound to increase, it must be much higher today than it was in the 19th century. In his models, Marx assumed a rate of surplus value of 100 per cent; most probably for the sake of simplicity. It is easier to work with a 100 per cent rate of surplus value than, let us say, with one of 79 or 127 per cent. But the rate of surplus value may have been around 100 per cent in those days. The idea that it *was* near it, is deeply rooted — according to my experience — in the mind of every Marxist. Thus, if the rate of surplus value has been rising since the 19th century, it

must be now well above 100 per cent. According to calculations, this is really so; very high rates have been demonstrated; frequently 200 per cent and even above. Almost everybody agrees that the rate of surplus value is at present very high indeed. Some research workers are, of course, not of the same opinion. In his book [2] relying on US statistics, Péter *Erdős* quotes rates lower than 100 per cent, and, under certain conditions, even considers it necessary for the rate of surplus value to decrease at times of growing productivity. In education, however, the rates are referred to everywhere as very high and almost steadily rising.

To avoid any misunderstanding, let me mention in advance that, in a certain sense, I deem it justified to speak about two kinds of rates of surplus value. One is S_1/v_1, where v_1 symbolizes the wage of productive workers and S_1 the part of national income minus the wages of the productive workers. *But this rate is not a rate of exploitation.* Item S_1 also includes the wages of those employed in an unproductive manner, of people who do not work in the oppressing apparatus, whose work does not serve the maintenance of the capitalist system. Why should the wage obtained, say, by a trade employee doing really unproductive work, be considered exploitation, or why is the salary of those employed in the financial apparatus the result of exploitation? Why is e.g. the pay of the teacher, postal clerk etc. exploitation; or why should the sum of transfer payments to the working population be regarded as exploitation?.

I could go on quoting examples but I only wish to note that in all calculations showing a steady rise in the rate of exploitation and a more than 200 per cent level of the rate of surplus value, the authors rank the salaries of all trade employees into surplus value, saying that capitalist trading activity is mostly unproductive in character. Beyond the fact that I consider it absolutely incorrect to classify incomes as S or v merely on the basis of whether the pertinent activities are productive or unproductive, I do not think it is correct to consider the bulk of capitalist trade as unproductive, either. Transportation, warehousing, packaging, the detailing of goods, the service of buyers are productive activities, and these make up the bulk of commercial activity even under capitalism. It would therefore be correct to deduct the wages of commercial employees from S and to add them to v. This would, of course, suddenly reduce the rate of exploitation. In 1967, the number of those employed in the manufacturing industries was 19.4 million and in trade 13.6 million in the US. Considering these figures, the calculated rate of exploitation would indeed show an abrupt fall. It is inconceivable that the rate of exploitation calculated should depend simply on what is considered productive or unproductive activity. In fact, the size of the rate of exploitation is independent of how commercial activity is qualified, since it does not depend on the proportion between productive and unproductive work.

The rate S_1/v_1 may be considered as an indicator of productivity rather than an indicator of exploitation. It is an indicator of productivity, because the higher the value of the fraction, the higher the level of productivity and the higher the level of productivity, the greater the number of non-producers (working in the unproductive sphere) sustained by the producers. Of course, the fraction cannot be used as an actual indicator of productivity. Apart from marginal cases, it is difficult to tell exactly who the producers are; S_1 includes also profits, the ratio of which cannot be simply traced back to productivity, etc. I only say that this indicator is an indicator of productivity *rather* than a measure of exploitation. The ratio S_1/v_1 regularly rises on the whole, since with the growth of productivity, with the increasing socialization of production, the ratio of those unproductively employed also increases, and this involves, as a matter of fact, a rise in the rate of S_1/v_1. But this tells us nothing about the development of the rate of exploitation. It may change in any direction, it may even stay invariable. The conditions of a change in the rate of exploitation should be examined separately.

The rate of exploitation will be denoted by S_2/v_2 where S_2 includes the net profits of capitalists, the income from interest, and every income deriving from private property, e.g. land rent, and S_2 comprises such wage disbursements of the budget as directly serve the defence of the capitalist order, as e.g., the salaries of soldiers and policemen. Finally, I assign here the material expenses of the budget. For the sake of simplicity, let us assume that they consist exclusively of purchases of armaments and military constructions. What v_2 includes are all net wages not directly related to the maintenance of the capitalist system, taking, however, care that they should not figure in a cumulated manner (v_2 should not include the pay of soldiers and policemen, since they belong to S_2). Also the transfer payments to the working populations should be included into v_2. Of course, many other refinements are needed, but I will touch upon them only in the concluding part of this article.

Let us assume that the productivity of labour is growing at a rate of 2 per cent p. a. With such a growth in productivity, the productivity of labour will be doubled in 35 years. Let us now examine the conditions for a rise in the rate of exploitation, that is, first examine theoretically the development of the rate of exploitation and neglect, for the time being, the use of statistical data.

Let the rate of exploitation be exactly 100 per cent at the beginning of the period to be analysed. Production and market are assumed to have been in equilibrium, and commodities smoothly realized. The national income thus fell into two equal parts, v_2 and S_2, the first being consumed by the working population, the second partly by the capitalists, through individual consumption and accumulation and partly by the state through material expenses (purchase of armaments) and wage disbursements (pay of soldiers and

policemen). The part used by the state will henceforth be referred to as government consumption. All this can be stated in a very simple way:

accumulation	personal consumption	government consumption	v_2

If real wages stay invariable by the end of the period and employment is unchanged, then the rate of exploitation must rise to 300 per cent in the wake of a 100 per cent rise in productivity. Thus v_2 will reach only 1/4 of national income and 3/4 of national income will be S_2. But can the rate of exploitation be really 300 per cent?

If we start from the assumption that the market is always unlimited, we may imagine any size of rate of exploitation. One must not, however, forget that behind every value part of national income there are commodities which must be sold. Growth in the production of the national income assumes a parallel growth in the sales of commodities. The two must be in equilibrium. But let us advance further. Within the national income, the growing production of S_2 requires the sales of commodities corresponding to its value just like the growth of v_2 depends on the sale of commodities corresponding to the value of v_2. Equilibrium must be restored also in this relation. But who buys the goods corresponding to S_2? Either the capitalists themselves, or the capitalist state. Accordingly, the development of the rate of exploitation cannot be examined irrespective of the purchases of the capitalists and the capitalist state; we could also formulate this in a way that the movement of the rate of exploitation can only be understood if it is coupled with the possibilities of realization.

Thus, the theory of surplus value is simultaneously a *problem of reproduction*. The flaw in teaching it is that in most places it is not coupled with the theory of reproduction; the conditions of raising surplus value and the rate of surplus value are not examined. The impression one gets in teaching this subject is as though the market expanded without any limits, as though the realization of the surplus value of increasing size and rate did not cause any problem. Of course, nobody says so, yet this is what is tacitly understood when the growth in productivity is taught to lead to a growing relative surplus value under all circumstances. The solution is that the theory of reproduction should be included in teaching the surplus value, and, according to my experience, this *can* be done.

Let us return to the previous example. Can the rate of exploitation be as high as 300 per cent? It can, if the realization of a surplus value of this size and rate is secured, if the capitalists and the capitalist state buy as much as is represented by the surplus value in this case.

Let us start from the fact that the capitalists buy partly for the purpose of their own personal consumption. In order that their personal consumption

should amount to at least the same proportion of national income as at the beginning of the period examined, their consumption must be elastic. In this case their consumption would rise at the same rate as national income grows. I must note that a growing proportion of surplus value would require the personal consumption of capitalists to grow quicker than national income. But this is certainly not so; it is even probable that the personal consumption of capitalists grows slower than national income, that is, it is inelastic. In his book already mentioned, P. Erdős assesses — most correctly, in my opinion — the inelastic personal consumption of capitalists when analysing both the exchange value of money and the reproduction proportions. Without this, no correct picture, e.g. of the laws of movement of the general level can be obtained. Unfortunately, we have no exact data on the personal consumption of capitalists. There is, namely, no such record as would show the capitalists' purchases of consumer goods. The inelasticity of capitalists' consumption can only be an assumption. Changes in the purchase of consumer goods depend, among other things, on the saturation of consumer needs. The capitalists' needs of this kind are and can essentially be saturated, for they can well afford it from their income. Their purchases grow or diminish not simply because production — and, together with it, their income — increases or declines. The inelasticity of their personal consumption may also be concluded on the basis of the emergence and liquidation of overproduction crises, since the loose dependence of their consumption on income changes plays an important role both in the origin and the liquidation of crises.

Thus, at the end of the period examined, the personal consumption of capitalists most likely absorbs a smaller portion of the national income than at the beginning; indeed, the realization of a much smaller part of the surplus value (of a bigger rate) can be ascribed to the personal consumption of capitalists than earlier. Therefore, the rate of exploitation cannot grow unless government consumption and the rate of accumulation — under conditions of undisturbed realization — considerably increase.

The share of government consumption within the national income shows a rising trend over a longer period. This may partly account for the growth in the rate of exploitation. But we can say nothing certain about the extent of this rise from one period to the next. This may be large or small, it may remain stable for a short period, or may even diminish. E.g. the share of government consumption in the USA rose sharply in the period of the Second World War; a rapid rise could be observed at the time of the Korean War and since the escalation of the Viet Nam War. Consequently, the changes in government consumption largely depend on political factors. When its share strongly increases, the spread of government consumption may compensate for the proportional decrease in the personal consumption of capitalists. In periods when political tension abates, the share of government consumption

stagnates or diminishes, or the growth in its share is negligible. Since the changes in the share of government consumption or the extent to which its share grows are not exactly determined by economic interrelations, nothing definite can be said on the development of the rate of exploitation unless the movement of the rate of accumulation is taken into account.

It is certain, at any rate, that over shorter periods the rate of accumulation is subject to strong fluctuations which depend, for the most part, on the business cycle; in a good economic situation the rate of accumulation grows, in the opposite case, it declines. We are mainly interested in the long-term changes in the rate of accumulation. If these were to show a regularly ascending tendency, this would reasonably account for the rise in the rate of accumulation. Yet we have no reason to make such a statement about the changes in the rate of accumulation.

Over a longer period, the rate of accumulation essentially depends on the capital intensity of production. It also depends on other things; thus on structural changes in production. But structural changes influence the rate of accumulation also because the capital intensity of production is not the same in the different industries or branches of economy. If in some period a decreasing tendency of the capital intensity of production becomes general, the rate of accumulation begins to fall, in spite of the fact that in the meantime also structural changes occur. The structural changes accelerate or decelerate the rise or fall of the rate of accumulation but seldom change the direction of its movement. When capital intensity begins to diminish, a fall in the rate of accumulation will sooner or later ensue.

In this article, we, of course, cannot deal with the factors determining the capital intensity of production. This would require another article. It is again another question what to consider on the social level as capital engaged, and what and how to include in this scope. I shall confine myself to stating that capital intensity had a rising tendency in the 19th century, while in the 20th century a diminishing tendency in capital intensity could be observed in the developed capitalist countries. The fall in capital intensity was very considerable. At the end of the 19th century, 4.04 units of capital had to be engaged in the USA to produce one unit of final product; by 1950 the corresponding figure fell to 2.55 (See [3]).

The greater the capital intensity of production, the greater will be the rate of accumulation, since the expansion of production by one unit requires the national income to accumulate at a quicker rate than that. In the opposite case a unit expansion of production requires the accumulation of a smaller part of the national income. I have mentioned that the capital intensity of production has diminished in the USA. The fall of capital intensity has been a rather regular occurrence since the end of the last century, and the rate of accumulation has also diminished in the same period. For lack of anything

better, let me compare the year 1929 with the data of the sixties. Calculated at unchanged prices, the proportion of gross private investments to the gross national product in the USA amounted to 19.3 per cent in 1929, to 14.9 in 1964, and to 15.9 in 1965. In the sixties, the rate of gross investment in the USA moved around 15 and 16 per cent in general. This, of course, is not the rate of accumulation, which is of a much smaller size than the investment rate. The fall in the rate of accumulation must have been much greater than that of the gross investment rate, since the share of replacements in gross investments has essentially risen in the meantime. This can be easily shown with the aid of statistical figures, but the statistics on amortization are unreliable because of the widespread practice of accelerated writing-off. I wish simply to refer to the fact that the average age of productive equipment considerably diminished between 1929 and 1965; it fell from 14.5 years to 10.9 years. This means that the change of equipment accelerated, that is, replacement must have really grown within gross investments. Thus, the rate of accumulation considerably fell in the United States, in spite of the fact that the boom culminating by the mid-sixties was not weaker than the one preceding the crisis of 1929 [4].

What follows from all this is by far not the necessary rise of the rate of exploitation under all circumstances. The point is that, owing to growing productivity, everything is possible in this field. The rate of exploitation may rise, diminish or remain on the whole unchanged. It may rise if the rate of accumulation and government consumption rise at a satisfactory rate, but if this is not the case, we may even reckon with a decreasing rate of exploitation. The level of productivity and the size of the rate of exploitation do not run exactly parallel.

If the effect of the productivity of labour on the relative surplus value is mechanically interpreted, and the conditions of realization neglected, we may believe that the rate of exploitation is higher where the productivity of labour is higher, that is, e.g. higher in the USA than in Western Europe. This is, however, contradicted also by facts. If e.g. the value added by the manufacturing industry — that is the net production value — is compared to the wages paid, we find, that, in 1954, the net production value was 1.86-fold the wages in the USA, 2.91-fold in the Federal Republic of Germany and 2.86-fold in Austria [5, 6].

This, of course, is not an indicator of exploitation but reflects the deviations in the indicator of exploitation, showing precisely that the rate of exploitation in the West-European countries quoted is higher than in the United States. And one cannot help remembering that the U. S. is many years ahead of Western Europe in technological progress. If we compare the USA with Western Europe, in certain respects it seems as if we were sitting in some fantastic time-machine. Would this comparison show that the rate of accumula-

tion must unavoidably increase when productivity grows? This is exactly what I asked myself when comparing the data of individual capitalist countries.

What now remains to do is to show approximatively how the rate of exploitation has developed in the USA. This task is full of pitfalls, and I do not claim to be able to give an exact picture of the rate of exploitation. I believe, however, that I shall succeed in illustrating that there is no exact parallel between the growth in productivity and the development of the rate of exploitation.

Development of the rate of surplus value in the USA

As an introduction, let us remember the following: Prices have the nature of production prices even in monopoly capitalism. What I mean is that — although they do not fluctuate around the production price of individual commodities, since monopolistic prices may make them move steadily above or under the production price — they do not break really away from the production price. Therefore, the production price has a price-regulating effect even in monopoly capitalism. The prices are not of the value type. This is important for our investigation since, if this is true — and it is true — the rate of exploitation cannot be calculated from the data of an industry or a branch of economy. Since, according to my experience, many people fail understand the above considerations, I shall try to make them clearer by a brief explanation.

Let us assume that the rate of exploitation is fully unchanged in every field. Let us further assume that in some industry the capital intensity of production gradually increases in some period in comparison to that in others. There is no rule saying that relative capital intensity should always be the same for industries or branches of economy. Let us further assume that in this industry the rate of employment has not grown in comparison to others. This, is an equally justified assumption since it is by no means certain that a growing proportion of capital engaged is accompanied by a proportionate growth in employment. What will now happen? In all probability, the net production value of the industry will grow quicker in the statistical returns than that of other industries. The net production value shown depends, namely, on sales receipts which necessarily increase if the engagement of capital grows proportionately. This is so, because the production price has a price-regulating effect. Since the average profit is due to the individual industries on the basis of capital engaged, the share of profit in the total income of the industry will grow. Should we compare this profit to the wages paid in the industry, we would get a growing rate of exploitation which, however, has not risen at all. It follows that the rate of exploitation must be calculated, if possible, by consider-

ing the data of all economic branches, since in this way the distorting effect due to shifts in capital intensity may be eliminated.

A combined examination of several branches of economy is justified also by monopolistic price policy. The structural price changes involved may distort the development of the rate of exploitation upwards or downwards. A combined analysis eliminates also this distortion. Though the correct thing, in my opinion, is to analyse the economic branches together, the service sector will be excluded from my investigation precisely when the most important data are presented. There are several reasons for this, but my most important argument is the problem of assessing the non-productive services. As is known, bourgeois economists present these, too, as branches producing national income. Wages paid and the personal income stated are considered as their contribution to national income. As a consequence, the net production value attributed to services, i.e., the new value, exceeds the wages and salaries paid for services to a much smaller extent than it does in other branches of the economy. In addition, it must be noted that the proportion of services strongly rises everywhere including the United States. Owing to this fact and also because the rate of profits is much smaller in the services than elsewhere, the inclusion of the service sector would show the calculated trend of the rate of exploitation to decline, even if it did not do so in reality.

On the other hand, the data of the commercial sector must not be disregarded by any account. The reason why I stress this is not that I consider the majority of capitalist trade productive, but mainly because part of the new value, and within it, of surplus value, created in other fields, appears only in the commercial sphere. The industrial net production value, for instance, does not comprise the total of new value created in industry, since the factory sales price is smaller than the value by the trade margin. The total of surplus value can be seized only if trade is also drawn into the scope of investigation. A separate accounting of rental and interest incomes is not absolutely necessary. If we start from the net production value created by branches, the rent and interest payments of the capitalists have been already taken into account, since these are paid from sales receipts. The investigation of rental and interest incomes becomes necessary at most if they are paid from wages since, in this case, part of the wages turns into income of an exploiting character.

Let us examine the development of the rate of exploitation in the USA from 1929 to 1964, that is, over a rather long, 35-year period. During this time, the productivity of labour rose about two-fold. But did the rate of exploitation show a considerable increase?

As a first step I will start from the national income and wage payments figuring in statistics. The corresponding data are to be found in the following table:

Million dollars

Year	National income	Wages and salaries (excl. military)
1929	87 814	50 777
1964	517 281	353 965

Source: U. S. Income and Output, Survey of Current Business, July 1966.

The ratio of wages to national income was 57.8 per cent in 1929 and 68.4 per cent in 1964. Accordingly, the rate of exploitation was 73 per cent in 1929 and 46.2 per cent in 1964. Instead of increasing, the rate of exploitation shows a steep fall. Of course, the calculation performed on the basis of the above data should not be taken all too seriously. The data comprise many duplications; I again refer to the distorting effect of the service sector, taxes are left out of account, etc.

A different solution has had to be found. The new value created and the wages paid in enterprises functioning as joint stock companies suggest themselves for examination. This has been recommended to me several times. Since this is a smaller area, the duplication is also smaller, and a considerable part of services can be eliminated since most non-productive services do not operate in the form of joint stock companies. The data of these companies are shown in the next table:

Million dollars

Year	New value shown	Wages and salaries
1929	45 224	33 739
1964	292 254	231 389

Source: as for the previous table.

According to these data, the proportion of wages was 74.6 per cent in 1929 and 79.2 per cent in 1964. The rate of exploitation calculated amounted to 34.1 per cent in 1929 and fell to 26.3 by 1964.

If compared to the preceding data, two things become immediately conspicuous. The first is that the decline in the rate of exploitation is much smaller. By all means, the elimination of a great part of non-productive services plays a role in this. It is, however, even more conspicuous that the level of the rate of exploitation is much lower than the level indicated by the preceding data. This can again be explained by the partial elimination of services, yet also by the fact that the concealing of profits in the form of wages is most widespread in the joint stock companies. Fortunately, I have data up to 1955 at

my disposal on the salaries of executives in joint stock companies, i.e. of those who obtain very high wages. This amount was 10 per cent of the wages in 1929 and 8 per cent in 1955. *The relative* decline in the "wages" of executives is rather even. If this is also taken into account, we find that the rate of exploitation fell from 46 per cent in 1929 to about 36 in 1964, that is, the decline was somewhat slower, but the level of the rate was higher.

But this calculation, too, has its serious defects. First, the duplication is not entirely eliminated, and the biggest trouble is that tax burdens are not considered. Nor is the item of transfer payments included. In order to include all these, I have embarked on quite a different kind of calculation.

To avoid multiple duplication, I started from the new value created in the *productive spheres* — agriculture, forestry, fishing, mining, construction, manufacturing, transport, communication, production of electric energy, production of gas, and trade — and from the wages paid in these branches. From wages I deducted the personal income tax. Since there are no records showing personal income taxes (paid by wage and salary earners in the productive fields), I tried to solve the problem by deducting from these wages an amount corresponding to the proportion of the wages paid in the productive sphere to total personal incomes. This means that more taxes were deducted than would have been necessary. Personal income includes, namely, the incomes of capitalists who pay much higher rates on their much higher incomes. Thus, any error in the calculation goes to increase the rate of exploitation.

Further, I deducted the sum of social contributions on the assumption that only wage earners contribute from their personal incomes. I deducted from the wages of producers the same percentage of total social contributions as the proportion between the wages of producers and total wages. If not only producers contribute to cover social benefits from their personal incomes, there is again an error and again one increasing the rate of exploitation. Added to the wages was a percentage of transfer payments corresponding to the proportion between the wages of producers and total wages, on the assumption that all transfer payments go to wage earners. This is not so, and this time the error goes to diminish the rate of exploitation. We thus have two errors increasing the rate of exploitation and one pointing the other way. Therefore the errors are not one-sided, and that is about the best one can do.

Finally, since the wage payments of the government (covered largely from the tax payments by productive enterprises) must not be neglected either, one third of the civilian wage bill of the government, both in 1929 and in 1964, was added to the wages. That much, or even more of the useful wages can safely be taken into account. But let us not reduce the rate of exploitation without sufficient reason. The v thus obtained was then compared to the new value created in the productive sphere. Now let us have a look at the figures:

	1929	1964
	million dollars	
1. Gross wages paid in the productive sphere	37 050	215 167
2. Personal income tax	— 1 163	— 27 076
	35 887	188 091
3. Social contributions	— 107	— 9.408
	35 780	178 683
4. Transfer payments from the budget	+ 1 122	+ 27 572
	36 902	206 255
5. Government wage payments	+ 1 543	+ 17 546
Total v	38 445	223 801
6. New value created in the productive sphere	58 880	327 238
7. Proportion of v to new value (per cent)	65.3	68.4
8. Rate of exploitation (per cent)	53.1	46.2

Source: as for the previous tables.

Thus, statistical data again prove a diminishing of the rate of exploitation. I do not claim that the rate of exploitation is exactly as much as this; it may be higher by 10—15 points, but is not likely to have risen beyond this level. The table above does not include the profits concealed as wages, the interest payments of the working population; these would increase the rate of exploitation. However, S_2 comprises also such material expenses of the government as the building of schools and roads which I classified as S_2 without much enthusiasm, though it is quite unjustified to include them into v. This, too, goes to show that the rate of exploitation cannot be much higher. On the other hand, it seems highly probable that the rate of exploitation has really decreased. To classify very big salaries as S_2 would accelerate the fall of the rate of exploitation, because their share in total wages is dimnishing and so is the proportion of interest incomes in comparison to national income. Within total civilian government employment the proportion of teachers has increased and so has the participation of workers' children in general education. I thus hardly believe to have given an inadequate picture of the trend in the rate of exploitation.

Let us repeat: everything is possible; with growing productivity, the rate of exploitation can simultaneously change in any direction, depending directly on the development of the rate of accumulation and of the proportion of government consumption. Government consumption in the USA (meaning government consumption of an exploiting character) does not seem to have grown in the period examined to an extent that would have induced a rise in the rate of exploitation.

Thus far the facts. These, however, raise new problems which cannot be left unanswered. We shall deal with them in the following part.

Some theoretical problems

Let us start with the frequently recurring problem that what Marx calls surplus value is the part of the new value above wages, and that he handles the entire surplus value as income representing exploitation. First, it should be noted, that this not quite so. When discussing the commercial capital, he says that in the wages of commercial employees part of the surplus value turns into v. This v no longer means exploitation. Nor is it immaterial to note that Marx considers here the activity of commercial employees as unproductive labour. Yet he speaks about the transformation of a part of S into v.

There can be no doubt, however, that in the course of the theoretical investigation of surplus value Marx neglected the wages of unproductive employees and what he called v were only the wages of producers. If v only consists of that, the rate of exploitation can, of course, be obtained by deducting the wages of productive workers from the national income appearing in statistics and this leaves us with a residual which is the surplus value representing exploitation. This is a correct procedure, but only applies to such capitalist economy where the staff of unproductive employees is small and therefore negligible, where the inclusion of unproductive activities does not too much boost the national income calculated, where there is no duplication or hardly any. Marx could proceed by neglecting the unproductive activities, the wages of unproductive workers since the weight of these in total wages was much smaller than today. But what Marx could do in his time, we can no longer do in our age because of the changes that have taken place in the meantime. If we adhere to the *substance* of the Marxian theory of surplus value, we cannot employ the calculation methods that were used or could have been used by Marx.

It seems to me rather strange that the same people who are so keen on stressing that the value of national income presented in the bourgeois statistics is duplicated and inflated and that this national income must be corrected, often include into s, without any scruples, the part of national income above the wages of producers. That is, they add to S *what does not exist*! In calculating the rate of exploitation we can only proceed from the national income if the wages of unproductive workers are included in the denominator. But this is precisely what these people fail to do. But if anyone considers all activities productive, why does he not write the total wages in the denominator?

Another question frequently raised is whether the contradiction between production and market increases when the rate of exploitation declines. My answer is, that any variant is possible, similarly to the increase in the rate of exploitation: the contradiction between production and market may either grow or slacken. In fact, I have often had a hunch that this contradiction may

become even sharper when the rate of exploitation declines. In the last century the rate of exploitation probably increased; beginning from the 1870-ies a long period of boom started owing to the building of infrastructure, to an increase in capital intensity and to a growing rate of accumulation. The market situation was not unfavourable. Or let us take the case when the ratio of government consumption (armaments) shows a steep rise. This makes the rate of exploitation grow and improves the market situation. Conversely, when the rate of accumulation diminishes, the rate of government consumption is stable or hardly increases yet productivity grows, the share of *v must* grow in order that realization should be smooth. Is there any guarantee that the share of *v* will *satisfactorily* grow in a given period? There is none, since the law of surplus value will assert itself. In this case a deterioration in the market situation may be reckoned with. I could continue this line of reasoning by investigating the development of Departments I and II of production, but this much, I believe, will suffice to demonstrate that it is not permissible to simplify the situation by reducing it to the statement that contradiction between production and market can become sharper only where to rate of exploitation increases.

But what about the deterioration of the relative situation of the working class when the rate of exploitation diminishes? In addition to the theorem on the absolute situation is there any fault also with the one on the relative situation of the working class? There is not any "fault". The relative situation of the working class does not simply depend on the share of the *class* in national income. The class consists of individuals, and the individuals belong to classes. The individuals belong to classes primarily according to their own individual wealth, income, and the place they occupy in the social organization of labour. The workers feel better off or worse according to the size of their own individual income and its relative development, and not according to the share of the working class in the national income. The ratio of this share may increase, yet the ratio of the individual incomes of the workers may diminish in comparison to that of the capitalists. The number of workers considerably increases, whereas that of capitalists may remain stable or even decrease. Today the difference in the wealth and income situation of workers and capitalists is much greater than in 1929, that is, the relative situation of the working class has deteriorated, not improved. *Of course, the term "working class" must not be restricted to manual workers.* I believe the whole theory of surplus value is related to the problem of whom to consider as belonging to the working class under the present conditions.

What is the content, the substance of the theory of surplus value? Its substance is capitalist exploitation, that is, part of the value created by the workers becomes alienated from the working class, it is expropriated by capitalists or by the capitalist state. An essential feature of the theory of surplus

value is that capitalism is inconceivable without the production of surplus value, without exploitation by capital. It follows that capitalists *make permanent efforts* to increase exploitation; it is another question whether the rate of exploitation really increases or not. True, Marx unequivocally took the stand that, e.g. an increasing productivity of labour results in a growing rate of exploitation. However, we must not forget that the increase of the rate of exploitation was a fact in those times. One of the most important tasks of Marx was to give a scientific explanation of this process. Under the conditions of those times the possibility of a decline in the rate of exploitation did not even emerge. The nature of capitalism will not be embellished if the rate of exploitation declines, and the reason is that capitalism cannot help it.

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ПРИБАВОЧНАЯ СТОИМОСТЬ И НОРМА ПРИБАВОЧНОЙ СТОИМОСТИ В УСЛОВИЯХ СОВРЕМЕННОГО КАПИТАЛИЗМА

Т. ЭРДЁШ

Автор настоящей дискуссионной статьи, с точки зрения дальнейшего развития преподавания политической экономии, рассматривает некоторые вопросы политической экономии современного капитализма.

В связи с понятием прибавочной стоимости он ставит вопрос, присваивает ли капитал всю массу прибавочной стоимости, если под прибавочной стоимостью понимать часть новосозданной стоимости сверх заработной платы. Доля переменного капитала на уровне народного хозяйства может быть выше, чем доля заработной платы в созданной производственными предприятиями новой стоимости. Так к переменному капиталу можно относить целый ряд выплат сверх заработной платы, которые получают трудящиеся. Автор трактует в качестве переменного капитала часть заработной платы, выплаченной из государственного бюджета. Часть выплаченных из государственного бюджета вещественных расходов тоже не является просто присвоенной капиталистами прибавочной стоимости.

Автор различает две нормы прибавочной стоимости. Одной из них является норма $\frac{m_1}{v_1}$, где m_1 представляет собой часть национального дохода сверх заработной платы производственных рабочих, v_1 — заработную плату производственных рабочих. Это не является степенью эксплуатации, а в большей мере показателем производительности труда. Движение этого показателя не зависит от степени эксплуатации. Норму эксплуатации автор обозначает дробью $\frac{m_2}{v_2}$, где m_2 включает чистую прибыль капиталистов, далее все доходы от частной собственности и, наконец, те бюджетные выплаты, которые непосредственно служат сохранению капиталистического строя, а к v_2 относится вся чистая заработная плата,

которая не связана непосредственно с поддержанием капиталистического строя. Согласно автору, норму эксплуатации можно исследовать только в увязке с возможностями реализации и преподавание теории прибавочной стоимости тоже нельзя отрывать от теории воспроизводства. На основании проведенного им анализа он приходит к выводу, что норма эксплуатации не должна во всех случаях возрастать, более того, она может и сокращаться. На основании статистических данных он делает вывод, что в Соединенных Штатах Америки на протяжении последних десятилетий норма эксплуатации не возрастала существенным образом. Автор считает, что относительное положение рабочего класса может ухудшаться и в случае сокращения нормы эксплуатации, поскольку и в случае роста участия всего рабочего класса в национальном доходе может произойти сокращение доли индивидуальных доходов рабочих по сравнению с долей капиталистов: например, если численность рабочего класса возрастает, а число капиталистов остается неизменным. Стремление капиталистов к повышению степени эксплуатации является бесспорным, но другим вопросом является его превращение в действительность. Во время Маркса рост нормы эксплуатации являлся доказанным фактом, тогда вопрос о понижении эксплуатации не мог даже возникнуть. Сокращение нормы эксплуатации не меняет природы капитализма, тем более, что это происходит помимо его воли.

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REVIEWS

Z. Román

INTERNATIONAL CONFERENCE ON INDUSTRIAL ECONOMICS

(Budapest, April 14—17, 1970)

The Research Group for Industrial Economics of the Hungarian Academy of Sciences held its International Conference on Industrial Economics in the Academy between April 14th and 17th, 1970. The large attendance (five hundred Hungarian and a hundred foreign participants) was due partly to the questions on the agenda and partly to the fact that this was the first large-scale international meeting in this discipline to debate a broad spectrum of topical industrial development issues and to permit their joint discussion by scientists and practical experts from socialist and capitalist countries.

When deciding to convene the conference we relied on the conviction that in industrial economics, just as in other fields of scientific and technical work, it was necessary to get acquainted with, and understand, one another's methods and experience. Industrial economics like any other discipline, needs intensive international cooperation, indispensable for healthy development, for a critical spirit to prevail, for setting up proper yardsticks and for a more rapid proliferation of knowledge.

These were, among other things, the considerations that led us to extend the scope of both topics and participants, in comparison to two similar meetings held earlier by the Research Group for Industrial Economics. From the very beginning of its existence the Group has considered its task the extension of international scientific cooperation; indeed, the socialist countries were extensively represented at the first International Fixed Asset Economy Symposium held in 1963, and at the second, in 1967. Convening the present conference was made possible by the favourably developing international atmosphere between the scientists and practical experts of the *socialist and capitalist countries*, and by the achievements of the research work in industrial economics in Hungary.

Half of the Hungarian participants consisted of leading enterprise experts and the other half, of workers of central authorities, scientific and educational institutions. The number of participants from abroad was just about evenly divided between socialist and capitalist countries. Experts from a total of 17 countries (including overseas ones, such as the United States and Japan) were present, along with representatives of the United Nations European Economic Committee and the UNIDO. Participants included the chairman and general secretary of the European Association of the National Productivity Centres, and the chairman of the European Work Study Federation.

The conference was opened by *Ferenc Erdei*, Secretary General of the Hungarian Academy of Sciences. He spoke on the national and international

importance of the conference, and on its topicality for the problems of Hungarian industrial development and incentives towards further international scientific cooperation.

At the plenary session, following the opening three lectures were delivered: "Economic Reform in the Soviet Union" by *S. T Khachaturov,* Soviet Academician; "Which Industries Should Be Developed in Which Countries" by Prof. *J. Tinbergen* of Holland; and Academician István *Friss,* Chairman of the Section of Economics and Jurisprudence of the Hungarian Academy of Sciences, director of the Institute for Economic Sciences of the Academy spoke on "Planning and Economic Reform in Hungary".

These three lectures were received enthusiastically by the Hungarian and foreign participants alike. The Soviet and Hungarian lectures dealt with the economic reforms of socialist countries, and with the related theoretical and practical questions. Professor Tinbergen analysed the problems of expedient industrial structure from the standpoint of international cooperation promoting the welfare of all countries. At the opening plenary session Zoltán Román, Chairman of the Group for Industrial Economics of the Academy also gave a lecture on the aims and programme of the conference, under the title "Industrial Development and Productivity". This guiding motive of the conference was echoed by all lectures, expressing the joint concept that industrial development stemming from growth in productivity is the most desirable, for this ensures the continuous rise in living standards and improvement in living conditions. The coordinated work of enterprise management and guidance of the economy is destined to realize this type of industrial development, and the conference sessions were used to search for the roads and methods to do so.

From then on, the conference was divided into three sections where a total of twenty-one lectures were given; nine by foreign guests and twelve by Hungarians. The three sections dealt with

long-range planning
productivity and efficiency, and
enterprise behaviour and enterprise decisions.

Participants received the lectures in writing in advance; the lecturers' short introductions and the comments were followed by informal discussion.

Within the general sphere of topics of the conference, the individual sections, sessions and comments were governed by two considerations in choosing their subjects. Naturally, they wished to put topical questions on the agenda, but at the same time they wished them to be of common use to the experts from countries different in their state of development, size and social systems.

There is no doubt that the methods applicable to economic work are heavily dependent on the socio-economic structures of the given countries. The application and transfer of different methods are far more problematic and labour-absorbing than is the introduction of neutral technologies. Enterprise objectives and social goals are different in the different countries, and so are the means that have priority in reaching those goals.

At the same time we cannot deny that economic work, enterprise and economic management have many similar or identical technical elements which can be applied almost identically to achieve different goals.

The striving to place increased emphasis on empiric studies could be observed in the choice of subjects, and even more clearly in the method of debate. Industrial economics is still dominated (not only in Hungary as was revealed by the conference) by the normative approach which prescribes *what things should be like,* while there are far fewer works dealing with *how things are* in reality, which of the methods are being used, and for what reason, or which of them are not being used. Naturally, these two approaches and analyses supplement each other. It is not enough simply to determine what things are like, without saying a word about what would be desirable; nor is it enough just to show the methods being used today and without stating the methods that would best serve the purpose under given conditions.

Empiric studies, by necessity, do not let us restrict viewpoints to economic correlations. In the empiric world, in practice people do not act under purely economic motivation; in order to explain their actions, the achievements of psychology, sociology, behavioural science, organization theory and other related disciplines are needed. This striving for an interdisciplinary approach to the problems, including the application of mathematic methods — which are needed not so much to explain phenomena as for the application of modern techniques — was reflected in the programme of the conference. At the same time, interdisciplinary research was revealed to be struggling with great difficulties everywhere, and to require special attention for further development.

The three sections of the conference — as we have mentioned — debated the groups of issues on long-range planning, productivity and efficiency, and enterprise behaviour and enterprise decisions. But, in fact, this was only a conditional separation, since the questions were closely interrelated. These correlations were clearly (and very correctly) expressed in both lectures and discussions. In Section One, one of the major problems of long-range planning was how to plan and achieve rapid growth rate in productivity, — and this question was also discussed by Section Two. One of the conditions for increasing productivity, an item on the agenda of Section Two was to develop an enterprise behaviour to strengthen the endeavours for increasing productivity within the enterprises. And this problem was also included in the discussions of Section Three.

The 21 lectures selected for discussion were divided up into a total of 7 sessions in the three sections. The sessions and the sections did not run fully parallel to one another, since many participants were equally interested in all or almost all sections and topics under discussion.

A session of Section One, debating *long-range planning,* discussed industrial development for sectors and the total industry, while another session dealt with long-range planning in enterprises. In the former, one lecture apiece was held on long- and on medium-range planning, while in the latter four speakers from four countries took the floor. Of course, long- and medium-range planning of sectors, industry and single enterprises are topics closely connected to one another. The questions discussed included the suitable ways of developing these relations, and the degree and methods of establishing ties between them.

Development in recent years in the capitalist countries is primarily characterized by the general recognition of the necessity of planning (and by its spreading practice), while in the socialist countries the new feature is the in-

creasing role of medium- and long-range planning. Underlying both phenomena is the acceleration of scientific-technical development, and an endeavour to predict and influence this process. However, along with the many common problems of methods and procedures, there are fundamental differences in the role of planning, in the ways and means of implementation, and this naturally affects the practical applicability of the methods and their success. In the long-range planning of industrial development — as the discussion showed — the experience so far collected is not very much appraisable; this means that intensive international cooperation — with respect to methods, and plan concepts alike — would be particularly important. We have but little processed experience in the field of enterprise long-range planning, too. This is all the more true of Hungarian enterprises since, under the new system of economic management, their greater independence — which extends to marking their own goals — means they must face qualitatively new tasks in long-range planning, compared to their earlier work. So it was no accident that the discussions — on such topics as, for instance, the time horizons of planning, the extent of breakdown, the methods to be applied — were the liveliest at this session.

Accelerating the growth of productivity or maintaining a high rate is a general goal of economic policy in just about all countries. In order to reach this goal it is important to obtain as much information as possible on factors influencing productivity, and on the past and potential future role of these factors, for this can serve as a foundation for forming an economic policy which, in coordination with other goals, will also aid the increase in productivity. This is the major reason for the choice of the theme by Section Two.

The lectures and discussion in this section analyzed the factors of increasing productivity and possibilities for speeding it up. Several lectures provided comprehensive discussions of the problem, and separate lecture groups and sessions dealt with three important means of increasing productivity: the human factors of productivity; the use of fixed assets, and investments; and concentration and specialization. These are three key questions for stepping up the growth of productivity in Hungarian industry, and turned out to be equally important issues in other countries, too.

The acceleration of the growth rate in productivity — along with improving the contemporary qualities of products — is one of the main conditions for the further advancement in Hungarian industry. The number of people employed in industry compared with the total population is slowly approaching a reasonable maximum and the further rapid increase of production depends on productivity. This is why we must examine all possibilities for increasing productivity, such as sensible economic development concepts, the advancement of the economic reform, and innumerable other means of enterprise and national economic management. Discussions in this sphere of topics were all the more interesting because many of our CMEA partners, with whom we have been cooperating in a working group for productivity for years now, and the heads or representatives of nine productivity centres were among the participants.

The discussions have made it clear that in Hungary attention must be focussed on the growth of productivity more intensely in all fields of the economy, and even in all activities connected with the economy alongside the many other social goals, and even against individual and group goals which often deviate from the social ones. We must study the trends in productivity;

we must become better acquainted with the conditions and possibilities of accelerating it, and consciously strive to make greater use of all means that might contribute to a more rapid growth in productivity. Several lecturers issued warnings particularly on three kinds of one-sided approach: one is to expect everything from technical development, without considering the fact that technical development can only serve the growth of productivity if it takes place in keeping with economic depends. The other one-sided approach wants to leave everything to financial incentives, to indirect regulation, and underestimates the importance of the influence of real processes and direct actions aiming at bringing about the productivity rise. Finally, the third case of one-sidedness is the concept which approaches productivity growth simply as a problem of labour and factory organization without realizing that the entire efficiency of enterprise economy must be advanced for productivity to grow truly at an increased pace.

While Sections One and Two dealt with macro- and micro-economic issues, the two sessions of Section Three dealt with explicit enterprise problems: enterprise behaviour and enterprise decisions. Three lectures discussed the first theme; they approached the questions from different sides, but pursued a common goal: how to influence enterprise behaviour in a direction promoting economic development. The two lectures dealing with enterprise decisions analyzed modern methods of decision-making, and the conditions under which these can be applied. According to studies made in Hungarian companies, the ratio of the application of modern methods is rather low; hence the chief problem is not to discover new methods, or to experiment with the very newest ones; we stand to gain much more by adapting test-proven modern methods rapidly and on a broad scale.

There was lively discussion in this Section on two particular questions. One was the degree to which non-rational motives prevail in enterprise decisions, and the methods with which these motives can be studied. The other question was whether or not a substantial disparity or gap is bound to exist between theory and practice (that is between the knowledge of the methods and their actual application) in preparing decision-making. The discussion emphasized that scientific research should approach reality as closely as possible, that wide-scale empiric methods should be applied and increased efforts made to bridge the gap often existing between theory and practice.

A round-table discussion organized within the framework of the conference, permitted the 30 foreign guests and 20 Hungarian experts invited, to talk off the cuff and exchange opinions on the problems of this branch of science, and on possibilities for further international cooperation. The representatives of international organizations, Academician *T. S. Khachaturov*, Professor *S. Fabricant* and others evaluated this conference as an important and successful initiative, which must be followed up with further meetings, and they made a series of concrete proposals regarding the subject and forms of further international cooperation. Implementing them will be the task of the coming years. By way of example, let us quote a few of the proposals. Regarding the forms of cooperation, a concrete proposal was made for coordinated empiric studies, for organizing symposiums with a smaller number of participants, for exchanging experience, for more intensive participation in certain work of the ECE and UNIDO, and for organized aid to the publication of outstanding foreign works. Regarding the subject of cooperation,

proposals were made for further work in order to develop common terminology, for cooperation in analysing and prognosticating the effects of technical development, for long-range planning in industrial development and enterprises, for studying the optimal branch structure, and in other fields, too.

Compared with the technical and other fields, industrial cooperation in industrial economics has been rather weak in the past. In order to advance this, the Committee for Industrial Economics and the Research Group for Industrial Economics of the Hungarian Academy of Sciences have come up with a number of initiatives in recent years. The large-scale interest shown in the conference, its recognition, by participants from abroad and a common desire for further cooperation have shown the correctness of these initiatives.

B. Csikós-Nagy

COLLOQUE D'ÉCONOMISTES FRANCO-HONGROIS*

Le 2 juin, sur l'invitation de l'Association hongroise d'économie politique, des représentants français des sciences économiques et de la pratique de l'économie politique, présidés par M. François *Perroux*, professeur du Collège de France, sont venus en Hongrie pour y avoir des échanges de vues sur des problèmes politico-économiques théoriques et pratiques intéressant mutuellement les deux pays. L'organisation du colloque d'économistes franco-hongrois était un geste en retour de l'invitation d'une délégation d'économistes hongrois en 1967 à Paris. A cette occasion, des économistes hongrois donnaient des conférences sur les problèmes de la réforme économique hongroise dont la mise en pratique était à l'ordre du jour à cette époque-là.

Le colloque fut inauguré dans la matinée du 3 juin et, par la suite, 5 réunions de travail furent tenues dans chacune des sections théorique et pratique, respectivement. Les débats étaient dirigés à la section «A» par M. le Professeur *François Perroux* et l'académicien M. *József Bognár*, et à la section «B» par M. *André Marelle* et M. *János Nyerges*, directeur général ministériel. Nous sommes convenus que l'acte de clôture du colloque serait une séance ouverte à laquelle un cercle plus large d'économistes hongrois serait invité, devant donner une évaluation récapitulative des travaux de trois jours et permettant d'intervenir à ceux qui n'ont pas participé aux travaux du colloque.

Il me revient la tâche d'évaluer actuellement les travaux du colloque, ce qui n'est pas chose facile. Il est même possible que mon cher ami le professeur Perroux ne soit pas d'accord sous tous les rapports avec l'appréciation présentée par moi. Mais dans ce cas-là, il ne se gênera pas de le dire. En ce qui me concerne, j'étais le plus impressionné par le fait que sur la plupart des questions des idées identiques, ou pour le moins très rapprochées, furent développées. Bien entendu, il y avait aussi des divergences de vue, ce qui paraît bien naturel puisque l'échange de vues a eu lieu entre économistes de pays à régimes socio-économiques différents: la France est membre du Marché commun, et la Hongrie du Comecon. Mais il y avait aussi des malentendus devant être attribués à ce qu'on ne se connaît pas suffisamment. Or, ce colloque a contribué à l'esprit de la compréhension mutuelle, tout en offrant l'occasion de

* Discours à la séance de clôture.

s'informer mutuellement au sujet des derniers résultats des recherches scientifiques.

En vue de la préparation convenable du colloque, 16 conférences avaient été rédigées, dont 9 par d'économistes français et 7 par mes compatriotes. Les discussions s'étendaient sur 5 ensembles de problèmes, notamment:

— certains problèmes de la théorie du commerce extérieur,
— quelques problèmes d'ordre économique de la révolution technico-scientifique,
— l'analyse comparative des mécanismes de change et de prix de pays à régimes socio-économiques différents,
— les problèmes de la coopération industrielle franco-hongroise et
— la coopération internationale par rapport au développement intensif de l'agriculture.

Sur les problèmes théoriques du commerce extérieur, ce sont les professeurs *Perroux, Bognár, et Bourginat,* et les économistes *Denoel, Courbis* et *Tardos* qui avaient préparé des conférences. La note fondamentale a été donnée par la conférence du professeur *Perroux* dont l'exposé se fondait sur la critique de la théorie de commerce extérieur de l'école néoclassique de *Hekscher—Ohlin —Samuelson.* (Voir le texte abrégé pages 325—338.).

Quelles sont donc les conclusions susceptibles d'être dégagées des débats?

(1) La politique économique est une politique de structure et le commerce extérieur n'est concevable que comme partie de la politique de structure, ne pouvant être abordée théoriquement que de cette manière. Cela se présente de façon quelque peu différente dans le commerce est-ouest. C'était d'ailleurs une des thèses de la conférence du professeur *Bognár* qui regarde comme le but principal et primaire de l'encouragement du commerce est-ouest, non pas la solution du problème structural, mais la reconstruction technique en dedans de la structure donnée.

(2) La division internationale du travail ne doit être traitée de manière statique. Le noyau rationnel des échanges commerciaux ne peut être interprété que dans les conditions de l'accroissement économique systématique, c.-à-d. dynamisé.

(3) On ne peut pas exclure de la division internationale du travail le mouvement des facteurs de production, ce qui est considéré par la doctrine néo-classique comme facteur d'exclusion.

(4) L'avantage provenant des relations économiques de divers pays doit être apprécié différemment s'il s'agit d'échanges entre pays à degré de développement économique à peu près identique, ou si ces échanges ont lieu entre pays ayant atteint des niveaux différents sous ce rapport. C'est à cela que s'est raccrochée la thèse principale de l'étude du professeur *Bourginat,* selon laquelle pour un pays se trouvant à un degré inférieur du développement économique, la coopération de production avec un pays plus développé comporte plus d'avantages que la relation marchande classique.

M. l'ingénieur-économiste *Courbis* a fourni des informations au sujet du modèle utilisé en France pour la prévision dans le cadre du 6e Plan de l'accroissement économique fondé sur l'équilibre extérieur. M. l'économiste *Tardos* a fait connaître un modèle de planification perspective, tenant compte des circonstances d'une économie nationale sensible au commerce extérieur.

Sur certains problèmes de la révolution technico-scientifique, ce sont les professeurs *Chambre* et *Cukor* qui avaient préparé des études. Le professeur

Chambre a mis en parallèle les caractéristiques de la «deuxième révolution industrielle» et les traits fondamentaux de la révolution industrielle anglaise du dernier siècle. L'étude préparée en commun par MM. *Cukor* et *Sebestyén* traitait la planification à long terme en rapport avec les questions du développement technique.

On appelle souvent notre siècle l'ère atomique, l'âge de la cybernétique, de l'électronique, des matières synthétiques, sans que nous connaissions, en réalité, suffisamment le contenu de la révolution technique, les facteurs plus importants du développement. La somme d'une série de pas en avant dans le domaine technique, chacun insignifiant en soi, peut gagner une importance très grande. Le professeur Chambre a analysé surtout les incidences sociales. Le professeur Cukor traitait la mesure du développement technique en structure de production et en coefficients d'utilisation.

Il y avait unité de vue que, de nos jours, la science, étroitement attachée au développement industriel, est devenue oeuvre collective et seule la coopération des forces scientifiques du monde est capable de répondre, selon une stratégie mise au point pour des groupes de pays et des continents, aux questions cuisantes de l'âge. Cela concerne surtout les pays de petites et moyennes dimensions, lesquels en présence des exigences de capitaux des recherches de nos jours, ne peuvent que conjointement marcher avec leur siècle. On était d'accord aussi, que le soin du développement à long terme de la science et de la technique ne peut être confié au marché, une évolution d'envergure du développement technico-scientifique ne peut être assurée que comme partie organique de la politique sociale du gouvernement. On a discuté les modèles mathématiques susceptibles de caractériser les effets économiques des inventions et innovations. Au milieu des économistes hongrois, un vif intérêt a été suscité par l'information fournie au sujet des fonctions de production et d'enseignement sectorielles, appliquées par la planification française.

Sur le mécanisme de change et de prix des divers régimes socio-économiques, ce sont les professeurs *Jessua* et *Csikós-Nagy*, qui avaient préparé leurs thèses. Au cours des discussions, on est tombé d'accord que les divergences se présentant dans les systèmes de change et de prix de la France et de la Hongrie, respectivement, ne peuvent pas être considérées simplement comme particularités dues aux différents régimes socio-économiques. Il y a des divergences qui découlent de l'évolution et des faits acquis dissemblables des deux économies nationales. Le débat a fait ressortir l'identité de vues sur ce qu'un pays socialiste peut également avoir une devise convertible et que le prix peut exercer une fonction d'allocation aussi dans une économie socialiste. La discussion s'est cristallisée autour du problème, à quel point cette fonction peut être puissante et déterminante. Peut-être qu'on puisse considérer comme partagé l'avis selon lequel les problèmes structuraux ne se laissent pas résoudre par le mécanisme des prix. En résumé, cela peut être formulé de la façon suivante: c'est la structure qui engendre les prix et ce ne sont pas les prix qui engendrent la structure.

Le rapport du professeur *Csikós-Nagy* a précisé en trois points les différences les plus importantes qui découlent des divergences des régimes socio-économiques.

(1) En Hongrie, à la suite de la socialisation des moyens de production, les facteurs de production, sauf la main-d'oeuvre, sont propriétés d'Etat. Pour cette raison, les calculs économiques jetant les bases de l'association optimale

des facteurs de production, doivent être résolus au moyen d'une imposition conforme.

(2) Dans une économie socialiste, le capital remplit une fonction sociale et comme tel, il agit obéissant aux lois macro-économiques.

(3) Dans une économie socialiste, les relations de prix et de revenu sont réglées par une politique de niveau de vie dont les critères sont déterminés par des normes sociales socialistes.

Au cours du débat sur ces problèmes, les économistes français ont, au fond, admis cette analyse. Mais par rapport à la fonction sociale du capital, le professeur *Jessua* a déclaré que le changement en caractère de la fonction sociale du capital n'arrive pas automatiquement, mais seulement à la suite d'une politique économique tenant convenablement compte des attentes sociales. En s'enchaînant au problème des rapports de prix et de revenu, les professeurs *Perroux* et *Bognár* se sont occupés de l'interprétation dissemblable de la rationalité économique. Le professeur Perroux, en analysant les relations entre société et marché, en est arrivé à la conclusion que les modèles du capitalisme et du socialisme ne peuvent même pas être comparés, à proprement parler, puisque la demande tout comme l'offre, sont des phénomènes sociaux et les sociétés diffèrent l'une de l'autre en caractère.

Pour le débat sur les problèmes de la coopération industrielle franco-hongroise, ce sont MM. le ministre *Catroux*, le directeur général ministériel *Marelle*, l'économiste *Saltiel*, et du côté hongrois le directeur général ministériel *Nyerges* et le directeur d'institut *Rédei* qui avaient préparé des conférences. L'échange de vues était très utile sous deux rapports. Du côté français on a relevé que les informations que possèdent les entreprises hongroises sur l'industrie française, sont incomplètes. Aussi les entreprises hongroises réagissent-elles à des impulsions où, d'après appréciation française on pourrait entrevoir la possibilité d'une coopération fructueuse et mutuellement avantageuse. D'autre part, on avait l'impression en même temps que les dirigeants de l'industrie française ne se rendent pas un compte exact des nouvelles circonstances qui se sont établies en Hongrie à la suite du nouveau système de gestion économique introduit en 1968. Aussi l'initiative fait-elle défaut maintes fois dans la supposition que la Hongrie n'est pas à même de fournir les garanties nécessaires à la coopération de production.

Bien entendu, les économistes hongrois manifestaient un intérêt particulier à l'égard de la question si les effort d'unification du marché ouest-européen et les mesures prises dans ce sens, n'exercent pas une influence défavorable sur les éventualités de la coopération franco-hongroise. Sous ce rapport, les économistes français ont souligné que les dispositions du Marché commun admettent, à l'avenir aussi, la poursuite d'une politique ouverte à l'égard des pays socialistes.

Quelques questions de détail furent également abordées, comme la procédure de l'assurance-crédit et, à la suite de la conférence de l'ingénieur-économiste *Krackiewicz*, le tarif des transports.

Les problèmes de la coopération agricole étaient également sujets à débat. Les économistes français et hongrois critiquèrent la manière de voir prétendant qu'il y ait des excédents en produits agricoles au monde et en sont arrivées à la conclusion que les excédents se présentant périodiquement sur certains marchés et en certains produits, reflètent les insuffisances de l'organisation du marché. En fait de produits agricoles, il y a pénurie aussi en Europe,

comme en certains produits d'origine animale en France, et les pénuries périodiques de viande dans les pays orientaux et méridionaux d'Europe. Or, en fait des mêmes produits, il y a d'excédents en d'autres régions. L'opinion était unanime que de nos jours, la production et la distribution des produits agricoles ne peuvent être résolues en certains de leurs éléments d'une manière satisfaisante que dans le cadre d'un système de politique agricole organisée à l'échelle mondiale.

Les débats à ce sujet ont mis en évidence que la Hongrie et la France se trouvent aux prises sous plus d'un rapport de la production et de l'organisation agricoles, avec des problèmes similaires. Les économistes hongrois effleurèrent les domaines de l'économie des comestibles où, de leur avis, il y aurait possibilité d'approfondir les relations franco-hongroises.

Ce rapport ne s'est pas étendu sur tous les problèmes qui se sont posés au cours du colloque, mais ce qui y est dit rend manifeste que les débats couvrirent une large échelle des problèmes. Ils ont permis le sondage des points plus sensibles sur lesquels doivent se concentrer, par la suite, nos efforts. Avec cela je veux exprimer l'espoir que ce colloque ne signifie pas la clôture, mais plutôt la fondation des contacts entre économistes. En outre, le colloque peut devenir le point de départ de recherches portant sur des problèmes d'intérêt mutuel.

J. TIMÁR

A CONFERENCE ON THE TECHNICAL PERSONNEL SUPPLY

The Engineering Organizations of the socialist countries have been regularly organizing conferences on the questions of the supply of the national economy with technical staff and on technical education from the year 1961. On the invitation of the Union of Technical and Natural Science Associations the 5th International Educational Conference took place in Budapest between 23rd and 25th May. On this conference the participants discussed the influence of scientific-technical progress on the staff of technical qualified manpower in the national economy and on technical education.

From among the many interesting subjects discussed a brief review will be given in the following, how the technical staff supply of the investigated countries can be evaluated relying on preliminary broad international comparative investigations as well as on the papers submitted and on the discussions at the conference.

As far as everyday practice is concerned, frequently the question is first put whether there are many or few engineers and technicians in the countries in question? What can be, however, considered as a measure of this supply? In case we compare the present supply with technical personnel to the one in the past, we can find an enormously big increase of employment in this field. In most of the socialist countries the staff of qualified technical personnel has increased within the past two decades to two or threefold. The annual growth rate of staff in the fifties was about 10—12 per cent, in some countries it even reached 15 per cent per annum. The growth rate has definitely slowed down in the last decade; and we can find only one or two countries with a rate around 10 per cent, in all the rest this rate approached 6—7 per cent per

annum. The data on training indicate a further slow-down (apart from Bulgaria). So it seems that the growth rate of the technical staff in the years to come will settle around 5—6 per cent per annum as far as most of the socialist countries are concerned; this rate being similar to the one prevailing for a longer period in the capitalist countries investigated.

The growth rate of the staff of technical personnel cannot be treated in itself, since it mainly depends on the original starting position. The previous fast increase of the technical staff in the socialist countries was in close connection also with the fact that most of the countries belonged at the beginning of socialist development to the industrially underdeveloped or developing countries, and so the relative number of technical personnel was rather small. The overcoming of backwardness, socialist industrialization demanded the education and training of many technicians. The fast increase of the staff has been up to now a precondition of our progress.

This statement, however, hardly gives us a satisfactory base to judge the recent level of supply. Not even the analysis of demand for manpower of enterprises or of the one appearing on a national economic level can give a satisfactory reply. It can be experienced not only in Hungary but elsewhere as well, that enterprises show a lack of experts and at the very same time, many experts do some work different from their qualification. This latter situation allows the conclusion that the degree of utilization of the work of the technical staff is not satisfactory. In this fact an undoubtedly important role is played by the fact that the system of technical training and education does not entirely correspond to requirements. Especially much harm can be done by over-specialization, which increases the loss due to professional mobility. The narrower the specialization in the field of education, the greater the danger that the graduated experts will not find such a special place to work for which they have been trained. This danger is especially great in the smaller countries. Narrow specialization can be harmful even in bigger countries with more differentiated demand for labour, in case it was not preceeded by a basic general education, since in the lack of such an adaptation to the fastly changing technical circumstances would run into obstacles. In case the obsolescence of knowledge is faster than usual, this again increases the number or rate of those leaving their professions.

The growth rate of the staff of technical personnel also influences the quality of training and education. If the quantitative development of education is too fast, it unavoidably happens at the expense of the level of the education since concessions must be made not only in enrolment, but also in choosing teachers, textbooks, in securing equipment and other material conditions and, finally, also in the level of examinations.

Besides, in case the supply is growing too fast, a certain proportion of the young people get — after leaving school or university — to such working places where there are not enough skilled and well-trained and experienced experts who could be able to lead the youngsters into practice; where the organization of work is rather poor there is no chance to supplement the knowledge obtained in school and to improve it as well.

The main reasons for the low efficiency of the work of engineers and technicians should be looked for in employment at the working place. There are such as — to list them only by title — bad organization of work resulting in loss of working hours, lack of the planned cooperation and rational division

of labour, low level of up-to-date information-flow and of standardization, etc. Because of these and because of certain other reasons a number of experts are working on the solution of tasks which have already been solved before. There is substantial loss due to the lack of technical auxiliary staff and satisfactory equipment.

Efficiency of the work of engineers and technicians could be greatly increased by concentrating the experts to pioneering and leading technical tasks to be solved. However, as far as the allocation of the graduates is concerned, mostly a tendency of exaggerated levelling can be observed.

Let us feed back this, only superficially cited information to the conclusions of the international comparison. From the data it seems that there is no essential difference amongst the specific figures on technical staff of the industrially developed countries, though the economic-technical development level of the countries concerned is quite different. Though this latter statement may be surprising at first sight, on reflection, it is quite evident. The differences in economic development level are rooted in the differences of labour-productivity and efficiency. In the less developed countries the labour productivity not only of the physical workers is lower than in the developed countries, but that of the brain workers as well. Thus, in order to produce the same quantity of industrial products in the less developed countries, there is a need not only for more working time of the workers but of engineers and technicians as well, than in the developed countries.

From our point of view, it deserves special attention that with the fast development of education the socialist countries had already approached by 1960, some countries succeeded even to overtake, the level of technical staff existing in many higher developed capitalist countries. Since that time this difference is even increasing, coupled with an unusual fact, namely that the per capita technical staff in some socialist countries — which are less developed because of certain historical reasons — is already now higher than that of the most developed socialist countries and this difference is supposed even to increase in the years to come.

As far as the Hungarian situation is concerned, it is a bit different from that of the rest of socialist countries, since the long-term plans for the demand and education of qualified manpower worked out in the mid-sixties took into consideration the fact that the efficiency of labour would increase faster than before. So the level of the technical expert staff in Hungary is lower today than in other socialist countries, though this level is still higher than in many capitalist countries more developed than Hungary.

Under these circumstances, there is an especially important task to be solved in Hungary, namely, to increase the efficiency of the technical personnel as fast as it is possible, to improve the use of the technical staff in every field of the national economy.

There is a particular connection between the high level of technology and labour productivity and their fast development, and the staff of the technical personnel.

It is undoubted that the accumulation of up-to-date technical equipment means nothing at all, if there are no skilled people available to use them purposefully. The increase in the number of technical personnel, their high rate alone cannot, however, promote and lead technical development and the fast increase of labour productivity. The efficiency of the technical staff's

labour — and beyond this that of the whole sphere of production and distribution — the application of sciences in management as well as in economic decisions, the flexible system of the economic and moral incentives are at least as important factors in the development of technical and labour productivity as the increase of the number of technical personnel.

STATE PRIZE WINNER ECONOMISTS

On the occasion of the 25th anniversary of the liberation of Hungary five distinguished economists were awarded the highest medal for scientific activities. István *Friss* and László *Háy* obtained State Prize 1st Degree, and József *Bognár*, Béla *Csikós-Nagy* and Kálmán *Kádas* State Prize 2nd Degree.

István *Friss* was born in 1903. Studied at the Handelshochschule in Berlin and at the London School of Economics and took part in the work of the Labour Research Department.

After having returned from emigration in 1945, he became the Head of the Economic Department of the Central Committee of the Communist Party and participated in shaping the economic policy of the country. In 1953 he was elected corresponding member of the Hungarian Academy of Sciences and in 1960 he became a full member. Since its foundation he has been directing the Institute of Economics of the Hungarian Academy of Sciences. From 1965 on he was the Secretary, since 1970 he is the Chairman of the Department of Economics and Law of the Hungarian Academy of Sciences.

Academician Friss is playing an important role in the emergence and development of Marxist economic research in Hungary. Beside his leading role as organizer of scientific research he significantly contributed to Hungarian economic literature. His deep knowledge in Marxism, his links with economic policy and practice for more than two decades, his wide-ranging interest in economic and social problems enabled him to analyze and theoretically generalize the most important experiences in building socialist economy. Since 1954 he has written more than 100 studies and articles, a dozen of which had been published also in foreign languages. In recent years he has been especially thoroughly interested in problems of economic planning, management and control and in some fundamental problems of the political economy of socialism, connected with the preparation and implementation of the economic reform. A selection of his writings appeared in the volume "Economic Laws, Planning and Control" published in Hungarian in 1968 and shortly available also in English.

László *Háy* was born in 1891. He graduated at the Medical Faculty in Budapest. After the debacle of the Hungarian Republic of Councils in 1919 he emigrated and spent many years in Berlin, later in Moscow. He became an economist as a collaborator to Eugene Varga.

After the liberation of Hungary he returned to the country and took over responsible jobs in foreign trade administration at last as minister. Between 1957 and 1963 he was acting as Rector of the Karl Marx University of Economic Sciences. In 1965 he was elected corresponding member of the Hungarian Academy of Sciences. He is the Chairman of the Editorial Board of the economic monthly "Közgazdasági Szemle".

As a participant in the economic research work lead by Eugene Varga from the twenties up to the fourties he became a well-known expert of the business cycle. Also in later years this has been his main scientific interest, although he dealt with many other aspects of contemporary capitalism, too. In 1964 he published a book on "Economic Forms of Cold War" and in 1966 "On the Crisis of World Capitalism". Recently he is engaged also in problems of the socialist international division of labour.

József *Bognár* was born in 1921 and studied at the University of Budapest. As a leading personality of the former Smallholder's Party he was a member of the Council of Ministers between 1949 and 1956. His portfolios were first Home Trade, later Foreign Trade. In the fifties he held the chair of Home Trade at the University of Economic Science in Budapest. In 1960 he was awarded by the Hungarian Academy of Sciences the title Doctor of Economic Sciences and in 1965 he was elected corresponding member. He has been Director of the Center for Afro-Asian Research of the Hungarian Academy of Sciences since its foundation. In the sixties he was the President of the Hungarian Institute for Cultural Relations and last year he became the Chairman of the Hungarian Scientific Council on World Economy.

In the fifties Professor Bognár was occupied with home trade problems and in 1960 he published a voluminous book on "Demand and Market Research in Socialism". The sixties brought a new phase in his scientific carrier. He became deeply involved in the complexity of the problems of the "Third World". Several visits to developing countries served a twofold aim, first to get a deeper knowledge of the circumstances in these countries, and simultaneously to provide them with the experiences of socialist planning and economic policy. Among the countries visited there were India, Indonesia, the United Arab Republic, Ghana etc. He scheduled a Seven-Year Development Plan for Ghana. His investigations were summarized in the book "Economic Policy and Planning in Developing Countries" published in Hungarian and in English. The book had a good reception by scholars both in East and West. Professor Bognár made important contributions to the preparation of the Hungarian economic reform and he is constantly arguing for a well-founded economic policy of the country especially as foreign economic policy is concerned. He endeavours to strengthen links and cooperation of Hungarian economists with their colleagues abroad. This year he has been elected Chairman of the Editorial Board of "Acta Oeconomica".

Béla *Csikós-Nagy* was born in 1915. He graduated at the University of Szeged and habilitated in 1942. After 1945 he held important positions in the economic administration and since 1956 he has been President of the National Office for Prices and Materials. He has been lecturing at the Karl Marx University of Economic Sciences. In 1964 he was awarded by the University the degree titular professor and in 1967 by the Hungarian Academy of Sciences the degree "Doctor of Economic Sciences". He is President of the Hungarian Economic Association, and Chairman of the Editorial Board of the economic quarterly "Gazdaság".

Professor Csikós-Nagy is an expert of pricing. Since 1958 he published four books on the different aspects of price theory and policy, the last of which "General and Socialist Price Theory" may be regarded as a summary of his investigations on this subject. His latest volume "Introduction to Economic Policy" is the first systematic treatise of this subject in postwar Hungarian

economic literature. He had an outstanding part in the preparation and implementation of the Hungarian economic reform. He often delivers lectures and publishes studies both at home and abroad. The number of his pubications is over 140.

Kálmán *Kádas* was born in 1908, graduated at first as mechanical engineer, later as economist. In both subjects he habilitated too. He was a close collaborator to Professor Wolfgang Heller, an eminent scholar in the interwar period. Until 1949 he taught at the Faculty of Economics, afterwards held an important post at the Ministry of Transport and Communication. In 1955 he was appointed as full professor to the Chair of Transport and Building Economics of the Technical University, which he has held ever since. He has a considerable part in introducing engineering students and young engineers into economic reasoning.

Having been educated first as engineer he became interested in exact economic research methods and was involved in econometric studies. He was first to apply the Cobb-Douglas production function to the Hungarian industry. Later he was engaged in productivity measurement and analysis. Lead by his practical activities he began to investigate problems of transport economics. His contribution is regarded as significant even in an international context. He is Doctor h. c. of the Transport University at Dresden. He published a great number of studies on transport economics, regional analysis. He is involved in urban studies and in the investigation of microeconomic and recently organometric problems. He is a member of board of several scientific societies and scientific journals both at home and abroad.

THE NEW EDITORIAL BOARD OF ACTA OECONOMICA

At the July session of the Committee of Economics of the Hungarian Academy of Sciences a decision was taken on the extension of the scope of activity and the size of the Acta Oeconomica. In order to meet the growing responsibilities a new Editorial Board was appointed and the vacant place of the late Professor Imre *Vajda* as Chairman was filled. Professor József *Bognár*, correspondent member of the Hungarian Academy of Sciences, director of the Centre for Afro-Asian Research of the Hungarian Academy of Sciences and Chairman of the Hungarian Scientific Council of World Economy was elected Chairman. The members of the Editorial Board are as follows:

Sándor *Ausch*, D. econ. sci., head of section of the Institute of Economics, Hung. Acad. Sci.

György *Cukor*, D. econ. sci., deputy director of the Institute of Economics, Hung. Acad. Sci.

Ernő *Csizmadia*, D. econ. sci., pro-rector of the University of Economics, Budapest.

Péter *Erdős*, D. econ. sci., head of section of the Institute of Economics, Hung. Acad. Sci., professor of the Technical University of Budapest.

Ferenc *Fekete*, D. econ. sci., at present Iowa State University, USA.

Iván *Gönczi*, Cand. econ. sci., professor at the Agricultural University, Debrecen.

István *Hetényi*, vice-president of the National Planning Office.

Róbert *Hoch*, Cand. econ. sci., head of Research Group of the Institute of Economics, Hung. Acad. Sci.

István *Huszár*, president of the Central Statistical Office.
János *Kornai*, D. econ. sci., scientific adviser to the Institute of Economics, Hung. Acad. Sci.
Ferenc *Kozma*, D. econ. sci., head of department of the Government, Secretariat of International Economic Relations, Secretary of the Hungarian Scientific Council of World Economy.
András *Nagy*, Cand. econ. sci., head of section of the Institute for the Economic and Market Research.
Mihály *Simai*, Cand. econ. sci., professor at the the University of Economics, Budapest.

The mandate of the Editor, Tamás *Földi*, Secretary of the Committee of Economics, Hung. Acad. Sci., was prolonged. The Committee expressed its gratitude to Ferenc *Molnár*, former member of the Editorial Board who resigned because of his permanent stay in New York as a staff-member of the Secretariat of the United Nations.

Acta Oeconomica Academiae Scientiarum Hungaricae, Tomus 5 (4), pp. 405–419 (1970)

BOOK REVIEWS

FEHÉR, L.: *Agrár- és szövetkezeti politikánk 1965–1969.* (Unsere Agrar- und Genossenschaftspolitik 1965–1969.) Budapest, 1970. Kossuth Könyvkiadó. 368 S.

Der Band enthält 27 Vorträge, Reden, Referate, Artikel aus der Zeit der zweiten Hälfte der Sechzigerjahre, als sich das Dorf, also das gesamte ungarische Wirtschaftsleben auf sozialistischen Grundlagen entwickelte und die Weiterentwicklung der Wirtschaftsleitung des Wirtschaftsmechanismus begann.

Ein charakteristischer Zug der Politik der ungarischen Regierung ist die organische Eingliederung der Agrarfrage in die Politik des gesamten sozialistischen Aufbaus. Diese Behandlungsweise wird im ganzen Material des Bandes — dessen Verfasser der stellvertretende Vorsitzende des Ministerrates ist — gut widerspiegelt. »Die Zentralfrage der Entwicklung unserer Volkswirtschaft ist die Entwicklung der Industrie. Dies ist so richtig, sogar gesetzmässig, denn die Industrie ist ja bereits — als Ergebnis unserer Industrialisierungpolitik — die Hauptbasis unseres Wirtschaftslebens geworden . . . Eine grosse Verantwortung tragen auch die Leiter und Werktätigen der Landwirtschaft. Die Lebensmittelversorgung des Landes, in einem gewissen Masse auch das Gleichgewicht unseres Aussenhandels hängt davon ab: wie ökonomisch und zielgerecht wir Mittel zur Begründung einer modernen grossbetrieblichen Bewirtschaftung anwenden« (125–126. S.).

In unserer wirtschaftlichen Entwicklung und im ausgeglichenen wirtschaftlichen Wachstum spielt heute bereits die Industrie die grössere Rolle. Die der Landwirtschaft ist viel geringer, aber noch immer bedeutend, sogar in mehreren Beziehungen bestimmend. Durch die Erweiterung der Importquellen übt die Landwirtschaft z. B. eine bedeutende Wirkung auf die Industrieentwicklung aus. Vorläufig entwickeln und modernisieren wir unsere Industrie auf eine solche Weise, indem wir dazu durch den Aussenhandel auch die ansteigende Beteiligung der Landwirtschaft in Anspruch nehmen. »Weder die Industrie, noch die Landwirtschaft wird um ihretwegen entwickelt« — betont Lajos Fehér mehrmals.

Der Band gibt eine umfassende Charakterisierung über sämtliche wichtige Züge der ungarischen Agrar- und Genossenschaftspolitik. *Als erstes* ist es angebracht jene Verordnungen herauszuheben, die *die moderne, grossbetriebliche Bewirtschaftung, die moderne, mechanisierte Warenproduktion grossen Ausmasses begründen.* Als Ergebnis dieser wurden in der zweiten Hälfte der Sechzigerjahre die Umformung der Energiebasis der Landwirtschaft, die Mechanisierung, die Chemisierung, das Bauwesen und die technologische Entwicklung wesentlich beschleunigt. Derzeit arbeiten bereits ungefähr 70 000 Traktoren, 11 000 Mähdrescher und viele zehntausend andere Maschinen in der Landwirtschaft. Die Grossbetriebe kaufen jähr-

lich im Wert von 20 Milliarden Ft Materiale und Mittel industrieller Herkunft zur Modernisierung ihrer Produktion. Es begann die Entwicklung der Grossproduktion gebenden Anpflanzungen, Betriebszweigen, es erschienen die ersten »Fabriken«, die auf industrieller Basis betriebenen Grossbetriebe in der Landwirtschaft.

Ob die Modernisierung, die technische Entwicklung in welchem Mass in der Landwirtschaft begründet ist — ergibt oft leidenschaftlich geführte Diskussionen zwischen Volkswirten. Gemäss den Erfahrungen, hängt die Modernisierung davon ab, welches Tempo des Produktionswachstums notwendig ist um die innere Versorgung und den Export zu sichern. Wenn wir mit dem im letzten Jahrzehnt ausgestaltetem Tempo zufrieden sein können, müssen sich auch die Investitionen gegenüber den vorangehenden Jahren nicht bedeutend schneller erhöhen. Von einer solchen Modernisierung kann man aber auch in der Produktion nicht mehr erwarten, als sich in den letzten Jahren unter durchschnittlichen Umständen ausgestaltete. Wenn eine schnellere Entwicklung gerechtfertigt ist, müssen auch die Investitionen, die technische Entwicklung in einem schnelleren Tempo vorangehen.

So sehr es unerlässlich ist, die Produktion in Übereinstimmung mit den Ansprüchen durch Herstellung moderner neuer Kapazitäten zu erweitern, ist es wenigstens ebenso wichtig auch die alten Kapazitäten auszunutzen. Die materiellen Quellen unserer Volkswirtschaft, die der Entwicklung der Landwirtschaft dienen, sind — obzwar heute grösser, als sie vorhin waren — auch weiterhin nicht unerschöpflich. Deswegen kann die Modernisierung nur in einem bestimmten Tempo vor sich gehen, das geht wieder damit einher, dass man in der Produktion lange Zeit hindurch auch die einfacheren Mittel und Methoden anwenden muss. Wenn nicht genügend Chemikalien und moderne Maschinen zur Verfügung stehen, ist auch die Handarbeit nicht zu vermeiden. Wenn wir nicht noch mehr grossbetriebliche Ställe bauen können, muss die Tierzucht auch in der Hauswirtschaft betrieben werden. Eine sehr wichtige Voraussetzung der erweiterten und ökonomischeren Produktion ist, dass die Einsetzung der zeitgemässen neuen Kapazitäten in die Produktion neben einer je vollkommeneren Ausnutzung der alten Kapazitäten vor sich gehe. Für die Gesellschaft ist es teurer und nachteiliger, wenn die neuen Investitionen nur die Ablösung der vorherigen zur Folge haben. Unsere Agrarpolitik hat diese Gesetzmässigkeit in rechter Zeit erkannt und sich bemüht diese zur Erweiterung der Produktion auszunutzen. Die mit den Hauswirtschaften verbundene Politik ist ein organischer Bestandteil dieser Erkenntnis.

Zweitens: eine so wichtige Bedingung es in der Bewirtschaftung ist, dass zur Erweiterung der Produktion genügende und zeitgemässe Mittel zur Verfügung stehen — und auch die notwendige Zahl von qualifizierten Arbeitskräften — wenigstens ebenso wichtig ist, dass sich die *ökonomischen, finanziellen Bedingungen* der Produktion vorteilhaft gestalten. Zur erfolgreichen Bewirtschaftung sind nicht nur immer mehr Traktoren, Kunstdünger, Ställe notwendig, sondern es ist auch lebenswichtig, zu welchen Preisen, zu welchen finanziellen Bedingungen die Wirtschaften diese erhalten. Weiters ist wichtig, wie das System der Planung des Produktenvertriebs ist, ob die Produktionseinheiten genügend selbständig sind oder nicht. Der Preis, der Kredit, die Einkommensregulierung, die materielle Stimulierung, der Waren- und Produktenvertrieb, das System der Planung — dies sind jene wichtigeren wirtschaftlichen Bedingungen, die die Bewirtschaftung auch dann günstig beeinflussen können, wenn sich in der Versorgung mit Arbeitsmitteln und Arbeitskräften Schwierigkeiten ergeben, und umgekehrt, die die Produktion auch dann zurückwerfen können, wenn Ausrüstung, Material und Arbeitskraft voll zur Verfügung stehen.

Mit der Reform des Wirtschaftsmechanismus gestalteten sich solche Einkommens- und ökonomische Bedingungen aus, die es nicht nur für den kleineren Teil, sondern für die Mehrzahl der Wirtschaften ermöglichen, wenigstens eine der früheren ähnliche Entwicklung aus ihren eigenen Einkommen finanzieren — und für sämtliche Wirtschaften — die elementare Bedingung der normalen Produktionstätigkeit, die Amortisation aus den Einkommen decken, für den Ersatz Sorge tragen zu können. Dies ist die Grundlage auch der selbständigen Betriebswirtschaft, die in jedem Zweig der Volkswirtschaft die Bedingung des Fortschritts ist.

Früher hat der sozialistische Staat aus der Landwirtschaft das Reineinkommen durch das niedrige Aufkaufspreisniveau zu einem solchen Masse zentralisiert, dass man die zur Erweiterung der Produktion notwendigen Mittel zum überwiegenden Masse durch die komplizierten Kanäle der Umverteilung, in Form von Budgetzurückzahlungen, verschiedener Begünstigungen, Kreditabschreibungen und anderer Mittel den Wirtschaften zurückerstatten musste. Es zeigte sich, dass diese Methode die Grossbetriebe mengenweise traf, ihre Mehrheit mit der Gefahr der Verschuldung bedrohte. Die Verordnungen der letzten Jahre haben dies geändert, in der Einkommenslage der landwirtschaftlichen Grossbetriebe begann eine tiefgehende Wende. Die Veränderung aber hat erst begonnen, im Finanzierungssystem der Landwirtschaft blieb aber die Rolle der »Rückerstattung« auch weiterhin bedeutend. Gemäss den Erfahrungen kann die bedeutende Zentralisierung des Reineinkommens vermittels des Preissystems durch keinerlei differenzierte Rückerstattung ausgeglichen werden. Eine bedeutend richtigere und wirkungsvollere Methode der Einkommensregulierung wird dadurch erreicht, wenn die Zentralisierung des Reineinkommens nicht grösstenteils durch das Preisniveau sondern eher durch das Steuersystem geschieht. Eine solche Einkommensregulierung kann sich besser den Realitäten anpassen, die nicht so sehr durch die Rückerstattung, sondern hauptsächlich durch die Differenzierung der Entziehungen die Einkommen zu beeinflussen trachtet. Mit der Reform des Mechanismus begannen wir diesen Weg zu gehen, in der Zukunft müssen wir folgerichtig weitergehen.

Die bisherigen Verordnungen der Reform des Mechanismus haben zusammen mit der Rentabilität der landwirtschaftlichen Grossbetriebe auch das Interesse an der Erhöhung der Produktion gesteigert. Dies ermöglichte auch die Entwicklung der materiellen Stimulierung. Der personelle Anreiz der Werktätigen hat sich in eine günstige Richtung entwickelt. Es erhöhten sich die Garantiertheit der Arbeitsentlohnung, und zugleich auch die Rolle des gleitenden Lohnes am Jahresende. In den Produktionsgenossenschaften verminderte sich die Rolle des Naturallohnes und erhöhte sich die Rolle der Geldentlohnung. In weiten Kreisen verbreitet sich die Entlohnung nach dem Endprodukt, also die materielle Stimulierung, die sich enger an den Erfolg anpasst. Folgerichtiger zeigt sich das Prinzip, nach dem: wer der Gesellschaft mehr gibt, auch von ihr mehr erhält. In der Verbreitung der Formen der fortschrittlichen Arbeitsentlohnung gaben jene Standpunkte eine grosse Hilfe, die im Buche von Lajos Fehér jetzt erschienen.

In dem Band bekamen auch die Anordnungen, die sich mit der Veränderung der dörflichen Lebensbedingungen, mit der Regulierung der Renten, des Familienzuschlages, mit den sozialen, den gesundheitlichen Umständen befassen, einen entsprechenden Platz. Diesen wurde früher keine angemessene Bedeutung beigemessen. Gemäss den Erfahrungen fällt aber die Rente und die Familienzulage oft mit einem grösseren Gewicht in die Stimulierung, als die Lohnerhöhung. Diese sind wichtige Bestandteile des Lebensniveaus.

Drittens: es ist angezeigt auf die Kooperation innerhalb des Betriebes und zwischen den Betrieben einzugehen. Die Ver-

stärkung der Kooperation ist ein Zug in der Entwicklung unserer Landwirtschaft, der sich in den letzten Jahren immer mehr abzeichnet, und auf welchen der Verfasser in diesem Band mehrmals ausführlich zurückkommt. Die Mechanismusreform hat auch in dieser Beziehung eine Wende angestrebt, die Anordnungen wirken auf die Entwicklung günstig ein.

Ein gesetzmässiger Mitläufer der Modernisierung und Konzentration der Produktion ist die Entwicklung der Arbeitsteilung und zugleich die der Kooperation. Unsere Ökonomen haben lange Zeit hindurch nur der Arbeitsteilung Beachtung geschenkt und die Entwicklung der Kooperation vernachlässigt, obzwar diese beiden Erscheinungen streng miteinander verflochtene zwei Seiten derselben beiden Erscheinungen sind.

Die schweren Folgen der einseitig in den Vordergrund gestellten Arbeitsteilung in der Landwirtschaft zeigten sich in der Mitte der Sechzigerjahre immer mehr. Dies ist verständlich, da zu dieser Zeit die sozialistischen Grossbetriebe zur Herrschaft gelangten. Ihre Tätigkeit wurde durch solche Beschränkungen immer mehr gehemmt, die ihre Bewirtschaftung auf die in einem engen Sinn gemeinte Pflanzenzucht, Tierzucht und Gärtnerei zurückdrängen wollten.

Mit der Verwirklichung der Mechanismusreform begann auch in dieser Hinsicht eine tiefgehende Veränderung. In den Vordergrund gelangten die Ausweitung des Tätigkeitskreises, die Förderung der Kooperation innerhalb des Betriebes in den landwirtschaftlichen Grossbetrieben. Die landwirtschaftlichen Produktionsgenossenschaften und Staatsgüter weiten ihre Produktion rational aus, verbinden ihre Grundtätigkeit erfolgreich mit einer Verarbeitung, Verwertung oder einer anderen Dienstleistungstätigkeit.

»Die Ausweitung der Wirtschaftstätigkeit der Produktionsgenossenschaften ist nicht nur für die Genossenschaften, sondern auch für die Volkswirtschaft sehr vorteilhaft. Sie ermöglicht die Verwendung solcher Rohmaterialien, die besonders im Falle der leicht verderblichen Gemüse- und Obstarten, bisher für die Volkswirtschaft verloren gingen. Nicht davon ist also die Rede, dass wir durch die Entwicklung der örtlichen industriellen Tätigkeit der Produktionsgenossenschaften die derzeitige staatliche Akkumulation vermindern wollten. Im Gegenteil, durch Erweiterung dieser ihrer ergänzenden Tätigkeit wird sich eben infolge der Produktionsvermehrung *das Nationaleinkommen erhöhen, was eine neue Akkumulationsquelle für die Volkswirtschaft bedeutet.* Weiters ist dies auch deshalb vorteilhaft, weil unter unseren derzeitigen engen Investitionsmöglichkeiten die zur Verfügung stehenden Quellen, materiellen Mittel am ökonomischsten verwendet werden können.« (103. S.)

Die Erstarkung der Kooperation innerhalb des Betriebes ist in immer mehr Produktionsgenossenschaften auch zwischen der kollektiven und der Hauswirtschaft bemerkbar. Dies stellt das ganze Problem der Hauswirtschaft in ein neues Licht.

In der öffentlichen Meinung ist die Ansicht ziemlich verbreitet, dass die Existenz der Hauswirtschaft in Wirklichkeit mit dem Eintritt der individuellen Bauern in die Genossenschaft verbunden, bzw. zur Eroberung der Bauernschaft wichtig sei. Heute kann schon gesagt werden, dass die Hauswirtchaft ein bleibendes ökonomisches Gebilde im Sozialismus ist, weil die neuen Kapazitäten die alten nur stufenweise ablösen können.

Für die Versorgung des Landes, für den sozialistischen Aufbau ist das günstig, wenn sich die grossbetriebliche Produktion schneller erhöht, als das Mass in dem die Produktion der Hauswirtschaften abnimmt, bzw. es ist günstig, wenn diese Abnahme nicht grösser ist, als die hindernislose Befriedigung der ansteigenden gesellschaftlichen Ansprüche bedingt. Dazu ist 1. die Modernisierung der grossbetrieblichen Produktion, ihre Entwicklung in einem schnellen Tempo notwendig; 2. un-

erlässlich, dass die Wirtschaftspolitik die Produktion der Hauswirtschaften mit der grossbetrieblichen Entwicklung übereinstimmend beeinflusse. Die entsprechendste Methode zur Beeinflussung der Hauswirtschaft ist ihr Zusammenbau mit dem Gemeinschaftsgut im Rahmen der festeren Kooperation (Integration) zwischen dem Kollektivgut und der Hauswirtschaft, indem man diese als einen Betriebszweig voriger entwickelt. Für die sich modernisierende, industrialisierende Landwirtschaft ist auf der ganzen Welt die Verflechtung der im engeren Sinne genommenen Rohstoffproduktion und der damit zusammenhängenden Aufarbeitung, dem Handel, bzw. mit den ihr dienenden industriellen und anderen Dienstleistungstätigkeiten charakteristisch. Dies wird von der Fachliteratur als *die Gestaltung der Nahrungsmittelwirtschaft* benannt.

In Ungarn steht dieser Prozess noch in seinen Anfängen, wird sich aber in der Zukunft sicher beschleunigen. In der Nahrungsmittelproduktion sind die Rohmittelherstellung und -verarbeitung ökonomisch vereinbar. Die Verbraucheransprüche sind auch nur dann bruchlos vom Verbraucher bis zu den Produzenten zu bringen, wenn die Entwicklung sämtliche Phasen der Nahrungsmittelproduktion in eine einheitliche Kette bringt. Deswegen ist eine Richtungslinie, die die Nahrungsmittelwirtschaft in den Vordergrund stellen will, begründet. Die Theorie und die ökonomische Praxis können nachher am besten die zwischen den landwirtschaftlichen Grossbetrieben und den verarbeitenden, bzw. verwertenden Betrieben in den letzten Jahren sich entfaltenden neuartigen Beziehungen enger flechten.

Dies ist in grossem Masse notwendig, weil die Kooperation zwischen den Betrieben in Ungarn nur sehr langsam vor sich geht. Die Entwickung der gemeinsamen Unternehmungen wird heute infolge der Ungeklärtheit der Prinzipien und praktischen Methoden der Zusammenarbeit, bzw. Risikotragung behindert.

Endlich lohnt es sich noch auf die in den letzten Jahren zu bemerkende Verstärkung der Genossenschaftsbewegung und Genossenschaftsideen einzugehen, die ein herausgehobener Themenkreis des Werkes von Lajos Fehér ist. Die kraftvolle Entwicklung der Genossenschaftswirtschaft hat diese Frage in ein neues Licht gesetzt, und dies widerspiegelt sich gut im Band.

Die Genossenschaften sind in fast sämtlichen Zweigen unserer Volkswirtschaft anzutreffen. Ungefähr die Hälfte der 11 000 derzeit in Betrieb stehenden Unternehmen funktioniert in Form von Genossenschaften. Mehr als drei Viertel der Bodenfläche, ein Zehntel der Grundmittel der Volkswirtschaft befinden sich in ihrem Besitz. Sie beschäftigen ein Drittel der aktiven Werktätigen. Die genossenschaftlichen Unternehmen stellen 18% der gesamten Produktion, ungefähr ein Fünftel des Nationaleinkommens her.

Das grösste Gewicht besitzen die Genossenschaften in der Landwirtschaft. Hier geben sie mehr als 70% der Produktion und des Aufkaufs. Ihr Anteil an der Industrieproduktion ist 8, an der Produktion der Bauindustrie ungefähr 12%. Die Erzeugung der Genossenschaftsindustrie beträgt in der Möbel- und Textilbekleidungsindustrie ein Drittel, in der Schuhindustrie ein Viertel der Produktion des Landes. 70% der durch den sozialistischen Sektor ausgeführten Dienstleistungen werden durch Industriegenossenschaften versorgt.

Die ältesten Traditionen in unserer Heimat haben die allgemeinen Verbrauchs- und Verwertungsgenossenschaften. Ihr Anteil am Umlauf des Kleinhandels und der Gaststättenindustrie beläuft sich auf ein Drittel des gesamten Umlaufs. In einen grossen Teil der Gemeinden aber ist dieser Anteil 100 prozentig.

Unsere Erfahrungen zeigen, dass die Genossenschaftsform nicht nur vereinbar mit den sozialistischen Produktionsverhältnissen ist, sondern auch der Charakter der Genossenschaften dem der sozialisti-

schen staatlichen Unternehmen gleich ist. Die Genossenschaften sind ebenso sozialistische Unternehmen, wie die staatlichen Grossbetriebe.

Die Existenz des genossenschaftlichen Sektors wird in der sozialistischen Wirtschaft nicht nur durch die Führung der Kleinwarenproduzenten auf sozialistischen Weg — also eine geschichtlich relativ kurzfristig lösbare Aufgabe — sondern auch dadurch begründet, dass es für die ganze Gesellschaft vorteilhafter, ökonomischer ist, wenn bestimmte Wirtschaftstätigkeiten durch genossenschaftliche Betriebe verrichtet werden.

In den Genossenschaften verknüpfen sich die individuellen Interessen auf eine direktere Art mit dem Ergebnis der Tätigkeit, mit den wirtschaftlichen Prozessen. Deswegen ist es in allen solchen Fällen vorteilhafter, wo in der Bewirtschaftung die lebendige Arbeit, die Arbeitskräftebeschäftigung eine überwiegende Rolle innehat, wo das wirtschaftliche Ziel ein Dienst an den unmittelbaren Interessen einer verhältnismässig kleineren Gemeinschaft ist, diese Tätigkeiten in Form eines genossenschaftlichen Zusammenschlusses zu organisieren.

Im Wege des genossenschaftlichen Zusammenschlusses ist es möglich die Quellen der Wirtschaftsentwicklung zu erweitern. Verhältnismässig grosse Gruppen der Bevölkerung sind geneigt auf eine direkte Weise auch materiell dazu beizutragen, mit Arbeit oder auf eine andere Art solche Tätigkeiten voranzutreiben, die eine schnellere, bessere Befriedigung ihrer Bedürfnisse zur Folge haben.

Die Genossenschaften können auf eine ökonomische Weise und mit geeigneter Beweglichkeit solche Aufgaben verrichten, die die Grossunternehmen nicht unternehmen wollen, obzwar diesen gegenüber ein grosses Interesse besteht. Das ist mit solchen Vorteilen der klein- und mittelbetrieblichen Wirtschaft verbunden, wie der geringere Verwaltungsapparat und Administration, schnellere Reaktion auf die Ansprüche, und — da im grössten Teil auf Handarbeit begründet — einer schnelleren Veränderung der Tätigkeit.

Neben der wirtschaftlichen Tätigkeit ist auch die gesellschaftliche, sozialpolitische Arbeit der Genossenschaften bedeutend. Sie erfüllen in sehr vielen Fällen, eine unersetzbare Funktion durch die Beschäftigung von Frauen, ausserdem von Werktätigen mit verminderter Arbeitsfähigkeit, weiters von Hausfrauen, von Saisonarbeitern.

Die ungarische Agrar- und Genossenschaftspolitik — die Lajos Fehér in seinem Buche ausgezeichnet dokumentiert — stellt sich die Aufgabe die Ergebnisse des letzten Jahrzehnts weiterzuführen und zu entwickeln. Gleichzeitig ist es ihr Bestreben, die verschiedenen Zweige der Genossenschaftsbewegung in die sozialistische Volkswirtschaft organisch einzugliedern, und den Aufbau des Sozialismus zu fördern.

E. CSIZMADIA

HEGEDÜS, A.: *Változó világ.* (Changing world.) Budapest, 1970. Akadémiai K. 167 p.

Hungarian sociology has a long-standing debt for a comprehensive work analyzing (or just surveying) the changes in the living conditions and internal world of the village population. András Hegedüs's new book, "Changing World", is an attempt to pay off this debt, a delightful work both regarding the topic he has chosen, and on account of his method of handling it.

The book discusses a concrete topic, but what the author has to say isn't lost either among the detail or in the maze of generalizations. He touches on an extremely large number of essential and topical phenomena, clearing many up and putting them in their places, while at the same time he leaves many questions open, and even makes his readers awaken to and ponder new questions.

Following a review of the literature dealing with the phenomena of agrarian society, the author surveys the sociological consequences of the socialist reorganiza-

tion of agriculture, and he sketches out the major tasks of sociologic research dealing with village society. The chapters discuss several of these tasks, with more of a demand for thoroughness and responsibility than for broadness in scope. We do not have enough space here to present a comprehensive review of any of the ten topics in as many chapters, each of which would demand a separate book to themselves in view of their importance. Instead, we would like to dwell on a few questions chosen at random.

The chapter on industrialization and urbanization brings extremely exciting problems to the surface. What in fact exists at present is a desire to escape from general village living conditions and life forms, while the desire for the urban way of life can only be spoken of as runner-up. The duality of the reasons divides the result, too: migration, or the striving to meet demands locally. For the most part, the character of the village determines which of the two phenomena is dominant. András Hegedüs divides village settlements into three groups: – the industrialized villages where over 50 per cent of money-earners do not work in agriculture; the industrializing villages in which 50 to 75 per cent of money-earners work in agriculture; — and the agrarian, traditional villages, in which over 75 per cent of money-earners work in agriculture.

Grouping the populations of villages and suburban areas by their place in the division of labour is truly justified for a number of reasons, though this grouping provides opportunities for misunderstanding. We have two comments in this connection. One is that in this form the terms "industrialized villages" and "industrializing villages" are misleading, for we cannot speak of the industrialization of the village, but at most, of its population. Therefore, it would be more correct to call them "villages populated by a majority of agricultural (or industrial) workers". This is a question of form, but has something to do with content. There are many examples to prove the tremendous deviations that may exist between the villages placed in the same group by Hegedüs's definition if the village is viewed as a complex (settlement and social) unit. These deviations are caused by factors which in theory are dependent on the division of labour among the populations of the different villages but, in reality, are often independent of it: the public administration situation and economic environment, the existence or non-existence of work opportunities of a non-agricultural nature, the size of the settlement, its proximity to Budapest or other industrial centres, etc. These considerations do nothing to lessen the importance of criteria set up for grouping village settlements according to their populations' work in agriculture and are simply meant to call attention to the fact that certain correlations that are relevant in general, may not be applicable to details without reservations.

One of the most valuable parts of the study is the chapter dealing with the household plots. This is not only because there are still many different opinions and intentions regarding household plots, but also because – in our opinion — this is the point on which the author has revealed perhaps the most new, and has formulated his standpoint the most clearly and the most logically.

The first essential recognition is the fact that, economically speaking, the difference between the household plot and the kitchen garden (or supplementary garden) is on the wane. Their character and role show many common features. This is not accidental. Despite all opinion to the contrary, the household plots were primarily established, and have been maintained, by objective factors. Courtyards and gardens around the houses characteristic of the settlement type of our villages acting as possibilities, and the insufficiency of public supply to the villages, and the low incomes from collective farms (low to other sectors at least) acting

as a driving force, prompt on cooperative farm families to cultivate household plots. However, a sizable proportion of these circumstances (the existence of a garden surrounding the house, and the shortages in public supply) effect not only cooperative farm families, but almost all strata of village populations.

András Hegedüs defines and divides the household plots into three distinct types, providing thereby a chronological survey of the major stations in the development of the household plots.

The first type is the "subsistence economy plot, producing for family needs, which, by its nature, cannot compete with the jointly tilled land".

The second is the "household plot producing for the market, which, by its nature, becomes a competitor to the cooperative".

The third form is the "simple commodity-producing household plot or supplementary garden, whose activities — like those of a sub-contractor in a major enterprise — are organically integrated into a cooperative or perhaps state farming".

When analysing these definitions, two aspects should be remembered: 1. In the third, and undoubtedly, the most advanced form, the author discusses the household plots, and supplementary gardens together. For a long time to come this will remain the most advanced form of small-scale production by the village population, using the gardens around their homes. 2. The distinction is based primarily on the relation of the types to cooperative farming. This approach — the only correct one in our opinion — has enabled the author to recognize the most progressive form of household plots for the future; that of a small-scale production unit organically connected to and integrating into, cooperative production.

The author strives to throw light on the different forms of social transformation not merely by analysing phenomena directly connected with production relations; he has an eye also for the rapidly changing laws governing the culture, way of life and customs of village communities. With the exception of the chapter on the spread of new technical information (somewhat oversized, in our opinion), we felt that all chapters would have benefited by a more extensive analysis of the subject, in a broader scope.

P. Halász

Biró, J.: *A magyar külkereskedelmi politika. A külkereskedelem fejlődése, szerepe a népgazdaságban.* (Hungarian foreign trade policy. Development and role of foreign trade in the national economy.) Budapest, 1970. Közgazdasági és Jogi Könyvkiadó. 292 p.

The increasing importance of foreign trade, of external economic ties is a worldwide phenomenon. The demands of scientific-technical development and the economic efficiency of production equally call for enhanced international division of labour and cooperation. At the same time, the external economic ties expand under keen competition, since increasing turnover is an essential demand for all countries.

The issue is particularly sharp in those industrially developed countries which are territorially small, have high population densities, and comparatively few natural resources. In these countries demands for imports grow parallel to the advance of industry and can only be met by expanding exports.

The example of Hungary provides a many-sided proof of these conclusions. Regarding the ratio of commodity exports to the national income we are surpassed only by the Benelux states, and foreign trade turnover compared to the national income is showing a strong upward trend. This is a healthy phenomenon, in keeping with world trends, but has, at the same time, important consequences affecting the whole of our economic policy. Had this been the only topic discussed in the book of the Hungarian minister of foreign trade, Dr. József *Biró* on the development

of Hungarian foreign trade and on its role in the national economy, it would have deserved attention.

But the author, as he himself writes, has taken on the job of analyzing the development of socialist foreign trade, of studying the formation and goals of Hungarian foreign-trade policy, as well as its ties with different groups of countries and economic bodies. The broad sphere of issues dealt with by the book gives an insight into the development of the national economy as a whole from the angle of foreign trade.

The historical review in the first chapters of the book sketches out Hungarian foreign trade trends from the 1920's to the present.

The economic policy in effect since 1957 has created new, favourable conditions for progress in foreign trade. When economic efficiency took the forefront, views on the role of foreign trade changed. Economic policy handled it no longer as some kind of service industry but as a branch of the national economy which, as the mediator between production and the world market affects the progress of the national economy as a whole. This involved the necessity of studying the economic efficiency of foreign trade. It has gradually be realized that overprotection of home production and of the home market may give rise to unfavourable trends, that without the influence of foreign trade upon production, the efficiency of economic actions could hardly be improved.

The author, in keeping with his intentions, examines the road travelled, with due regard to the interactions of foreign trade and the other branches of the national economy. Concurring facts supplementing the theoretical analysis — for instance, his series of data showing comparisons and changes in commodity structure — are proofs of these interactions. Thus the nearly eighty pages of historical analysis casts a new light on the quarter-century development of the liberated country.

In the second large part of the book, the author writes about the methods developed in foreign trade under the new system of economic management and about the foreign-trade problems of the economic reform. He emphasizes that the new management system, which in many respects is far less rigid than the old one, gives a wide scope for the companies to be more flexible in adjusting themselves to the demands of the world market, but, at the same time, he points out that, "participation in the international division of labour, and foreign trade are areas where government control plays an important role even under the reform . . ., because these activities must be closely tied to the total development of the planned economy and . . . the trade policy interests of the national economy must be safeguarded".

Relying on this principle, the author reviews the ties between national economic and foreign trade planning. His description of foreign-trade regulators provides a clear and well organized picture. He shows how to achieve growth in accordance with the national economic plan, how to meet inter-state contracts and how to maintain balance and increase the efficiency of foreign trade by the uniform application of the general economic regulators (for instance, credit policy), of the special economic regulators (for instance, trade-policy directives, customs duties), and of the administrative regulators (for instance, the permit system) under the new conditions. In describing this method, based on the experience of the first two years of the reform, József Biró signals the arising problems and discusses possible ways of solving them.

In his analysis of the interpretation and implementation of foreign-trade monopoly, the author deals with an issue still heavily debated today. The foreign-trade monopoly, he writes, expresses the socialist character of the economic system and is, at the same time, a fundamental institution of socialist economic man-

agement. Its essence is this: "The government, or more closely, a definite government body, the Ministry of Foreign Trade, manages foreign trade activity and, within the framework of management decides which economic bodies have the right to carry on foreign trade." (Therefore, in this concept, granting or revoking the right to carry on foreign trade does not extend or contract the size of the foreign trade monopoly, but instead, creates an organizational scope of desirable size for the government to enforce this monopoly privilege.)

In recent years the number of companies with autonomous foreign trade rights has increased tremendously and, as the minister writes, "in economically justified cases, the Ministry of Foreign Trade continues to believe in granting companies this right".

Another heavily debated issue, in close connection with this one, is the specialization system. The party resolution on the guiding principles of the economic reform, and the resolution of the National Economic Committee on this subject stipulate that producers and home-trade companies have the right to choose between two or more foreign-trade companies. What, in fact, the regulations issued by the Ministry of Foreign Trade for execution allows is that the companies mentioned may request the ministry to assign one product or a group of products to another foreign-trade company — a disposition only apparently contradicting the former, according to the author. This process may temporarily be justified, but at any rate it makes it difficult to narrow down monopoly position of the specialized foreign trade companies.

The other chapters deal with the actual economic relations maintained with the different groups of countries (the socialist countries, developed capitalist countries, developing countries). By reviewing topical problems and development possibilities these chapters provide valuable guidance at the same time, exemplifying the practical application of our foreign-trade policy. When discussing economic ties with the individual socialist countries, the author correctly emphasizes the fundamental significance of these ties for us. The necessity of changing over to intensive development and the importance of the economic integration of the socialist countries.

In recent years, the pace of foreign trade development with the advanced capitalist countries has exceeded the rate of development of world trade. On our part, further advance calls for increasing the marketability of our products, particularly in the machine industry and for developing new forms of cooperation. For our capitalist partners, the major condition for increasing their trade with us is to decrease the discriminatory trade policies against us, to liberalize turnover. In this connection, József Biró states our stand regarding the different West-European economic associations. The fundamental principle underlying our active trade policy, he writes "is the unconditional, unlimited most favoured nation principle, comprising equality, reciprocal advantages and respect of sovereignty".

Trade ties between the developing countries and Hungary are comparatively new, but are very promising. Developing them further depends partly on our credit possibilities, partly on how we can increase our imports from these countries.

A review of the development of the different international economic organizations, and of our relations with them provides a useful supplement to the book.

I. FÖLDES

KOZMA, F.: *A két Európa gazdasági kapcsolatai és a szocialista nemzetközi együttműködés.* (Economic relations between the two Europes and socialist international cooperation) Budapest, 1970. Közgazdasági és Jogi Könyvkiadó. 350 p.

1970 marks the 25th anniversary of the end of World War II. The battlefield of

the first and second world wars was Europe, and today this continent is still directly facing weapons of mass destruction. In the strategy of the United States, for instance, Europe may be no more than one of the "sub-systems", but for us, who live here, it is a matter of life and death to prevent our continent from becoming a battlefield once again, to prevent the "hotbeds of fire" which have survived since the second world war, from bursting into flame. Along with the failure of different cold war plans, this is the recognition that has brought about a substantial change in western public opinion and in the standpoints of certain leading political groups. This would, in fact, mean an official recognition, by western circles, of the realities that have developed in the eastern portion of Europe, primarily as a result of the defeat of nazi Germany. These realities are the international recognition of the first socialist German state, the German Democratic Republic, the international recognition of the Oder-Neisse frontier, and a complete and declared invalidation of the Munich Pact.

Problems in the economic ties of the two Europes are closely linked with political factors. The backward "agrarian belt" of pre-World War II Europe gave way to a new dynamic industrial belt in Eastern Europe by the mid-1960's, developing within the socialist system. This fact pushes economic cooperation to the forefront in a new way. Economic ties between the two Europes are characterized by a special contradiction. The fact that Eastern Europe's economic façade has changed is not sufficiently reflected either in the scope and structure of economic relations, or in the development of the forms applied.

The changes in political conditions in the 1960's open up new possibilities for removing the asymmetries and disproportions characterizing economic ties. But this cannot be achieved overnight. Filling in the economic framework ensured by the political changes means that economic science has to face new tasks. It calls for a deep and many-sided analysis of possibilities, demanding daring concepts. This is why Ferenc Kozma's work is equally important for theoretical and practical economic policy alike. Based on a large and ramified material, he analyses and evaluates the economic factors permitting, in the wake of changed conditions, economic relations between the two Europes to be raised to a new, higher level. He considers deepening relations to be of particular importance for technical development. An extra value of the study is that it does more than simply examine the ties and their economic or technical aspects; it tries to reveal the underlying economic correlations from the viewpoints of both partners. The author compares a number of possibilities, variants, which, in his opinion, are feasible in developing relations, with due regard to the national and international interests of certain leading economic circles of the West European countries.

On the socialist countries' side he also provides an analysis of the realism in the different changes, their national and international consequences and their possible effects on cooperation within the CMEA.

In analysing the relations between the two Europes the author is not "Europe-centered"; though primarily concentrating on this topic, he deals with it in a broader sense, in its correlations with world economy.

The study takes into account relations between the United States and Western Europe along with ties between the developing countries and the two Europes.

One or two conclusions in the study might seem to be somewhat daring when compared with the palpable possibilities of our days. Yet it is very likely that the demands of economic development in the "two Europes" and the improvement in political conditions will eventually prove the viability of possibilities which today cannot be realized completely, or

would seem to be unrealizable. And in working hypothesis the economist, by necessity, takes the more perspective stand.

So the major value of Ferenc Kozma's study is that it rises above the present "barrenness" of East-West relations, and both for this field and for the development of cooperation between the socialist countries, it sketches out a broader and more general perspective — without losing its grasp of reality.

M. SIMAI

ÁDÁM, GY.: *Amerika Európában. Vállalatbirodalmak a világgazdaságban.* (America in Europe. Business Empires in the World Economy) Budapest, 1970. Közgazdasági és Jogi Könyvkiadó. 516 p.

For a short time after the world economic crisis of 1929—1933, and even to a greater extent after World War II., it looked as through long-term capital movements, which had earlier played such substantial role in world economic relations, would have in the future, in the new historical circumstances, no more than a marginal significance: should there be important capital movements between countries, resp. currency and economic areas, it was believed that they would be effected primarily by the outward flow of government funds of the capital-exporting countries (first of all the U. S.) and through economic aid tied to conditions.

Today we are aware that this did not take place. Long-term foreign private investments, including the so-called direct investments carried out by industrial corporations, began growing at a rapid rate in the early 1950's, mainly as a result of the increasingly "global" outlook of *American* investors. What enabled them to do this was the technological superiority obtained in the advanced industries, due to the tremendous scientific potential of the U. S., built out largely by the assistance of more than generous federal R&D expenditures; their accumulated and very considerable surplus sums for which investment outlets had to be found; and last but not least, the fact that the U. S. Government, inter alia by means of its capital exports, promoted successfully those liberalized patterns of international trade which are indispensable both for long-term private investments and the uninhibited transfer of profits and interests.

The spectacular rise of American investments abroad, and the set of problems engendered by them explains why both economists and "non-professionals" focus their attention upon them.

György Ádám's recently published and richly documented monography, based on research "in depth" is meant to satisfy this interest. The two central subject matters he deals with are: "America in Europe" and "Business Empires in the World Economy". In the author's own words: ". . . this order of succession should let the reader feel that the two processes are closely interconnected, that there is a relationship of cause and effect between them".

Simultaneously this development is presented by the author as an outgrowth of the scientific-technical revolution, resp. of the "American way" of its implementation.

Accordingly he starts his exposition by the analysis of the decisive changes that occurred in the sphere of production, the development of science into a direct force of production and the role of research-intensive industries in today's world economy, with particular emphasis on the United States. During World War II., closer cooperation between science and military technology had been established in all the major belligerent countries, but particularly in the U. S. This cooperation was intensified after 1945. Endeavoured to meet the demands of the military, the U. S. Government became the cornucopia of funds for R&D. The outcome was a new relationship between civilian and military technology: civilian production takes over with ever-

growing frequency the achievements of military technology. Economic development and the growth of a substantial sector of private — mainly big corporations became largely dependent upon R&D.

This model, which America was the first to put into practice on a continental scale, is one which other advanced capitalist countries — that had meanwhile lost their big-power status — are trying to copy, but neither their individual efforts, nor the insufficiently financed joint ("European") undertakings were able to diminish substantially "the research gap" or offset most of its implications.

The American model of the scientific-technical revolution is indisputably a wasteful one, and its negative social consequences are only appearing today. But despite of this it did create in many respects a new situation in the world economy whose main beneficiaries happen to be the American giant corporations. The quantitative and even more the qualitative weights of the research-intensive industries are steadily growing both on the national and international scale. So is the share of these industries (of the giant corporations operating in them) in commodity exports: high research-intensity industries and the concentration of exports go hand in hand; this again means that research-intensive industries are primarily oriented towards foreign markets. In fact, their relative share in commodity exports is much bigger than in the domestic sales of U. S. corporations.

The author thereafter proceeds to examine how the biggest corporations in the research-intensive (and some other) industries are induced by the necessity to preserve their share in the export-markets, as well as by some other factors, to increase their direct investments. For the new corporate strategy, the change-over from exports to satisfy demands through foreign-based production units becomes a natural corollary of foreign transactions, indispensable to keep that part of their sales volume which was accounted for so far by direct commodity exports. Oligopolistic equilibrium in the domestic markets, their (relative) saturation etc. provided additional inducements for world-wide expansion.

In the second part of his book the author outlines the West-European implications of U. S. private capital exports, i. e. of the fact that Western Europe's share in U. S. direct foreign investments increased steeply after World War II. The chapters which deal with the differences in the dimension of U. S. and European corporations, the technological gap and the global strategy of American enterprises are particularly interesting. One of the main features of U. S. corporate expansion is their invasion of some of the key sectors of West European economies. In order to illustrate this process he quotes from a recent OECD-publication: ". . . the concentration of United States investments in the research-intensive industries in Europe in relation to total sectoral investments in Europe is relatively high, and the concentration of United States investments within nearly all sectors appears to be highest in the more advanced products of the sector. It appears quite reasonable to attach a particular qualitative importance to investments in the research-intensive industries because they are major sources of innovation for the rest of the economy."

We agree with the conclusion of the author — derived therefrom — that those estimates which assess the importance of American penetration merely in quantitative terms, i. e. compare U. S. direct investments with the total of private and non-private investments, or gross capital formation in the EEC, respectively Western Europe, are unrealistic. We cannot, however, share his views when he states that these comparisons are "irrelevant" because "the control of new industries, becoming increasingly the key sectors of the economy is sufficient to obtain and exert decisive influence even in case a substantial part of the traditional sectors

continues to be controlled by Western Europe, as their up-to-dateness and modernization makes them dependent largely upon the advanced industries invaded by U. S. capital". On the one hand, György Ádám himself argues later that although Western Europe lags technologically behind the U. S., her private and government R&D efforts should not be underrated; on the other hand, without the West European control of the "traditional sectors" American influence would be even more enhanced. Moreover state intervention on a local level also increases the weight of "native capital", *de facto* at the expense of the Americans. The chances of blackmailing via advanced technology are in our opinion, — under the prevailing international conditions — rather limited: the delivery of the giant computers destined for the *force de frappe* (which the author himself mentions) appears to corroborate this, not to speak of such factors as the possibility to exert pressure upon the traditional American economic sectors, financial policy to regulate credits and the cycle, bargaining in the area of international finance etc. Even so no valid objections can be raised against the author's inference that the lack of the pooling of resources in many research-intensive key-areas undermines the efficiency of the European "countermoves", preserves the technological gap and conjures up the danger that Western Europe will be confined even to a greater extent than today to the role of a second-rate industrial power.

In the third part of his book the author deals with the historically unprecedented proliferation and growth of the American — and to a minor extent West European — world corporations (multinational companies). He describes their organizational patterns and exposes their endeavours to minimize all government control. The centers of decision within the nation-states have to take into account many problems of economic equilibrium, those connected with their specific social structure etc. The coordination of their efforts to deal with the globally expanding world corporations is proceeding rather slowly in comparison with latter's spontaneous but quickly evolving private international economic integration. Thus the world corporations are becoming sort of a "dual power" in the capitalist sector of the world economy.

The fourth part of the book contains the author's critique of the capitalist world-economy model that came into being in the sixties, couples with a very enlightening and informative exposition of new developments in the world trade union movement aimed at standing up to the world corporations by closing their ranks on an international scale. Some sectors of the trade union movement are aware that the deep-going transformations taking place in the economy — as e. g. the advent of the world corporations — require new forms and methods of labour organization, as attested by the appearance in some advanced and mass production industries of world company councils. Thus ways and means are sought to lessen the enormous world-wide wage disparities which attract the "runaway" industries, to establish new patterns of collective bargaining with the participation of labour representatives of all countries where subsidiaries of the big American and West European concerns operate. Due emphasis is also given to the strengthening of those currents in the West European labour movement which tend to unify its different sectors.

The author is justified in concluding his book by stating that ". . . the process of concentration and of the emergence of world corporations in the capitalist sector has not yet come to an end. The design aimed at their control and regulation did not take any concrete shape so far, nor can it be said with any certainty that they will ever be implemented." Undoubtedly some of the main contradictions within and between capitalist countries in the coming years will be focussed

upon the problematics of the "multinational companies".

From all this it follows that the new book of György Ádám is one of the most topical and exciting economic works that came out in 1970. We may add that it is written in an extremely lucid style that makes it accessible also to the "lay" reader.

Gy. BECSKY

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VOL. XXXVIII (1) México, Enero — Marzo de 1971 Núm. 149

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Armand Mattelart: *Prefiguraĉión de la Ideología Burguesa. Lectura ideológica de una obra de Malthus.*

DOCUMENTOS:

— Discurso del Licenciado Hugo B. Margáin, Secretario de Hacienda y Créd to Público, en la Reunión Conjunta del Fondo Monetario Internacional y del Banco Mundial. (Copenhague, Dinamarca, 22 de Septiembre de 1970).
— Discurso pronunciado el 24 de Septiembre, en Copenhague, Dinamarca, por el Licenciado Hugo B. Margáin, Secretario de Hacienda y Crédito Público y Gobernador por México, en la reunión del Fondo Monetario Internacional y del Banco Mundial.
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