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AKADÉMIAI KIADÓ, BUDAPEST

VOLUME 24
NUMBER 1—2
1980

ACTA OECONOMICA

A MAGYAR TUDOMÁNYOS AKADÉMIA
IDEGEN NYELVŰ KÖZGAZDASÁGTUDOMÁNYI FOLYÓIRATA

Felelős szerkesztő:

FÖLDI TAMÁS

Szerkesztőség: 1112 Budapest, Budaörsi út 45.
1502 Budapest Pf. 262.

Megjelenik évi 2 kötetben. Megrendelhető az Akadémiai Kiadónál (1363 Bp. Pf. 24.) a külföld részére a Kultura Külkereskedelmi Vállalatnál (1389 Budapest, Postafiók 149).

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Acta Oeconomica, Vol. 24 (1–2), pp. 1–20 (1980)

I. T. BEREND

THE HUNGARIAN ECONOMY AND THE WORLD MARKET IN THE 20TH CENTURY

The Hungarian national economy can escape from the jaws of its actual disequilibria only through adaptation to world market requirements. The best way towards this end is a radical transformation of the production pattern implying consideration of the trends in both the CMEA market with its enhanced quality requirements and in the world market. Considering, however, that the Hungarian economy has failed to cope with this goal all over its 20th-century history, adaptation to the world market will require a long-term process.

The current economic policy decisions and those to be shortly taken will soon become subjects of economic history. Research workers of coming generations will analyse whether the national economy was able to respond properly to the big challenge of the world market in the years 1970–1980, and whether it has chosen the right answers from among the alternatives inherent in the situation.

But the task of economic history is not restricted to analysing events that have already taken place and to making its *ex-post* comments on the extinguished debate of a once ardent historical decision. It may also present its contribution derived from the analysis of *historical processes* even to actually necessary decisions, as history has its own message to the debate about necessary decisions. An army of economists study the possible and necessary responses of economic policy to the periodic challenges of the world market and the future will qualify their assumptions. But the historian can qualify the responses the Hungarian economy has been able to give as well as the validity of past economic conceptions and of economic policy decisions on the relations between the Hungarian economy and world economy, on their 20th-century confrontations. Economic history must therefore try to help to a better understanding of the present in its historical process, that is, more comprehensively.

The Hungarian economy in the protected market of the Austro-Hungarian Monarchy

In the stage of development of modern capitalist economy Hungary's contacts with the world market were extremely limited. Those requirements of the domestic market which were not satisfied by indigeneous production were supplied mostly from other areas of the Austro-Hungarian Monarchy and the export capacities of domestic production were engaged mostly by Austrian and Czech areas. The Monarchy's common market of 50 million people, its integrated transport and banking systems, its common currency system and the tariff barriers built on the borders of the empire at around the turn of the 19th and 20th centuries made the Hungarian economy mostly independent from the

world market. Real foreign trade – that directed to countries outside the Monarchy – played a subordinated role since at the beginning of the 20th century less than a quarter of Hungarian exports was going to foreign currency areas.

Interestingly, Hungarian exports to the closed and protected market of the Monarchy showed quite different commodity patterns from those to the „world market" outside it. *Outside the Monarchy* it had to adapt to the competitive terms of the world market. Export of the traditional Hungarian items became consequently less and less possible. In the 1880s, three export items: grain, wheat and cattle amounted to 42 percent of exports, whereas in 1913 only to 10 percent. With the decreasing share of agricultural products, the share of modern industrial finished products, machines, and electric articles increased. (Only 31 percent of the exported machines and equipment were going to Austria, and from this figure vehicles and railway rolling stock amounted only to 17 percent. 40 percent of exported Hungarian pharmaceutical products and more than 70 percent of incandescent bulbs were sold outside Austria.)

In other terms the relatively small volume of Hungary's export to the world market showed up-to-date industrial features and made the impression of a higher development level than what was actually characteristic of the Hungarian economy.

On the other hand, in the closed and protected market of the Monarchy, adaptation to competition did not become imperative and – this was perhaps the most characterisitic symptom I can note – the unfeasibility of grain and wheat sales and the slumping grain prices that pushed the European agrarian exporter countries into a critical situation since the last third of the 19th century did not occur here.

Under the influence of mutually privileged marketing opportunities inside the Monarchy the export items of the Hungarian agriculture, especially grain and wheat amounting to about one-third of the total Hungarian export, lost almost all of its West European markets in these same decades. Yet an about one and a half times greater export opportunity, to other areas within the Monarchy gained at the same time, made up for most of the losses and reserved their role in total exports. The formidable waves of the world market price fluctuation and the consequential deterioration in the terms of trade broke on the tariff walls of the empire. As against the universal and significant fall of grain prices in the world market, they were increasing inside the Monarchy. (While world market prices of grain dropped by about 30 percent, the export price level of Hungarian grain increased by round 20 percent.)

All these are meant to indicate that until World War I the Hungarian economy had only marginal contacts with the world market and the existence of the closed and protected market of the Monarchy was naturally bound to have an impact also upon the production pattern of the Hungarian economy.

The most palpable consequence was that despite the enormous world market changes taking place in the last third of the 19th century, Hungary's traditional export leader sector agriculture and the food industry based thereon, especially grain production and processing, were not jeopardized. On the contrary, they gained further opportunity for expansion. Unlike the modern pattern of her export to outside the Monarchy, the

commodity pattern of Hungarian "export" inside the Monarchy was allowed to remain fully traditional. *Growth was guaranteed under the old structural system of production anyway!* The urge to transform the production pattern was therefore not to be faced.

Thus, in spite of the faster development of industry, there was no appreciable structural change after the turn of the century in the Hungarian economy and its production pattern. Based on traditional branches the value of agricultural production doubled. More than half of total Hungarian export consisted even in the 1910s of unprocessed agricultural products or raw materials and, together with food exports, the traditional export sector supplied more than two-thirds of the export.

Not only the relative proportions of the main sectors of the national economy but also those of the manufacturing industry showed the marks of overstability. On the 1920 area of the country (i.e. its post-war area – translator's note) 42 percent of industrial output was turned out by the food industry relying on the export opportunities in the former Monarchy, while the combined share of so-called light industry sectors manufacturing consumer goods (the textile, garment, leather, paper and printing industries) was less than 15 percent in gross output, a fact that must have been correlated with the insurmountable Austrian and Czech competition prevailing in the Monarchy.

Thus the Hungarian economy arrived at the end of the second decade in this century cushioned by the Monarchy's closed and greatly independent framework assuring a high extent of stability and thereby growth even with her traditional production pattern, and has been mostly cut free from world market impacts.

Failure of the first encounter with the world market between the two wars

After the previous centuries of closedness and seclusion, the first direct and, let us add, futile confrontation between the Hungarian economy and world economy took place under the known circumstances of historical changes after World War I.

The confrontation between a production pattern established and stabilized within the old framework and the new world market environment entailed a terrific shock. The Monarchy's market that used to be cut off from world market competition and price terms ceased to exist literally from one day to the other. The traditional Austro–Czech markets, too, became parts of the world market with its price and competition terms. As a matter of fact, the agricultural price rises that took place relative to the prewar period (1909–1913) were even at the peak of the boom in the 20s below those of industrial commodities, and in the exchange of agricultural for industrial commodities there was a 10 to 20 percent deterioration in the terms of trade, even though in the interwar period these were the best years with respect to the relative prices of agricultural products. This inflicted mostly upon the Hungarian export leader sectors: grain production and the milling industry. At the top of the boom of the postwar decade, in 1929, one quarter of

exports were cereals and flour. 60 percent of the enormous milling capacity of the Budapest-centered milling industry remained in the country whose area was reduced to one-third by the peace treaty. But in the second half of the 1920s only 200,000–300,000 tons of grain were milled with capacities designed for 6,5 million tons. Mills became bankrupt one after the other, the most dramatically the Victorian concern with 12 mills. The vacant buildings of mills were bought by new textile factories or were simply knocked down.

The export driving sector of the Hungarian economy noisily collapsed. It must be added that the marketing crisis extended over almost all sectors with higher production capacities than the domestic market requirements. From the strongest industries of prewar Hungary, the engineering industry got into a particularly disadvantageous situation. One of the factors contributing was that from the prewar capacity of this industry, also powerfully centered in the capital, 82 percent remained on the new smaller area of the country. This included the majority of railway and shipbuilding; these capacities, capable of supplying the whole prewar network, became unexploitable in the market of railway and waterway systems reduced to a third of their size. Actually nothing but exports to neighbouring or other countries could have provided for the full utilization of these capacities. But in those markets there already prevailed the terms of world market competition. The earlier established capacities became thus oversized and unexploitable. (Even at the peak of the boom the production of steam engines, railway wagons and ships did not exceed 20–40 percent of the 1913 level.)

So in the new postwar situation the Hungarian economy found itself in a specific and unique structural crisis.

However, it would be a mistake to infer that the profound crisis Hungary's economy suffered upon its sudden confrontation with the world market was rooted solely in the disintegration of the Monarchy, i.e., in the specific historical fact of shrunken territory, and to disregard the simultaneous tranformations of the world economy.

Namely, not only the *specific* national historical conditions changed for the worse, throwing the Hungarian economy into the "deep water" of the world market, but also the high sea of the world market became stormier and icier.

The most striking change was the abrupt deceleration of the high-rate 19th-century development of international trade. Between 1881 and 1913, per capita world trade turnover increased by 34 percent in each decade whereas from 1913 to 1937 by only a paltry 3 percent! These years world trade was growing at a slower rate than world production, showing the impacts of increasing tariffs and autarkic aspirations.

The market terms were thus becoming more difficult and this was especially true for the European and particularly for the relatively more backward European countries. Europe could namely maintain its dominating position with an about *unchanged* share over the entire 19th century in the fast expanding world trade, but between the two wars Europe's share sharply dropped. The consecutive and permanent defeats the advanced European industrial powers suffered from overseas industrial powers (the USA, Canada

and Japan), pushing forward in the world market and doubling their share in world trade, had a great role in this.

Also the decline of the export and import shares of the more backward, raw material and food exporting European countries had a substantial impact and was most closely related to the growing role in world trade of colonies and other countries outside Europe, and especially to their enormously surging share (from 37 percent to 50 percent) in raw material and food exports.

All that was accompanied by a certain transformation of the *commodity pattern* of world trade. Within the unchanged combined share of raw materials and agricultural items, the share of agricultural items dropped from 27 percent of world exports to 23 percent. Within this field mainly grain export decreased while tropical products, meat and butter exports appreciably increased. In the same period the export of minerals soared high.

There was an extensive rearrangement between the two wars also within the unchanged share of industrial commodities in world trade. The most striking one was the shrinking of textile exports along with a general decline of the major prewar industrial export items, i.e., of industrial consumer goods (from 52 percent of exports to 38 percent).

The traditional industrial consumer export articles were replaced mostly by engineering products. (Their combined share in world industrial exports increased from nearly 20 percent to over 30 percent.) In this context the share of electrical industry products (from 2,6 percent to 4,9 percent) and that of exports of new type vehicles (from 7 percent to over 12 percent) increased particularly swiftly.

The economic medium changed not only for a Hungary in a historically specific situation. The rapid growth of foreign trade came to a halt all over the world. Agricultural exports (and the export of traditional industrial consumer goods) became extremely difficult and strongly curbed in several commodity groups (especially in the case of cereals, the most decisive items from Hungary's point of view). The conditions for agricultural exports and especially for the marketing of grain and wheat continued to deteriorate between the two wars. The process is clearly indicated by the slumping price indexes of Hungarian exports under the pressure of the grave world economic crisis. Assuming the export price level of agricultural export items in the years 1925 to 1927 to be 100, the rate of decrease was 3 percent in 1928, and 19 percent in 1930 until it reached in 1933 a trough with a 58 percent drop. Moreover, the export price level of foodstuffs did not rise appreciably later on either and finally it got settled at half of the price level of that in the second half of the 1920s.

Mostly under this influence the *terms of* Hungarian foreign *trade* – the general export price index expressed in percentage of the general import price index – were badly deteriorating. Taking the 1925–27 level for basis, the deterioration was as much as 8 percent in 1929, 10 percent in 1930, 15 percent in 1931 and at its worst, in the year 1933, 19 percent – over five years. Considering that according to plausible estimates based on domestic price levels the terms of trade between 1926 and 1929 were already by

about 10 to 20 percent less advantageous than in 1909–1913, it unfolds how grave the situation of foreign trade really was in the new circumstances, shown *inter alia* by the 20 to 30 percent decline in the terms of trade in comparison with the period before World War I. In other words, *at the trough of the early 1930s, nearly one-third more had to be exported for the same amount of import items than before the war.*

The traditional pattern and export activity of the Hungarian economy were thus in antagonistic conflict with the new conditions of the country and of world economy.

What kind of escape could be found from this squeeze?

Logically a solution for the long run must have seemed to be extremely unambiguous: radical structural transformation, adjustment to world economic conditions beyond our influence, joining in the promotion of the most progressive sectors which offer the most favourable opportunities of development and which are pioneering in world production and world export.

But it is not easy to find a simple logical answer to the problems of the quest for the way out! The *possible* solution is not necessarily identical with the *ideal* solution: for the latter – however desirable it may be – the realistic conditions might be lacking. In interwar Hungary, at any rate, suitable conditions for the ideal long-range solution were missing. Low capital accumulation, amounting to 5 to 6 percent of the national income, smaller external capital resources than before, poorly trained and schooled labour and, at the same time, lack of the new 20th-century infrastructure would not have allowed fulfilment of the task of technological updating and transformation of the production pattern simultaneously in every field of agriculture and industry, even if clear economic policy recognitions had been reached and a powerful central will aimed at their implementation had been asserted. But there was nothing of the kind. A few big companies tried to assess the world market opportunities flexibly and in an up-to-date manner and to adjust themselves accordingly. But this could by no way make up for the other missing conditions.

Under the mostly disadvantageous conditions, the product pattern could be effectively trasformed eventually in very few fields through the production of new competitive and marketable commodities to balance the declining export.

Agriculture, once the major export sector that showed the least readiness to flexibility and adaptation (retarded by its outdated estate system, its fossil social, class and behavioural patterns and its grave cultural backwardness) was unable to carry out a reduction of traditional grain production which was in acute crisis, nor to promote animal husbandry, dairy and meat production that could have guaranteed good marketability and rising export prices. (Although meat prices were markedly climbing in the 1920s and were only slightly decrasing in the 1930s, world butter export was soaring, etc.) On the contrary, the livestock decreased and was by 15 to 35 percent below its prewar size (calculated for the same area). Animal husbandry only gave one third of the value of

agricultural output. Although poultry breeding was considerably promoted and export doubled in quantity from the mid-1920s to the late 1930s, in the same years butter export jumped from 100–200 tons to 5–6 thousand tons and also vine exports increased about ten times, the *aggregate* value of cattle, pig, poultry, butter and vine exports increased from 27–28 percent of total agricultural food exports to only one-third. This can be hardly called structural transformation.

In the food industry, mainly in the 1930s and with the express purpose of export, some new lines were developed especially in the canned vegetable and fruit industry and the Globus products, particularly the most successful new product tomato paste that attained a 20-fold incrase in its export volume, became known items in the world market.

The new development or further development of several new industrial commodities or sectors were extremely slow and extremely partial. The newly discovered bauxite deposits had a special position. Extraction exceeded half a million tons a year by 1937–38, and was mostly exported. From the new export items of the engineering industry electric railway engines played an outstanding role. The new product of Ganz Works, the most up-to-date Jendrassik type elctric engine proved to be a winner of many international tenders, it broke into the Latin American and African markets as well, and until the war some 550 units were exported. In those years Ganz sold more than 60 percent of its production abroad. Naturally only a few competitive engineering factories scored such shares but, on the average, one-third of the output of the entire branch was exported. The export-oriented development of the electrotechnical industry was an important factor in this. The Tungsram Co. that had already been pioneering in the production of incandescent lamps acquired further technological advantages in 1931, thanks to Imre *Bródy* who advanced bulbs filled with Krypton gas. Tungsram doubled its output through exporting three-quarters of it to 53 countries and increasing the volume of exports by 40 percent. Similar results were attained in the pharmaceutical industry.

These products doubtlessly belonged to the quickest advancing sectors of world economy and were parts of the fastest growing commodity groups of world exports. Their "domestication" and export were the most significant and most progressive events in the adaptation to the new world market terms.

However, the promotion of further export industries and products and their impressive success in world markets could not result in themselves in any substantial structural change in the Hungarian export because of their relatively small volumes. The traditional agricultural products and foodstuffs continued to be dominating and a radical rearrangement in favour of animal products or rather of advanced industrial products could not materialize.

Does that mean that once a modern transformation of the production pattern, under the sign of priority of products advancing in the vanguard of world economy, has failed (in lack of the necessary funds, suitable standard of the background sector, technical knowledge, adequately skilled labour etc. as well as a dynamical purposeful economic policy heading in the right direction) then Hungary has exhausted and lost all her chances to cope with the world market?

A comparative analysis of trends in world trade in this era suggests that she hasn't at all! Appropriate adjustment to the world market competition and price trends is namely feasible not merely through the building of progressive new sectors and the enhanced export of their products, It is true that some countries, especially the USA, advancing at the strongest pace, managed to consolidate their positions in world trade through their pioneering role in building up the most advanced product pattern. But the reverse example of Britain's export also deserves reflexion: though basing her export activities on the most progressive engineering sectors of world trade, Britain was nevertheless pushed more and more back (her almost 31 percent share in world trade in 1913 dropped to 22 percent by 1937). The decisive role of the progressive sectors of world economy alone was not enough in the field of export since Britain's relative competitivity deteriorated, especially vs. the United States, and consequently her export share decreased along with America's advancing (from 13 percent to over 20 percent).

It is even more remarkable that countries like Canada and Japan, who enhanced their share in world export the most dramatically, boosted their exports not through the development of the new driving sectors of modern economy. On the contrary. Between the two wars Canada increased her share in world exports from a yearly 0.7 percent to 5 percent precisely through exporting traditional consumer goods. Japan trebled her 2.5 percent share rapidly mainly by increasing the export of textile goods even though they were badly squeezed by world trade. These countries could boost their exports through industrial items with abruptly contracting world trade because they extremely powerfully increased their relative competitivity in these *traditional* sectors and, as world trade in these items was as a rule depressed, Canada and Japan could still increase their shares at the expense of other countries (whose exports obviously ran down).

Here belongs the example of countries which, while closing up to the exclusive group of the most advanced countries with respect to national income and industrialization, still concentrated their export invariably on agricultural and food industrial items. The historical path of some white colonies outside Europe and of some small European countries (Denmark the most markedly) emphatically suggest that "high development level" and "powerful industrialization" are not mere synonims of the same phenomenon. Certain countries attained the top level of development not through onesided and perhaps not even primary reliance on industry. The export pattern of these countries preserve the predominance of agricultural products with astonishing stability. (To such an extent that in Danish exports these items represented 58 percent even in 1960!) But in the background of this apparently "traditional" export pattern there are such quality factors as outstanding productivity, balanced and steady product quality, up-to-date food industry and, as a rule, industrial type qualities and unique competitivity concentrated on relatively few products.

These symptoms emphatically indicate the opportunity open for every country, of course including Hungary. *The way towards world market competitivity could be opened not only by a radical trasformation of the pattern of production.* Also the expansion of traditional and normally shrinking export sectors could do that, provided that world

market competitivity could be substantially improved in these sectors and products by raising the technological and quality standards to the top and by cutting back costs so as to let the traditional items enter into the narrowing market.

Though possible in principle, the improvement of relative competitivity in traditional sectors was still not viable in interwar Hungary. The same reasons that retarded the expansion of new export sectors and products put obstacles in the way of improving the competitivity of traditional export sectors as well.

Could the national economy have any chance after all to escape the grave conflict outlined above?

A path opened up and finally absorbed the shocks of a heavy collision with the world market and also restored the foreign trade balance.

As it could not manage to get adjusted to the world market, the Hungarian economic *policy reverted to the policy of withdrawal from the world economy and the most perfect possible exclusion of world market impacts.*

Two important ways were opened towards this end in the decades between the two wars and especially in the thirties.

The first was the reduction of foreign trade turnover and the balancing of declining and losing exports through import restrictions. This aspiration can be recognized as the guiding motive of state economic policy as from Spring 1921, whereafter ever newer tools and ever more effective ways were used to help the most powerful repression of imports and through this the development of import substitutes. The first import bans of the Bethlen administration, then the new protective tariff introduced as from January 1925, the monetary and foreign trade measures of the great crisis and especially the surcharge system based on strict currency management provided ever safer protection against earlier imports, and against the competition of the more industrialized (mainly Austrian and Czech) neighbours' commodities.

Once the confrontation with the world market demolished the traditional Hungarian export sectors, the Hungarian government, making use of the advantages inherent in the grave situation, erected from the ruins a wall in the way of traditional imports. Owing to the export oriented 19th-century development the demand for a number of mostly industrial consumer goods, about 70 percent of domestic requirements, were met from imports and against the competition of the more industrialized (mainly Austrian and Czech) neighbours' commodities.

If the export pattern did not lend itself to profound transformation this could be carried out all the more in the field of imports through ever more radical intervention. The biggest previous item of imports, that of industrial finished goods, was more and more diminished: in 1913, these goods amounted to 62 percent of imports and in 1938 only to 29 percent!

Two important objectives were attained this way at the same time. In part, the promotion of domestic consumer industries was given room, that is, what could not be done in the export-oriented sectors, could be easily provided by import substitutive sectors. Between the two wars the output of the textile industry increased fourfold and

became capable of fully satisfying the domestic requirements. Also the paper, leather and other consumer industries doubled or trebled their production.

On the other hand, the imports of precisely those goods were radically restricted whose world market price level was the highest relative to the prewar period at the time of the boom of the 1920s and even after the great crisis and was thus one of the main factors in the subsequent deterioration in the terms of trade. Through the policy of seclusion and self-sufficiency the balance of foreign trade could be restored in a surprisingly short time in spite of the extraordinarily grave economic situation. The price level of Hungarian export items dropped unprecedentedly low, to about half. But at the same time, similarly slumping prices were characteristic of raw materials in the world market, while the price level of industrial products did not decrease that much. At the trough in 1933 the price level of the mostly agricultural Hungarian exports declined by 58 percent (relative to 1925–1927) while that of the industrial products imported by Hungary fell by only 36 percent! The gap between the two was enormous. (Even if the decline in industrial product prices came to a halt at a still lower bottom only later on.)

The cutting back of the imports of industrial finished goods had a substantial improving effect upon the terms of trade all the more as the world market price level of raw materials required for indigeneous import substitutive production showed a similar downward trend as the Hungarian export price level. Thus the increasing share of raw materials in imports was also beneficial for the terms of trade. And the share of imported raw materials and intermediate products increased at the rate at which finished products were repressed amounting to 38 percent of imports in 1913 and already to 64 percent in 1938!

As a result the deterioration in the terms of trade experienced until 1933 stopped already in the next year, what is more, the almost 20 percent decline was replaced by prompt improvement: by 1935 the pre-crisis balance was restored. The coming years showed only slight fluctuations and only a few percents of deterioration.

Naturally, there happened multidimensional changes in the background of the process scrutinized above. In the scope of this study we can only hint at the shifting of most of the burdens of the national economy onto the working classes in the form of gravely dropping real incomes and extensive unemployment. Also a kind of *product pattern transformation* took place. The share of the food industry in the gross output of manufacturing industry was drastically reduced, from 42 percent to 29 percent. Also the shares of the iron and metal industries as well as of the engineering industry decreased (from 16 percent to 13 percent and from 14 percent to 9 percent, respectively) in disagreement with world market trends while, again in disagreement with the progressive trends of the world market, industries turning out consumer goods (the textile, garment, leather, paper and printing industries) increased their 15 percent prewar share to 24 percent. This did not take place in the sign of adaptation to the world market, but just the other way round, through increased *seclusion* from the world market. Typically not the modern progressive sectors of world economy were promoted and up-to-date technology adopted but, on the contrary, characteristically the sectors losing ground in

world production and world export were built out and that on an obsolete and outdated technological level. However astonishingly fast the foreign trade balance was restored and also productions was somewhat increased, *all that did not advance the relative level of development of the national economy.*

This tendency was strengthened by the *other* major measure of seclusion from world economy and world market which the Horthy regime could afford to take in the specific political circumstances of the times. It namely joined such a closed regional (central European) economic system the member countries of which, emancipating themselves and each other from the world market by means of special agreements, in part set prices of their own and in part made special export concessions and mostly ruled out foreign currency from the turnover among each other. In other terms, Hungary "escaped backwards" into protected market frameworks rendered independent from the world market. I do not wish to indulge in the details of the systems of agreements that under the Italian–Austrian–Hungarian tripartite agreement and under the German–Hungarian trade agreement assured great export opportunities from 1934 on for Hungarian cereals, livestock, meat, lard and other agricultural products, that is, for the most traditional Hungarian export items, and under special terms, more advantageous than in the world market. In the context of the study I would only note that as part of a political alliance with fascist powers aspiring to overthrow the system of peace and, at the same time, also as a result of the strivings of central European countries seriously inflicted by the crisis after economic consolidation, such a regional central European economic system was emerging which, though increasingly under the sign of nazi-German domination and dictates, last but not least asserting narrow direct interests of the Hungarian class of big landowners, provisionally contributed to the preservation of Hungary's traditional framework of the division of labour. It assured preservation of the old export sectors that had failed in the world market medium, that is, the putting off of the transformation of the pattern of production and survival and even slow development in the old structural frameworks.

Let me recall that this way the two-market formula of the beginning of the century was reproduced: the pattern of exports directed to the open world market became modernized and sharply differed from that of the exports directed to the protected regional market which cherished the most traditional commodity pattern.

All in all, the Hungarian economy – more exactly the landlords and capitalists ruling it and asserting their partial class interests – responded to the resounding encounter with the world market which happened to modern Hungarian economy for the first time in its history after the war, by trying through two decades of hard efforts to push the world economy beyond the borders, that is, to keep the demand and price terms of the world market outside the boundaries of a central European regional system of economic relations attached to a system of political alliance. This response showed the strictest possible seclusion and autarkic endeavours which eventually guaranteed the preservation of the old production patterns and technological standards, and which resulted in regressive structural changes in ways partly inconsistent with the new postu-

lates of world economy and provided for growth and relative equilibrium, even if very moderately, in the old frameworks. But in the meantime both growth and the attaining of equilibrium turned out to be extremely expensive as the lag of the Hungarian economy increased. Its productions pattern and technological standards fell more and more behind the modern requirements of world economy.

Industrial development without world market pressure

Under the well known conditions of the social revolutionary transformation after the liberation of Hungary enormous economic changes evolved in the second half of this century. It is beyond doubt that this process was tuned to *industialization,* the essential prerequisite of development in modern world economy ever since the industrial revolution.

This was in fact equivalent to taking the main course of adaptation to the tendencies prevailing in the world market. In order to break loose from the peripheral role of subordination to the centre of the world system it was absolutely necessary to change the "traditional", that is, the historically established way of participating in the international division of labour in the capacity of industrial importer and agricultural and raw material exporter.

The longer-range tendencies of world market price changes clearly indicated that a country wanting to attain a favourable position and advantages in foreign trade must strive at importing raw materials and exporting industrial finished goods and, indeed, in the decades of stepped-up industrialization the patterns of both production and foreign trade were radically transformed.

One could witness a very interesting process: between the two wars the structural changes of foreign trade affected mainly the *import* and hardly the pattern of export. Now, just on the contrary, the *export* pattern was wholly transformed while the import pattern did not change much.

However, the relative invariability of the import was paradoxically a sign of major changes. The composition of the Hungarian import did not change much with respect to the main commodity categories but the import pattern of industrial countries was profoundly changed by the new processes taking place in the world economy and. consequently, the unchanged Hungarian import pattern increasingly deviated from what was then typical of the advanced countries. There, strangely enough, the import of industrial consumer goods was reenhanced. During the 1960s, due to increasing cooperation and division of labour, the share of consumer goods in imports was usually twice as high in industrialized countries as in more "self-sufficient" Hungary. It was a still more significant difference that, as a result of the sturdier cooperation activities among advanced industrial countries, such semi-finished products represented the most rapidly advancing export items after World War II which were playing but a tiny role in the Hungarian foreign trade. From a comparison with five smaller advanced European

capitalist countries it is conspicuous that the share of raw materials was outstandingly *high* and that of the semi-finished products that had undergone certain phases of processing was extremely low in the Hungarian imports. Namely, in those decades the smaller industrialized European capitalist countries did not at all think of fully building up all vertical stages of a sector but rather specialized themselves by leaving certain phases of production to others, whereby the turnover of semi-finished products was considerably expanded. On the other hand, against the latest requirements of advanced world economy, the Hungarian industry took the way of development through building up complete sectoral vertical chains.

Did the already noted radical structural changes of exports reflect the modern tendencies of the world economy better? It so seems: between the two wars agricultural and food industrial items amounted to 60 percent of exports while following the transformation of the system of economic and foreign trade relations their share shrunk already at the end of the 1960s to 20–25 percent. Moreover, while the share of raw materials and semi-finished products remained relatively unchanged, industrial finished products were at that time already the main export items. Before the war only 13 percent of exports had consisted of industrial finished goods – now shipments of machines and industrial consumer goods represented more than half of the export. I should like to emphasize that within *industrial* exports the share of engineering products was already over 50 percent. This transformation could take place only because the new export sectors of the Hungarian economy were built up in the decades of industrialization. This is shown by the fact that within engineeering production, increasing, on average, sixfold, the development rates of the telecommunication industry and precision engineering were especially high (their output increased 12, resp., 17 times). The unique development of bus production, outstanding also by international comparison, was launched in the second half of the period under study, in the framework of the road vehicle project. Consequently, from our gross industrial output nearly 8 percent is contributed by vehicle production, some 3 percent by the pharmaceutical industry, more than 2 percent by precision engineering and 5 percent by the meat industry.

The mass production and export of these articles coincided with the progressive products and sectors of world production and export. That is, for the first time in the history of modern economy, the transformation of the commodity pattern of domestic production and export was with respect to its direction in line with the modern tendencies of the world economy.

In contrast with the traditional portray of a country exporting mostly unprocessed agrarian products, sober statistics now outline the modern portray of a country exporting industrial products. What is more, exporting a significant volume of machines, that is, items that so far guaranteed advantages in the world market.

Following the industrialization carried out after the liberation, it became partly possible to eliminate the fiasco the Hungarian economy had experienced at its first encounter with the world market after World War I. Does this mean that the Hungarian economy was successfully adjusting itself to the requirements of world economy and

entered the world market with the products of the advanced countries that secured advantages?

In spite of the positive picture given above the answer to this question cannot be in the affirmative. The Hungarian economy could not come up to the world market requirements even in the quarter of a century after World War II. The above reviewed changes in the export pattern seem to contradict this. However, in reality the modern Hungarian export pattern characeristic of advanced industrial countries did *not* evolve in the world market, and a specific "duality" of the Hungarian export is characteristic for the entire period under study: in the two kinds of markets there again developed two kinds of perfectly different export patterns, as it was already seen in the case of the patterns of foreign trade inside and outside the Monarchy.

The cutback of agricultural products and the advance of industrial goods, and mainly of machines, became typical only of exports to the closed and protected CMEA market that concentrated two-thirds of total turnover, where there was no need to meet world market competition and where the technical and quality specifications of export products were, at least initially, not that severe.

On the other hand, in the high waters of the world economy the case was always profoundly different, there the changes in the Hungarian production pattern attained through industrialization could not be asserted. Unlike the situations in the Monarchy at the beginning of this century or in the 1930s, now the commodity pattern was not modern in the open market and traditional in the closed and protected one but just the other way round! Hungarian exports to the world market showed the most traditional traits: half of the export consisted of agricultural products even at the end of the sixties, which in itself must not be regarded as a symptom of "backwardness". In this context we may recall similar features of the Danish export pattern. What is more remarkable is that agricultural exports included a considerable quota of unprocessed shipments, two-thirds of it were livestock or animal products. At the same time, the share of machines amounted to not more than 10 percent. The biggest change in comparison with the interwar export proportions occurred perhaps in the growing share of industrial consumer goods, to 18 percent of exports. It must be immediately added, however, that in the decades after World War II the traditional industrial consumer goods were increasingly dropped from among the export items of the advanced countries and appeared among those of the less developed countries. Eventually the pattern of our exports to the world market became very much like the export pattern of the backward countries.

But in the sixties the contact between the Hungarian economy and the open world market was regarded by both economic politicians and economists as a place where our still unsurmounted relative backwardness appeared but would decrease and cease to exist as a natural function of progress. *But the world market did not impose on us either orientation or pressure!*

It deserves special attention that *in that period, too, the Hungarian economy was able to parry the challenge of the world market* and could avoid confrontation with the world market!

The striving after *self-sufficiency* was *deliberately* asserted in the Hungarian economic policy from the late fourties to the mid-fifties. The conception of "the country of iron and steel" expanded this principle beyond the limits of reality to the fields of raw material extraction and basic materials production, in addition to investment goods. The uniquely high rate of extensive industrial development naturally made real autarky impossible since the supply of the country with fuels and raw materials needed growing imports. Nor was it possible to implement the stepped-up investment program without buying machines and equipment. In return for imports, exports had to be increased. Therefore foreign trade increased at a rate still higher than the stepped-up rate of production. When self-sufficiency was a declared objective and programme, each 1 percent of increase in production required a 1.25 percent increase in foreign trade. Yet, the elimination of as much import *as possible* did not remain a mere program but was turned into reality. While immense volumes of materials were flowing into the country, the seclusion of the *manufacturing industry* was carried out, giving priority to quantitative development over a broad range of production and subordinating to it cost factors and technological and quality specifications.

The December 1956 resolution of the Hungarian Socialist Workers' Party in its critique and analysis of the economic policy of the first half of the 1950s condemned also autarky. Thereafter economic practice deliberately worked for *narrowing* the range of products turned out. But there was no turn. Though till the mid- or late sixties some remarkable results were attained, all in all there was only partial progress. In the given circumstances the new, export-oriented concept of development could not take the upper hand nor were the development concepts of the 1960s freed from the ambition to build up all vertical stages of sectors. This assessment is correct even if it is well known and duly emphasized that relying on the extremely broad market of the CMEA and with the help of progressive cooperation a number of highly important export sectors were developed and promoted in the sixties, and some export mass products were developed at unusually high rate, helping up-to-date progress.

In the given world political and world economic situation the initially inescapable isolation from the open world market, the indispensable material (and partly machine) imports and the subsequent export drive would have been hopeless ventures without a closed regional system separated from the open world market. This was created by the CMEA set up in 1949. This economic community of the socialist countries deemed its important task to foster the industrialization of the member countries and to ward off the discriminatory policy of western countries. In this a historical role was cast to the CMEA with its 300 million market where there was demand for everything because of the extremely quick extensive industrialization carried out in the member countries. In this "industry breeding" market that offered enormous facilities to countries that were latecomers in development, Hungary, too, was given the opportunity to appear as an exporter of machines, like the most advanced countries, to satisfy the thirst for investments. Thus it could obtain from the same market most of the fuels and raw materials she actually was in need of and most of the machines required for her projects. Trade and

economic cooperation with the socialist countries became a dicisive factor in the fast development of the economy and in modern industrial transformation.

Supply and demand evolved according to their own special laws in the CMEA market which was inseparably related to the forming of independent price relations of the socialist market. This step was taken in the first quarter of 1951 when the prices of trade with each other were fixed at the world market price level of the third quarter of 1950.

The stop prices "made independent" from the world market and conserving the earlier price proportions assured protection for the Hungarian economy. This can be easily traced by comparing the big differences of Hungarian foreign trade prices attained on capitalist and socialist markets.

The price level of items imported from the world market was first fast rising between 1949 and 1957, during the Korean war boom, then it dropped back to its initial level. The price level of Hungarian goods, on the other hand, showed on the whole a steady and significant decline resulting in a grave deterioration of the terms of Hungarian foreign trade. In the fifties (from 1949 to 1957) the terms of trade transacted outside the CMEA were declining steadily by around 25 percent and in some years by even more.

The turnover in the market of the CMEA countries showed to be more advantageous. Here, not counting the two worst years, a deficit ranging between 10–13 percent, i.e. about half of the decline in the terms of trade in the world market, was recorded.

The different price trends of the two markets went through drastic changes from 1958 on. From that time the CMEA prices were adjusted to the world market price level at regular five-year intervals (eliminating the frequent fluctuations). That is, from a certain "distance", tardily and less sensitively, the price trends of the socialist countries' market followed the trends of the world market prices.

But after the stormy world market price movements of the decade between 1949 and 1957, from 1958 on prices got relatively stabilized for one and a half decade. In the trade with capitalist and socialist countries alike, import prices showed fluctuating decreases in the range of 2 to 8 percent, while the price level ot the Hungarian export items decreased in both markets alike, also in a fluctuating manner, in the range of 1 to 5 percent. It follows that the terms of trade improved over the whole period by 1 to 3 percent.

The great stability of the CMEA's foreign trade prices ulteriorly adjusted to the world market originated in the sixties not so much in isolation but rather in the stability of prices of *the whole world market.* (It may be said that this invisibly "infiltrated" into the price level of the socialist countries just as the waves of the price storms of the seventies did.)

In the one and a half decade of great price stability the decline in the terms of trade which took place in the fifties (and which was favourably retarded by the CMEA) could thus be halted and even somewhat moderated. But the unfavourable shift that happened in the fifties could not be undone any more. So, for the first two decades of industrialization finally a relatively steady decline of 10 to 20 percent, (relative to 1949–1951) in the

terms of trade, or a stiffening of this level, was characteristic of the whole of Hungary's foreign trade.

The slightly climbing price of raw material imports played some role in the fact that during most of this period Hungary had to export by 10 to 20 percent more goods against the same volume of imported goods. In most of the 1949–1970 period the price level of raw material imports from the CMEA also increased by 10 to 13 percent. The prices of the two major export items, machines and industrial consumer goods, on the other hand, suffered more significant price cuts in every market. In the case of engineering exports this was steadily in the range of 3 to 7 percent, while for industrial consumer goods prices fell by 20 to 50 percent – not so much in the CMEA market but rather in the capitalist market. (In comparison with import prices also the prices of exported foodstuffs went down.)

In other words, the real source of the decline in the terms of trade was the lasting downward trend of the prices of export items set against the relatively stable import price trend fluctuating between 5 to 10 percent. This highlights the basic weakness existing *in spite of* the transformation of the production and export pattern towards up-to-date direction, namely, that over the entire era of industrialization the relative competitivity of the Hungarian products in the world market could not be improved. This is typical of the entire trade with both the socialist and the non-socialist countries. According to some estimates half of the Hungarian products are far below international standards with respect to quality and up-to-dateness, and only about one-fifth of the products comply with world market requirements. It is also proved by data that despite the relatively stable or rising world market price of this commodity group, the exchange of our not-enough-competitive industrial products (machines and especially industrial consumer goods) for raw materials was not to our advantage in either market because of the extremely high share of raw material imports.

Therefore in spite of industrialization the decline of Hungary's position in the world market and her relative competitivity continued, only more slowly and not so strikingly.

Upon these antecedents came the enormous world market storm in the 1970s which produced such an increase of the import costs, mostly owing to rocketing oil and raw material prices, which the Hungarian export items could not cope with (because of their poor competitivity). At the same time, the state of isolation of the early 1950s in the framework of the CMEA did not repeat itself. Moreover, after the oil price explosion the price level was more promptly and closely adjusted to the world market price trends and the prices of foreign trade among the socialist countries were determined annually on basis of the average of the previous five years.

Finally, in a span on five years a new 20-percent decline was inflicted upon the terms of Hungarian foreign trade. For the same volume of imported goods she has to export now by one-fifth more than a couple of years ago, that is, by 30 or 40 percent more than in 1949–1951. And, let us add, by about 50–70 percent more than before World War I.

Gauged by the thermometer of the terms of trade, the last period of about three-quarters of a century shows that the Hungarian economy has not been able to find the proper response to the 20th-century challenge of the world market and has not been able to acclimatize to its cicumstances.

Some lessons of the economic history

History naturally cannot prescribe any formula for the present. Economists and economic politicians claim that there is no other way for our national economy but adaptation to the requirements of the world market which can be done mainly through a radical transformation of the production pattern. This implies the need to observe the determining tendencies and requirements of both the CMEA market with its growing quality requirements, and of the world market. For holding our own in the open waters of the world market solid grounds can be found only in cooperation available in the framework of the CMEA. Only such a policy can be a winning one in the long run that zealously starts off and with strong strides guides the Hungarian economy to a successful and fertile meeting with the world market. This truth is supported by 20th-century economic history.

However certain this srategy may appear under the test of this century's domestic economic history, every expectation about some short-term way of satisfying the requirement of adaptation to the world market, a task that has never been and that cannot be accomplished, seems dubious.

Recalling the crucial moments of relations between the Hungarian economy and the world market during this century it becomes clear that a srategy that is adequate in the long run is not necessarily successful over short and medium ranges. In other terms, such short and medium-term plans are needed that, while serving the long-term objective, also seek transitory solutions that could provide quicker help. History clearly cannot provide much guidance for that. Some lessons of the 20th century may be nevertheless valuable. In this context it should be remembered that without a radical *trimming of imports* it was not possible to wriggle out of nocious imbalance problems. In the 1930s the way led through a radical restriction of the import of industrial consumer goods as precisely this used to be the major import item whose prices remained relatively highest. In the present situation the painful imbalances could be quickly relieved by a strong restriction of the imports not so much of industrial consumer goods but, obviously, of fuels and raw materials which show the highest share in Hungarian imports and do the most harm *today* to the terms of trade.

While elaborating the strategic objectives for the transformation of the production pattern we must not fail to notice that relative competitivity may be improved even in the *old* structural frameworks and that the export of products that are declining in the world market may be enhanced too – as shown by the examples of interwar Japan or Canada – if costs are cut sufficiently down and if quality and technological standards are

competitive. In some cases this programme is not as progressive as the most advanced sectors and products in the first line of development, but it may offer relatively simpler solutions in such fields of production where some benefit can be gained from older traditions and know-how.

While elaborating the strategic program of the ideal Hungarian export pattern and its implementation we must not forget that an advanced and competitive export should not be identified with the model of the export pattern in the most industrialized big powers with huge natural resources. This model is often consciously or subconsciously assumed to be the „natural" one. The example of contemporary Denmark and Holland show that the "traditional" (though not traditionally produced) agricultural items can be extremely promising provided that the conditions are given for its competitivity and for up-to-date and suitable processing. To underestimate the modern export opportunities in this sector (as some economist quarters do) contradicts the experiences gained from historical processes.

Last but not least, we must not forget that some sort of a closed and regional protection was always provided to help finding refuge from the 20th-century world market conflicts. True, this kind of protection only delayed the impact instead of solving the assertion of the world market conditions and thus the satisfaction of the most up-to-date requirements of development. In the long run the protective barrier can by no means be promoting. But in the short and medium terms, bearing also the actual disequilibria in mid, the endeavour to balance *provisionally* and to exclude the impacts of the world market seems to be inevitable. This is ostensibly against the long-term objectives as well as the momentary interests of raw material exporting countries in the area. But the implications of being collectively menaced and of the socio-political risks that might result from economic problems outweigh the instant advantages. It is therefore supposed to be a common interest to make better use of the potentialities offered by the relative independence of the CMEA market and price trends, that was once the motor of extensive industrialization and the booster of modern cooperation, for temporarily mitigating the unfavourable tendencies of the world market. Of course, the CMEA qualifies for the best way of development because it provides for the fullest utilization of lasting cooperation processes and not primarily because it offers provisional facilities. In the long run also the general growth of our world market competitivity is based the best by raising the standards of economic relations and by getting more particular about the market, technological and economical aspects. In the short run, however, utilization of the opportunities for temporary protection can be really momentous.

This is by no means an economic program but rather a natural conclusion to be drawn from the economic processes of the 20th century. It is a lesson of history worth of being learnt.

ВЕНГЕРСКАЯ ЭКОНОМИКА И МИРОВОЙ РЫНОК В XX ВЕКЕ

И. Т. БЕРЕНД

С самого начала эпохи современного капитализма связь Венгрии с мировым рынком своеобразна и противоречива. Замкнутый и в большой степени самообеспечивающийся пятидесятимиллионный рынок Австро-Венгерской монархии позволил обособление от мирового рынка и вызвал процессы, противоположные тенденциям мирового рынка. Распад империи, сокращение территории страны породили специфический структурный кризис венгерской экономики, который усугублялся изменениями, проходившими в мировом хозяйстве.

На структурные сдвиги мирового хозяйства венгерская экономика не смогла отреагировать радикальными структурными изменениями, и лишь несколько видов продукции и отраслей не отстали от мировых стандартов; ответной реакцией экономики в целом было обособление. Это мотивировалось также и значительным ухудшением внешнеторговых пропорций обмена. Наряду с ограничением импорта важную роль приобрело создание замкнутой региональной восточноевропейской экономической системы, связанной с системой политического союза во главе с Германией. Это вновь открыло широкие возможности для традиционного венгерского сельскохозяйственного экспорта (пшеницы, скота и т. д.). Восстановленное таким образом внешнеторговое равновесие не способствовало повышению относительного уровня развития национальной экономики, и изменение структуры национального производства складывалось противоположно мирохозяйственным тенденциям.

После 1945 г., в период быстрой индустриализации страны структура как производства, так и внешней торговли радикально изменилась. К концу 1960-х годов доля машин и промышленных изделий широкого потребления в венгерском экспорте превысила 50%, однако продукция машиностроения находила сбыт на рынке СЭВ, который по сути дела представляет собой замкнутую, отделенную от мирового рынка региональную систему, цены в которой лишь с опозданием следуют за тенденциями мирового рынка. Структура венгерского экспорта на «открытый» рынок сходна со структурой экспорта слаборазвитых стран, так как доля необработанной сельскохозяйственной продукции достигает в ней 50%, машин и оборудования — всего лишь 10%.

Для периода после 1945 года характерно ухудшение пропорций обмена венгерской внешней торговли. Как правило, за определенное количество импортной продукции нужно было поставлять на 10—20% больше товаров. Вследствие «взрыва цен» 70-х годов Венгрия за то же самое количество импортных товаров должна поставлять уже на 30—40% больше экспортных товаров, чем в 1949—51 гг. Это также свидетельствует о том, что венгерское национальное хозяйство не смогло найти должного ответа вызову мирового рынка.

Путь приспособления к требованиям мирового рынка — это радикальное преобразование производственной структуры. Однако и в прежних структурных рамках можно повысить относительную конкурентоспособность и при высоком уровне развития может сохраниться особое значение «традиционных» сельскохозяйственных продуктов (как, например, в Дании).

На дальнюю перспективу замкнутая региональная защита не представляет выхода, хотя на краткий и средний срок она может быть необходимой для временного уравновешения эффектов мирового рынка. Рынок СЭВ открывает главный путь развития в первую очередь не из-за предоставляемых им временных возможностей, а при условии полного использования долгосрочных процессов кооперирования.

Acta Oeconomica, Vol. 24 (1–2), pp. 21–45 (1980)

R. HOCH

ON LONG-TERM PLANNING IN HUNGARY

Deliberate formation of society and economy require an adequately elaborated strategy. The time-horizon of medium-term plans is all too short to work out and implement strategic objectives. This is what justifies long-term planning (for 15–20 years). One of the most essential problems of long-term planning is its scope. It may consist of substantially independent programs relating to a few fields of the economy and society. Or – and this is proposed by the author – it may cover the whole of the economy and society, and be uniform and consistent. A further important problem: should the central conception be a sum of partial conceptions or is it necessary for the centre to have a clear strategy that orients and coordinates the elaboration of the partial conceptions?

The relationship between long-term and shorter-term (medium and annual) planning is actually unsolved. In other words: a proper relatinship has to be established between strategy and tactics. As a matter of fact, establishing a natural relationship between objectives and instruments is a related subject. Planning work has to be improved also from the aspect of giving priority to the planning of processes against the planning of the end point. Also the clear place and role of the elements of planning – analyses, prognoses, plan targets etc. – have to be clarified.

Finally, the article examines the relationship between long-term planning and the economic mechanism.

Further improvement of the Hungarian long-term planning, looking back now upon a past of ten years, requires us to answer a series of questions which have not even been formulated clearly up to now. One has to confess that economists have not been deeply engaged in these problems, generally a not all too constructive scepticism can be met. Long-term planning has not become a fashionable topic in economics. The scanty literature on the subject discusses rather development strategies and not the principles of long-term planning.

I endeavour an answer to a few questions related to long-term planning. I wish to stress the restriction: "a few". My knowledge and my possibilities are limited to attempt to cover the whole ramified domain of long-term planning. My personal experience is related to the planning of living standards; I have seen and continue to see also the other spheres of long-term planning through this particular kind of spectacles.* It may produce a sharper picture, but it may also cause distortions. I hope it is not distortion that will be characteristic.

*My collaboration of over 10 years with the National Planning Office brought me into close contact with problems of long-term planning. Colleagues in the Office gave much help also in finalizing this study.

The necessity of long-term planning

Earlier planning practice already demonstrated that the *time horizon of medium-term plans* (five or at most seven years) *is too short* for the important economic processes and for the related decision sphere to fit in. E.g. the gestation period of investments frequently reaches beyond a medium-term plan, and the complete results of the additional capacity created appear almost always only later. Within a five-year period the degree of freedom of action is rather low: the situation at the beginning of the period already determines the situation at its end. Major conceptions can be implemented during a five-year span neither in the sphere of production nor in that of living standards. On the contrary: the closed five-year time horizons push us rather towards handling living standards essentially as a remainder after meeting the requirements of production, accumulation and foreign trade. More exactly: medium-term planning without a vision might easily become a set of compromises devoid of conception.

The necessity of long-term planning obtained special emphasis in Hungary since the 1968 reform. If the market is to be given a greater role as regulator than before, if we wish to influence the behaviour of enterprises rather with economic instruments instead of administrative measures, it should be even more obvious that we must possess a strategy of economic and societal policy which sets the main directions of influence. The economic regulators and the administrative measures are called upon to serve its implementation. Economic and societal tactics valid for a five-year period cannot provide satisfactory orientation for the use of the instruments.

All that holds, of course, also for a system relying on plan-directives. But, on the one hand, instructions covering almost everything produce an illusion that we have the economic and social processes firmly in our hands. On the other hand, in such control system even the medium-term plan is secondary to the annual operative plans. (It may be ventured: by measuring the changes in the weight of the operative plans we can see whether our reform is progressing or precisely retreating.)

Can we plan for the long term?

In spite of the above, arguments may be advanced even against long-term planning, denying the *possibility* of it. These arguments gathered strength from the drastic changes having taken place in the world economy.

To wit: in every plan, but particularly in the long-term plans the *assumptions* about the conditions and circumstances of social and economic development play an extremely important role. Realism of the plans depends first of all on whether the assumptions prove to be approximately correct or not. The changes in the mid-seventies fundamentally affected the conceptions worked out in the early seventies. After all that it may be justly asked whether it makes sense to draw up long-term plans if new ones have to be made before the ink has dried on them. The problem arieses with particular sharpness in a country which is highly sensitive to foreign trade, thus also in Hungary.

I think that the lessons are quite different. No doubt, the seventies taught us well that the world frequently changes abruptly, dramatically, and the long-term plan must not set out from the assumption that it will remain – essentially – unchanged. We cannot extrapolate the circumstances of past decades, not even in the sense that we expect a continuation of the gradual development in the past, of its trends hitherto experienced. It seems that the world economy and world politics are characterized at least as much by sudden breaks and turns as by gradual changes.* But similarly, and precisely on this account, we neither can project into the future the actual situation. It is one of the greatest obstacles to every planning, and particularly of long-term planning, if we get stuck in day-to-day troubles. This is the same, and practically a greater, danger than if we parted with the realities deriving from actual tensions and contradictions.

The main lesson is, however, – in my opinion – that it is precisely the variability of our circumstances that makes it unavoidable for us to possess an adequate economic and social strategy. A ship is in greatest need of a compass precisely in a storm. The danger that manoevring will deflect the ship from its course and it will finally run aground is greatest just in such cases. We have to possess a system of long-term economic and social goals in order to be able to choose correctly the development paths, directions and instruments. In respect of the tactical solutions, we would need variants in order to be able to shift from one path to the other if circumstances change. But the different paths have to lead in essentially the same direction; although a change in tactics also assumes minor or major changes in strategy. By its nature, the strategy itself is in need of continual development and modification even if the conditions relating to its realization are regularly verified.

But let us raise the problem again. Is it not that unexpected, hardly calculable changes in circumstances justify the exclusive existence of shorter-term plans? Should perhaps the medium-term still be the true pillar of planning?

First of all: I have already pointed out that the mastering of five and seven-year processes requires an essentially longer foresight. In the preceding this was one of the most important arguments in favour of long-term planning. Secondly: the reality of the assumptions in the medium-term plan may be frequently similarly challenged as that of the long-term plan. The history of the Hungarian five-year plans would provide, with all the modifications and deviations between plans and facts, sufficient argument against medium-term planning. And there were indeed periods when it was said we should not draw up under the circumstances a five-year plan, only annual plans. In more general terms: if we deny the necessity or possibility of an economic and social strategy, it necessarily follows that the annual operative plans should be considered the "true plans".

*Breaks and turns occur because a considerable part of changes in the world are released by the *accumulation* of contradictions, tensions and changing power relations. The researchers of world economy and world politics are expected precisely to call attention in time to these seats of turbulence and their expectable bursts.

But only in a system of directive planning does the illusion have some foundation that economy and society can be guided on the basis of annual plans. The constraints are so narrow that no meritory changes can be attained either in the economy or in society. The situation as it developed in the year *preceding* the period planned for mostly determines developments in the year planned for, thus the self-movement of the economy has a decisive role. If, say, a 4 per cent incrase of national income is inherent in the economy for the given year, it would be irrealistic to plan either a 6 per cent or a 2 per cent growth. And if we wish to force or to hold back development with operative measures, only troubles may arise and perhaps not even mainly in the given year but later. *Mutatis mutandis,* the same holds for the use of national income as well. The growth rate and the utilization ratios of national income can and have to be changed: but only gradually, by relying on economic strategic plans.

If we really believe that the annual plan is the basis of planning, it may be justly asked whether we need planning at all, whether the economy would not be functioning better without such plans. But with this the circle is closed and we have come back to our starting point: *without economic and social strategy economy-wide planning is no more than low-efficiency manoevring.*

Should our strategy be changed fundamentally?

We have come to the conclusion that, in spite of the unexpectedly and suddenly changing circumstances, in fact because of them, a long-term conception is needed, even if it requires regular correction.

But do the more or less sudden changes of circumstances require the old conception to be *discarded?* After the experience of the instructive seventies I dare answer this question definitely in the negative. It is relatively easy to prove this statement with the planning of living standards. The recent events could not change the social objectives formulated in the early seventies by relying on the analysis of reality and deducing them from economic, social and political relations in Hungary – either in their entirety or in their structure. Making up for infrastructural backwardness is invariably a basic objective, within that improvement of housing conditions is a key problem of living standards, together with a substantial rise in health standards and cultural levels of the population. In income distribution the same problems have to be solved: harmonization of stimulation with social policy, liquidation of poverty and limitation of the highest incomes, mitigation of differences in consumption patterns due to settlement conditions etc. Measures, and in details even priorities do change, but the substance of the conception has not changed, because it could not. If we were forced to change our basic societal policy strategy this would already show that there was some fundamental trouble with the operation of our economy.

But the fact that our long-term objectives have not basically changed with changing conditions can be proven not only with examples taken from the sphere of living

standards, but also with those of the economy: at most their emphasis has shifted. I will illustrate this statement with a single example. It is known that the use of materials and energy is high in Hungary relative to the level of output. This fact is partly a consequence but simultaneously a cause of obsolete production conditions and of unsatisfactory efficiency. Further, the intermediate inputs are too high relative to national income, and within the latter the rate of accumulation is too high relative to consumption. Under these circumstances acceleration of economic development entails a sudden increase in the import of raw materials and primary energy, a disequilibrium of the balance of payments. These facts demanded already ten years ago that a gradual but substantial reduction of relative material and energy requirements should be an important part of our economic development strategy. It needs no proving how much the changes in the world economy have pushed this task to the fore.

The nature of long-term planning

If we accept the necessity of long-term planning, it immediately arises: what should be the nature of long-term planning and of the document emerging as a result of this activity, of the long-term plan?

From the debates in Hungary in earlier years on the subject, two conceptions can be discerned.

According to the first concept, the long-term plan should be a *set of essentially independent programs relating to some fields of the economy and society.** These programs – so they say – relate to those fields which by their nature require long-term decisions. First of all investments are meant, though not necessarily all investments. A long-term program is needed in public utilities, first of all energy, transport, housing. But, according to this conception, a long-term investment plan is not absolutely – or not at all – needed e.g. in those branches of manufacturing (or services, or trade etc.), or their subsectors in which the productive assets are returned and are exchanged essentially within the duration of a medium-term plan. This conception similarly accepts the necessity of a long-term program – even beyond investments – e.g. in the sphere of education. This conception entirely excludes from the scope of themes to be planned for the long-term all such processes which are directly regulated by short- and medium-term decisions. Such is e.g. the sphere of income distribution.

According to the other conception relating to the nature of the long-term plan – and the strategy of long-term planning set out from this conception in 1968 – *the strategy has to cover the whole of the economy and society, it has to be uniform and consistent.*

*Planners call this conception the planning of "blots". The term is not very scientific, nor very literary, yet very apt indeed. Henceforth I shall call this approach "inconsistent".

The comprehensive and uniform nature means that the plan has to cover every essential economic and social process (thus not all processes, from the outset), and even as regards the main processes, it has to mark out only the main objectives and directions. Strategy can interpret even the directions of development as bands, reserving thus considerable scope of movement for tactics. The long-term plan must not extend to details.* Today we already know that not even the medium-term or the annual plan can strive after comprising the economic and societal processes in every detail: to outline e.g. how much we shall (intend to) produce from the individual kinds and ranges of products. Even in consideration of this, the long-term plan has to be *different* from the medium-term plan – also in this respect. The former has to strive even more after grasping the comprehensive interrelations. (It is a different problem that the analyses founding the long-term plan have to investigate the details perhaps more thoroughly than those preparing the medium-term and the annual plans.) It has to strive after planning major aggregates not only because the exactness of our foresight and of the impacts of our decisions is smaller in the long-term than in the medium one (this is not even certain), but because the conceptions *have to relate* in the two kinds of plans *not to the same or not quite to the same thing,* even if the subject has the same title in the two plans. Let us consider e.g. the plan of the output of products. Even if the economy is not controlled with plan-instructions, the product pattern defined by minor or major aggregates is an extremely important part of the medium-term and the annual plans, and the economic leadership may wish to influence it in definite directions. From this aspect the long-term plan is *fundamentally the plan for allocating and reallocating resources,* not directly one for changing the product pattern. The plan of changes in the product pattern expressed in high aggregation mostly symbolizes the needs for allocation and reallocation of resources.

Over such term the economic leadership may have direct objectives only for the volumes of relatively few groups of products. The long-term structural plan of output has to be checked, whether productive capacity will be sufficient for satisfying needs. E.g. whether the realism of investments serving the implementation of the growth conceived of is supported – say – by the planned development of the building materials and the construction industries. But, obviously, not building components or the amount of concrete have to be planned for 15 years ahead.

Or, the chapter on *prices* of a five-year plan has to comprise the official price changes deemed necessary by the economic leadership. The long-term price plan can outline at most the expected and – the frequently opposed – desirable changes in the tendencies of the prive level and in relative prices; rather it can state the principles of strategic price policy.

From what has been said it may be surmised that I adhere to the second conception reviewed.

*A planner, very wittily, compared long-term plans to strategic maps and shorter-term plans to the tactical ones. The strategic maps of larger scale comprise all areas which are represented in the smaller-scale maps, but the former provide a wider survey, while they do not comprise such details as do the latter.

Why has the long-term plan to be comprehensive and consistent? This can be answered relatively easily, even if its interpretation conceals many grave problems.

First of all: our possibilities are not unlimited over a period of one or one and a half decade (nor over any period); we can satisfy only a part of the pressing economic and social needs. It follows that the objectives have to be confronted with each other and with the expanding possibilities. Starting from the relative importance of objectives it has to be decided what objectives, to what extent and in what order can be implemented, which have to be renounced in the given period, and the realization of which can be started only at the end of the period. It is correctly said that planning is the science and the art of ranking.

Secondly, taken in themselves,the unranked objectives, which are inconsistent with each other and with the possibilities, as well as the inconsistency of the system of instruments make the necessarily existing contradictions between the individual programs antagonistic, and can be eliminated only through ranking and enforcing consistency. The setting of preferred development objectives also evokes dispreferences; if we denote the industries or complexes where we wish to concentrate resources, this also comprises that they have to be withdrawn from other purposes. If e.g. the long-term plan comprises development conceptions for the main branches of the extracting industries, it is highly probable that it mobilizes resources at the expense of developing the manufacturing industry or agriculture.

Thirdly: short and medium-term manoevring – as has been indicated – requires a "compass", a comprehensive conception.

I will quote two important groups of phenomena as examples.

No doubt, the development of manufacturing does not require a long-term plan of measures. Its productive assets and its product-mix may radically change essentially within a medium-term plan period. In the development of manufacturing an outstanding role has to be played by the market and by enterprise profit influenced through the system of regulators – both as a stimulant and as a source of development. But it is only on the basis of a long-term conception that the development of manufacturing can be channelled in a direction corresponding to the interests of the whole economy and society, and that the medium-term plans and the system of regulators can be put at its service. The development conception of manufacturing is simply unfounded if we do not simultaneously clarify: approximatively what funds are needed for its development, renewal and transformation. It is a subordinated question of this complexity, but a highly important one: what pays more? If we spend a definite amount of development funds on the development of the extractive industries, or if we invest a greater part of these funds into manufacturing in order to make it internationally competitive, and procure the necessary materials and primary energy from the additional foreign exchange earnings thus acquired. If the inconsistent plan comprises merely the program of measures for the development of the extracting industries, and the resources "are sold" to them, then no kind of medium-term plan or market mechanism can secure the necessary resources for manufacturing any longer. Further, it can be established, on the basis of long-run analyses

and long-term programs relying on the latter which the most favourable manufacturing sectors and subsectors are whose development it is expendient to prefer: to help them to be able to increase their weight, on a high level of technology, with profitable domestic and export products. On the other hand, which the manufacturing subsectors are that have to be gradually suppressed in view of the international tendencies. (Such long-term policies are carried on by several Western countries as well.) Finally, a long-term central conception is needed even for influencing the development of a subsector in the given direction. It is well known e.g. that for the development of the textile industry, particularly the cotton industry, the fact should be decisive that their development is rapid in the countries of the third world, and will be even more so in the future. Thus, for the implementation of such enterprise or even ministerial development conception which expresses invariably the "kilometre approach" and does not take international tendencies into account, not a single penny should have been or should be given from central funds, not even in the form of credit. But, without a "compass" no such requirements can be raised.

The other group of phenomena supporting the above statement is income distribution. No doubt, income distribution is determined by short-term and medium-term decisions. There is no such long gestation period between decision and realization as in the case of investments. But if we do not possess a long-term incomes policy conception which would be in harmony with the whole of the plan, the distribution relations are formed by the momentary (real or presumed) economic and political needs. Of course, it will be frequently necessary to take measures which form income distribution in a direction deviating from or opposed to the conception. But if there is no "standard" to which to compare, only contingency remains in income distribution relations and they will be less and less in conformity with socialist production relations.

Finally, we are not far from truth if we state that the view advocating inconsistent ("blot") planning, denies in substance the necessity of long-term planning.

The requirement of consistency has several "layers", it may be interpreted in several ways. The first interpretation or requirement: the sum of the parts must not exceed the whole. This is so self-evident that it is almost superfluous to be mentioned. Yet it is necessary to emphasize it, since, in spite of its basic importance it is not absolutely self-explanatory. The first-mentioned view believing it desirable to plan pieces of mosaics, implicitly or explicitly discards the requirement "the sum of parts = the whole". Further, the interpretation and quantification of the consistency requirement raises several questions which cannot be discussed in the framework of this article.*

The consistency-computations [2] performed in the National Planning Office are highly important, since, by achieving consistency they check on the realism of the partial

*The problems arise partly from the well known features and contradictions of volume-computations, and partly from the fact, that, because of the limited possibilities of price and cost forecasts, we cannot draw up a consistent plan at current prices. (see for details [1])

conceptions: whether in the period planned for the resources for accumulation, labour etc. necessary for the simultaneous implementation of partial conceptions will be available.

But the consistency requirement has also a higher level. To wit: prior to working out partial conceptions for either economic development or social policy a centrally elaborated "comprehensive conception" is needed which – relying on analyses of the economic and social processes – comprises ranking and priorities from the very outset, and into which the partial conceptions can be fitted and evaluated.

Of course, the partial variants will modify the comprehensive conception; but if the latter is really based on principles and is scientifically founded, the modifications will indeed be only modifications. It is absolutely futile to expect that from the ensemble of partial conceptions a comprehensive, consistent and principially founded general development conception can emerge. In the planning of living standards one of the greatest results, in my opinion, was that the partial conceptions of the "sectors" of living standards (income distribution, consumption, trade, housing, education, the health service etc.) could be fitted into a comprehensive conception. And I dare risk the statement that it is a shortcoming of decisive importance of long-term planning today, that no principled conception covering the whole of the economic sphere has been born as yet which would be suited for judging and integrating into a uniform system the partial conceptions of industry, agriculture, investment, foreign trade etc.

The difference in general approach and methodology in the two views or approaches to planning manifested itself in a seemingly ephemeral question of the organization of planning. In the first years of long-term planning in Hungary committees, organized on a wide social basis, helped the work of planning. This work, uniting men of practice and theory allowed experiences, views and conceptions to conflict with each other and, multiplying the efficiency of work, to develop on this basis a uniform conception or to crystallize differences in conceptions. (It is a great pity that in recent years these committees are dead or in the state of apparent death.) In the course of work these committees followed at least two kinds of practice. In some of the instances the National Planning Office closely guided the committee, coordinated, inspired and kept busy the members, work progressed systematically through exchanges between the committee and the staff of the Office. In other instances the committee was essentially dominated by a ministry or several ministries, the Office was so-to-say a member of the committee, the planning staff of the Office became "alienated" from the committee work. Obviously, in the first type there was a possibility for integrating the partial conceptions by relying on the "comprehensive conception", indeed the latter was the main organizing power of the committee. I should like to stress separately that I consider it an essential deficiency of the planning work that none of the higher level committees worked out a comprehensive conception to be confronted with the partial conceptions.

The latter indicates a basic problem of planned economy. To wit: does government control really enforce global social needs and interests by relying on a *central* conception, or do the contradictory interests of discordant industries, functions, ministries, councils etc. assert themselves according to their power relations? It should be quite obvious that

the advantages of planned economy can be secured only in the former way. And the more decentralized the sphere of enterprises, the more we need centralization of central control manifesting itself in the working out and realization of a central conception; the less can the rule of higher-level (and not only higher-level) partial interests be tolerated.

In the course of long-term planning it frequently was raised in Hungary that complex partial programs should be worked out which would not be restricted to the field of one ministry. Such attempts and projects were and are indeed undertaken, but we cannot rest satisfied with the results. The advantage of a socialist system would be – among other things – to be able to analyse and control a phenomenon or process of economic life really in a complex manner. Rationalization of energy cannot be restricted to the production and imports of primary and other kinds of energy, but appears together with the total use of energy in the economy (inclusive of the fact whether the doors and windows of a building insulate or let the heat escape in winter). Or: do we restrict the costs of residential construction to the building costs or do we also include the cost of developing transportation when the site is selected for construction? Is planning of health restricted to the development of the network belonging to the Ministry of Health, or is it planned in close harmony with prevention, working conditions, nutrition, environmental protection? The latter is more humane and likely to be cheaper, too. Even if we accepted the conception of inconsistent long-term planning, we would have to state that the existing system of institutions does not, or hardly allow to work out such complex partial programs. As a matter of fact, such partial programs are, or would be, needed even in the framework of a uniform consistent strategy.

Strategy and tactics

The period of the long-term plan is broken down into five-year subperiods. This is necessary in order to base the relationships between the long-term and the medium-term plans also on planning technology.

Today it may be considered clarified in principle what the desirable relationship is – or rather: should be – between long- and medium-term planning. Long-, medium- and short-term planning have to constitute an organic unity: their ensemble should form an organic whole. Within this system the long-term plan comprises the economic and social strategy, while the shorter (medium- and short-term) plans the tactics. The primacy of strategy over tactics should be obvious: the former has to determine the latter. The basic task of tactics is to secure realization of the strategy. If the relationship is reversed, economic and social development will be distorted. The reversed relationship causes distortion not only because the short-term targets determine the long-term tendencies. It follows from the nature of things that the longer the plan period, the more the objectives dominate the plan; and the shorter the period, the greater the weight of means and ways.

If tactics become primary, this entails a direction of development determined by decisions on the means; instead of – setting topsy-turvy matters on their legs – deciding on the application of means in the service of long-term objectives. Matters are not changed by producing an ideology to this practice and raising it to the rank of a policy. (For instance, we make ourselves believe that so-called input-proportionate prices may serve some kind of "optimal economic development". This is a typical case of deriving goals from the means.) The reversion of strategy and tactics, and of the ranking of goals and means is not restricted to the relationship between the long- and the medium-term plan. In practice the annual plans are the actual determinants of the five-year plan. The five-year plan, modified on several occasions in the wake of the annual plans, does in the end not even resemble the one originally approved.

The ideal relationship between strategy and tactics is not uni-directional. Tactics cannot become a mechanical tool for implementing the strategy, it also checks on the long-term objectives, on their realism in respect of both rates and directions. And, in conformity with the critique of tactics, the path has to be modified in the course of continual long-term planning.

In the last ten years it could be considered as a profound achievement of Hungarian long-term planning that the long-term programs worked out for the different economic and social processes (e.g. for living standards) did affect the medium-term plans – even if not to the desired extent. This holds particularly for the principles and conception on which the long-term plan was based. If only for this reason, the five-year planning of the seventies was not identical with that in the earlier five-year periods.

But the present practice is by far not characterized merely by the fact that the long-term plan affects the drawing up of the next five-year plan. This relationship is at least as much characterized by the fact that the five-year plan elaborated resembles the corresponding subperiod of the fifteen-year plan very little. The actually approved, and much more the realized, five-year plan decides the processes of the first third of the five-year period (e.g. because of investments reaching into the period), and, with decreasing intensity, even the following ones. Thus, for long-term planning the real freedom of decision emerges in the second half or the last third of the fifteen-year period.

The long-term plan is, as a matter of fact, a plan for seven to ten years whose validity falls into some later period with its endpoint fifteen years afar from the base. This fact justifies to reconsider what the coverage of the long-term plan should be. In my opinion, a fifteen-year period would be adequate (considering also the method of "gliding" planning). Foresight would be sufficiently long; for such a period real strategic tasks and targets can be formulated and the degree of freedom of action is sufficiently great. On the other hand, the period is not all too long to weaken the scientific bases of our forecasts. If the period is essentially longer, there is a great danger that we cannot project the trends from the base data with acceptable probability. But, since at present fifteen-year planning is in the best case ten-year planning, I would think it justified to prolong the horizon of the long-term plan to 20 years. In this case we could draw up a fifteen-year plan, but its base year would be the closing year of the next five-year plan.

This planning method is likely to have the advantage that the peak workloads of five-year planning and of long-term planning would not coincide, and the whole planning machinery could be engaged in long-term planning in the rest periods of medium-term planning. At least the technical conditions could be thus created for eliminating the organizational separation of medium and long-term planning.

Goals and means

In the hierarchy of the economy and in that of the plans reflecting the former the roles of goals and means are relative. The economic phenomenon and the related plan indicator which are goals in one respect may be means in another one.

It is also commonplace that a task which may be a goal in the short or the medium term, is no goal in the long run, but an instrument or perhaps a condition for realizing other goals. For the latter I would quote an example that may provoke contradiction, and I should like to return to it. To wit: securing the equilibrium of the economy, or, if it has been upset, its restoration may be a goal for the economy in the short and even in the medium term. But in the long run equilibrium may be considered as a goal at most on a lower level of the plan hierarchy: from the aspect of the strategy as a whole we may consider it as an instrument and a condition.

The question is precisely whether the long-term plan has an objective, a system of goals which can be considered as absolute in some sense – thus never transformed into means on a higher stage of economic hierarchy.

In my opinion there exists such an objective, and it is to increase the welfare and improve the living conditions of the whole population, of every social group, to satisfy their needs formulated in conformity with the socialist nature and interests of society on an ever higher level. Yet even these are not final objectives; as a matter of fact, they are the very instruments and conditions creating the socialist way of life: every member of socialist society able to harmonically develop his (her) talents precisely with the aid of society and able to realize himself as a man of the community. With the present level of development of planning, from all this only the strategy of living standards can appear as final objective in the economy-wide plan.

We frequently meet with the concept which considers the raising of national income (or GDP) as the final objective. I reject this conception. National income also includes productive accumulation. (Investments directly serving the population I now include in consumption.) We must not handle the growth of productive accumulation as a strategic objective, only as an instrument and condition for increasing consumption (inclusive of investments directly serving the population). There can be no doubt that a growth path which produces in the long run, say, a 5 per cent annual increase of national income, with a similarly 5 per cent rise in consumption, is more favourable than one with national income rising by 6 per cent but consumption only by 4 per cent. The difference in the efficiency of growth in favour of the first path and at the expense of the second

should be quite obvious. It may even happen that efficiency will deteriorate because we force the second path.

But if we say only that much we move on a too abstract plane, we do not take into account the actual historical circumstances. The above objective, or rather its approximation is restricted by several factors. On an abstract level of political economy also adequate standards of defence have to be considered a condition: a condition of the existence of socialism. But practically, it figures in the best case as a goal equal to the raising of living standards.

No doubt, we cannot liquidate our foreign debts in the course of a few years. Throughout the whole period it will remain a task, first to stop indebtedness and then to reduce the stock of debts. In the long run this is the highest constraint on every other task, thus also on those related to living standards. But this fact does not make the restoration of external economic equilibrium into a strategic target, and particularly not into one of equal rank with or even preceding the objectives related to raising living standards and forming the ways of life. This is not only a matter of words, of terminology. If external equilibrium is considered as the strategic target, the objective function will be the maximum difference between the growth rates of national income created and domestically used – and within that, of consumption. (Productive accumulation has to keep pace – as already indicated – with the national income created.) This path, on the one hand, neglects one of the most important factors of growth, the rise in living standards and, on the other hand, it introduces a dangerous distortion into the economy; production becomes an end in itself in the long run. An ever smaller part of national income or GDP, and finally the smallest one relative to the other directions of uses, will serve the population, while the growing weight of exports will make the whole economy dangerously unstable. Making the restoration of external equilibrium into the main objective and pushing the raising of living standards as a strategic aim into the background makes the restoration of external equilibrium itself irrealistic. While if, conversely, we set out from the fact that the most important factor of production is man himself, that a widely interpreted stimulation – including the feelings of the population, its cultural and housing cicumstances etc. – is a condition for operating this factor of production in the most favourable manner, we have to confirm that the basic and final strategic objective is to raise the standards of living. And, in conformity with this objective function, the whole development has to be programmed in such a way that external equilibrium should be restored by minimizing the difference between the rates of growth of national income created and used at home. A realistic long-term plan can be drawn up only with this program. In other words: for one or two years the difficulties in foreign trade may be bridged over at the expense of living standards, but in the long run this road is not passable. All the less as the troubles arising in external relations are mostly rooted in the internal relations of our economy. This, the contradiction between the basic strategic objective and the external economic situation of our country can be resolved only with an economic policy and a mechanism which gradually, but continually and palpably improves the efficiency of the economy.

This again shows how indispensable a long-term development program is. Such measures as restraining the rate of growth, stagnation of living standards, laying up investments, or a price stop may be sensible measures in the short run, if in the breathing space thus gained we make such changes on the basis of the long-term program "at hand" which simultaneously allow the cancelling of the restrictions themselves. Without such program and the changes made on its basis the restricitions will solve nothing, they rather do harm – and in the long run it is irrealistic to maintain all the restrictions.

What should be the starting point of planning?

In a long-term planning exercise started already in the late fifties but then miscarried, the question already emerged and is ever since returning: what should be the starting point for long-term planning that should orientate planning activity? Should it be the conception relating to the productive sphere or the living standard conception – in the wider sense that of social policy – or both?

Production determines consumption, thus the starting point of planning has to be that of production, or, in a wider sense, of the economic sphere. This practice essentially corresponds to short-term planning. When ten years ago long-term planning was started again, we frequently heard: a long-term plan can be drawn up for the economic sphere but how can we draw up a plan of living standards for fifteen or twenty years?

The unacceptablity of this conception has been proven also by practice. For the shorter run we can indeed plan in a manner that living standards are handled as a remainder – with certain restrictions (e.g. regarding the growth of consumption). But in the long run the development of the economy remains without orientation if we do not possess an elaborated conception of social policy, if the latter does not constitute the basic objective of economic development. The practice of long-term planning shows the unavoidable necessity and reality of what may seem in political economy a phrase devoid of contents.

Even on account of the above it seems corruptingly nice to argue: since the raising of living standards and their deliberate formation are the basic and final objectives of economic activity, it follows that the only starting point of long-term planning can and must be the conception of social policy.

But this conception is no better than the former one. No doubt, in the long run the degree of freedom of action is much greater in developing the economy and society than in the course of a medium-term plan. But it is not unlimited even over fifteen or twenty years. (The reader needs hardly to be convinced about that. Under the present conditions rather the reverse has to be emphasized: the ability to act is different in the long run from that in the medium term.) It follows that in formulating the conception of social development and in its improvement we have to keep the possibilities offered and the limitations set by the developing and growing economic sphere constantly in view.

Thus, long-term planning has to rely on two pillars from the outset, it has to have two starting points of equal importance. One is: the hypothesis or preconception of living standards, which raises demands, requirements towards the economic sphere, but which reckons even in the initial state with the realities of the economic sphere. The other is the hypothesis or preconception relating to the economic sphere, which even in its initial state makes efforts at satisfying the demands raised by the tasks set by social policy. It looks for the ways, variants, which can best satisfy these needs and prepares simultaneously for a dialogue with the planners of living standards.

Economic planning and the planning of living standards have to be done in parallel, from the initial hypothesis along the whole course of planning right up to the final plan and bring about the uniform and consistent long-term plan through continual iterations. Within gliding planning this iteration has to be a permanent feature. Responsibility cannot be shifted onto external circumstances if this iteration betweeen planners in these two spheres does not attain the desired level.

Planning the end point versus planning the path

It is an important problem already in medium-term planning but much more so in long-term planning how to approach the period itself, or rather the economic and social phenomena within the period.

Traditionally, planning is centred on the end point. How much will be, in absolute terms or expressed as a percentage of the base period, national income, or per capita consumption; how many tonnes of coal and steel shall we produce; what will be the per capita consumption of meat; how many flats shall we build and what will be the stock of flats etc. etc. in the last year of the plan period.

No doubt, the planning of a state at some date – in the present case in the last year of the plan period – has an important role. What will be our position relative to more developed capitalist countries or to those on a similar level of development in respect of per capita national income and consumption; what will be the stock of debts; to what extent will society contribute to the family costs of keeping dependants; what will be the level of consumption in the lower strata of the population; what will be the stock of consumers' durables etc. Without a projection of the expected, the possible and the desirable states a long-term plan cannot exist.

Yet, in my opinion, the substance of long-term planning is not the marking out of the end state. What planners should primarily aim at is the grasping of *processes* taking place in the plan period and continuing beyond it. However important a state may be, it is only a moment of the process. (In my earlier works I wrote that the plan should essentially consist of a consistent system of differential and difference functions.) No doubt, in the history of planning there were efforts to plan the processes, but their extent was unsatisfactory, and the method is still far from becoming the primary approach in planning.

Why should the planning of processes be given primacy over the planning of states?

1. Deviations in reality from the set of original "assumptions" affect primarily the state projected at the end points, both in the set of forecasts and in that of goals (and, accordingly, of instruments), Obviously, if national income increases instead of the assumed annual 5.5. per cent by only, say, 4 per cent, and if the ratio of accumulation to consumption shifts in favour of accumulation instead of the assumed (generally) constant ratio, then the level of consumption will be essentially lower at the end of the plan period than assumed in an earlier stage of planning.

These changes affect the processes themselves to an essentially lesser extent. Within the rather broad limits of the growth rate the path of development, along which we may proceed and on which it is desirable to proceed, is stable in its most essential elements. The main directions of changes in the sectoral structure of the economy, the distribution of manpower among industry, agriculture and tertiary sector, the process and the necessity of our participation in the international division of labour, the basic directions of changes in the consumption pattern and income structure of the population are not substantially changed by modifications in the foreign trade position. In fact, reduction of the very high per unit raw material and energy inputs was necessary already in the early seventies and much more beginning with the mid-seventies.

The changes do not leave unaffected the processes themselves either. Such changes in processes are illustrated partially by the above examples too. (Shift of accumulation relative to consumption, a faster growth of the energy sectors etc.) Changes occur also because the state reacts on the process. If the state contemplated for 1990 is attained at some later date, this does not simply mean that the process slows down but its structure remains completely unchanged. Suffice it to indicate at this place that the elasticity of demand for certain consumer goods or groups of articles depends not only on the nature of the given good or groups of goods and the level of income in the base period, but also on the increase of real income in the given period. Elasticity of demand depends not only on income, but also on other factors independent of income (e.g. technical progress, the housing situation etc.).

If basic changes take place in the processes themselves, an entirely new development conception is needed. It is, however, questionable whether from the social, political or even from the narrow economic viewpoint it is realistic at all to mark out an entirely new development path.

2. The processes taking place in time are not linear. Some economic and social phenomena accelerate in the course of the plan period, others decelerate; the curves of the processes may have turning points, others may describe cyclical paths; again others may approach saturation. These changes in rates may follow from the nature of the processes themselves, and also from the features of earlier development. (An element of prognostication.) E.g. the cycles in investments or the "demographic wave" may reproduce themselves in the plan period for a long time, even if no new measure or event contributes to the renewal of the cycle. (Unfortunately, this cannot be assumed.) And

conversely: a smoothing of the curves of processes would be possible if high-level measures were initiated at the adequate date of the plan period.

Even monotonically growing development processes are not smooth – even if e.g. national income is rising smoothly. Demand for certain groups of consumer goods may suddenly increase if masses of the population attain an income level in the plan period that allows them to enter among the purchasers of those commodities. In the case of other groups of articles it may happen the other way round: masses of the population may approach the saturation level. If the pattern of supply smoothly approaches the – otherwise correctly – prognosticated state by the end point of the period, at the turning point of the demand curve there will be necessarily equilibrium disturbance on the market of consumer goods.

The quality, character and importance of economic and social processes undergo changes. In the period facing us the important change will take place that the lowest income decile of the population will also attain, on average, the level which may be considered statisfactory from the nutritional and health aspects, and the satisfaction of secondary needs starts to become important also in this social group – without a major distortion of the consumption pattern, that is, not at the expense of elementary needs. This is the threshold, after which we may say that the whole of society has left the state of poverty. Of course, the smaller the rate of growth, the later we surpass the threshold. In fact, because of distortions in the consumption of the low-income group, (e.g. consumers' durables enter the consumption of those with low income even at the expense of nutrition), the change in quality may occur only later. We have frequently called attention to the fact at diverse forums: the same measure has quite different effects depending on whether we have stepped over this threshold or not. E.g. the raising of prices of basic foodstuffs entails grave social consequences (even if considerable monetary compensation is provided) if the level of nutrition of the lowest income groups is inadequate. But such changes in relative prices may be desirable once the level of nutrition is satisfactory. Further: with an average increase in real income it depends on the current incomes and price policies whether the income and real consumption of families belonging to the lower strata approaches the average or parts with it, that is, whether we bring forward the quality change in this respect or put it off. It depends, among other things, also on the latter to what extent the social tensions are relieved or get sharper. The situation of the social group in question may not have caused a social tension similar to the present one on a much lower level of consumption when the whole or the majority of society was poor. Or conversely: the putting off of the solution further increases the tension.

Another example for the changes in the quality and nature of some economic and social processes. The planners of living standards called attention to the fact almost a decade ago that the health service would become in a not too far future a similar key question of non-productive consumption, and even of the whole of living standards and the way of life, as has been the housing problem for long decades. The occurrence of this state cannot be circumvented by a smooth development of the health service, because in

the current decade we cannot secure such priority development for it that could solve the above problems. Thus we have to prepare for developing the health service suddenly in the next decade. If we postpone this, negative effects may assert themselves in other processes (e.g. in demographic processes) quite a few of which may prove to be irreversible.

Thus, for a correct timing of resolutions, decisions and changes, an analysis, planning and regulation of the processes over the period is needed. Without them, attainment of the end-state is not realistic even if the objective and subjective conditions of realization are otherwise present.

The science and the art of planning consists in ranking. But it is not sufficient to state priorities for the average development of the period, that is, for the end point. For regulating the processes it is indispensable to set up *time-preferences*, that is, to determine which processes should be given priority over the whole period, which only in a definite part of the period – e.g. in the last period – and which are the processes that the economic leadership does not wish to strengthen in the whole of the long-term period. Similarly: a deliberate restraining or hindering of processes may be also interpreted as time-dispreference.

The advantage of gliding planning, mentioned several times, consists among other things in that it makes the end point of the plan period – in conformity with reality – conditional and a matter of convention. For, what is an end point in the present stage of continual planning will be an intermediate stage in to-morrow's one. But gliding planning requires a considerable number of highly qualified experts, as well as time and energy. If all these are missing, the danger persists that the shifting of the end point, the expansion of the time-horizon takes place in a manner that, instead of new analyses, the processes lasting up to the end of the earlier stage of planning are simply linearly extrapolated.

3. The primacy of the process-approach is underlined also by the fact that the nature of regulating the different economic and social phenomena is different. The development programs of utilities (mainly energy), housing, construction assume the strict temporal sequence of decision and implementation because of the manysided links and the investment tasks. The regulation of the income-distribution processes earlier quoted allows greater, though not unlimited manoevring possibilities, and the time lag between incomes policy decisions and their impact on income distribution is also smaller. The long-term plan has to comprise these programs into a uniform and consistent system, but this cannot conjure away the differences in their nature. But, of course, these deviations can be taken into account only if processes are planned.

Following from differences in the nature of the programs, decisions and resolutions serving their implementation become necessary at different dates of the plan period. If, e.g., it may be considered as a realistic assumption that conditions will become more favourable in the last third of the period and development may then accelerate, then measures aimed at accelerating the growth of personal disposable real incomes have to be made essentially when conditions have indeed matured or we have already created them, – including in the measures also an adequate modification of the system of

regulators. An accelerated expansion of infrastructural capacities for the same period is possible only if the investments serving expansion of capacity were started already in the first third of the period. Further: it follows from the differences in the nature of the partial programs that with some of them the time horizon may be shorter than the full period of the long-term plan (we have quoted some examples), while with others the time horizon lies far beyond the plan period: the end-state marked is only an intermediate station in the complete process.

Thus, for the strategy of certain processes a principled program is needed and concrete measures are a matter for medium- and short-term policies. The strategy of other processes has to comprise, however, also the concrete program for action.

4. The end-point approach has to play a subordinate role in planning also because it is at least as important to know what aggregate results have been attained by the economy and society in the course of the plan period as is the result at the end point. For the economy of the nation, for society it is of outstanding importance what the size of national wealth has been in the period as a whole, how much it has accumulated over the period, how much the population has produced and consumed, how many people have moved into new homes etc. From two development paths the one may be more favourable along which integrated consumption is higher, though the end point may be lower than on the other path. The planning of integrated results assumes from the outset analysis and regulation of the process.

5. In the end-point approach it is an almost necessary concomitant of planning practice – equally for the medium and the long term – that, because of foreseen, or exaggerated, incorrectly interpreted daily concerns lower development is provided for at the beginning of the plan period. Then it is intended to satisfy the demands following from the systems of social and economic goals by promising a major "leap" by the end or even the middle of the period. Only the planning of the process can show whether acceleration of development is realistic at all. And similarly: what changes are needed in the course of the period in order that the desired and assumed acceleration should come about.

It seems as if the breaking down of the long-term plan period of fifteen years into three five-year sub-periods, or perhaps even into years would satisfy all requirements I mentioned in connection with planning the processes. No doubt, this "scheduling" amounts to a certain approximation to planning the processes relative to the planning of the end point. But this breaking down into stages is not the planning of processes – even if the plan targets are given for each year – but the planning of intermediate *states*. And a breaking down into three five-year periods inserts two further "partial" end-points in addition to the "final" end point of the long-term plan. To support the statement that breaking down into stages or subperiods is no substitute for planning the processes, it is enough to refer to what has been already said: the processes, the shapes of the curves describing the processes, their critical points, the changes in speed, the points of inflexion, qualitative changes etc. generally do not conform to the five-year plan periods.

It does not follow that the breaking down into stages (sub-periods) is superfluous. On the contrary, but the intermediary partial states should be derived from an analysis of the process.

Nature of the elements of long-term planning

Fortunately, we have long transcended the definition of the plan according to which it is not a forecast but an instruction. The plan is not absolutely an instruction and the long-term plan by no means is. But it can and should be a binding program for the leading organs. It was obviously a well-founded statement by Lenin that the national economic plan was the second program of the party. The program declared in 1975 at the 11th congress of the HSWP covers essentially the period of long-term planning (15–20 years) and comprises many highly important events from among the long-term plan objectives.

Further, no kind of plan and no kind of planning can exist whose important element would not be forecasting. But neither planning nor the plan can be identical with forescasting. Planning comprises the following major elements:

The first element is the system of *assumptions* about the circumstances of the period planned for. Here belong, as a matter of fact, also the assumptions which remain more or less implicit. (E.g. that there will be no war during the period.) An element of decisive importance in the assumptions of long-term planning is the system of expectations relating to international political and economic relations. For the planning of living standards, however, the growth rate of national income is also an assumption.

The second is *the analysis of the past.* Not generally, and not merely the economic processes having taken place are to be analysed, but the analysis must be planning-oriented. First of all those past processes have to be analysed which we wish to prognosticate and grasp in the future with the aid of economic and social policy. (From the close relationship between the analysis of the past and the forecast it also follows that the time series looking back on the past have to be *at least* as long as the period to be planned.) An important factor in analysis is to confront economic policy, social policy and economy-wide plans on the one hand with economic and social processes on the other hand. In what respects were our plans realized and why? Were our prognoses good, did we apply the instruments well, or were the plans realized by chance? And in what repects were our plans not realized and why not? Were the plans bad, or were there deficiencies in implementation?

The third element is the system *of forecasts* (prognoses), that is, the projection of the most diverse processes with diversified methods.

I have already indicated the close relationship existing between analysis of the past and forecasts. There is a similarly close relationship between assumptions and forecasts. In the planning of living standards demographic forecasts, estimation of the pattern of consumption as a function of the development of incomes etc. are highly important. The

forecasts have to be made according to the different variants of assumptions. There is no sharp line of division between assumptions and forecasts: the expected assumptions are frequently themselves prognoses.

Yet the two should not be mixed up. Our forecasts will be only realistic – even in the best case – if the assumptions about the plan period come true. Further: the forecasts have to point out directions: thus they cannot be independent of either the goals or the means.

The fourth element is the *system of plan targets,* of goals. As a matter of fact, this is the soul of planning and of the plan: we wish to attain and implement them in the course of the period. A careful foundation of the assumptions and the forecasts is necessary in order to provide foundations for a realistic system of goals. The assumed circumstances and the prognosticated processes are essentially constraints on these goals.*

Finally, the fifth element: the block of things to be done, the system of application of the *instruments.* If we have well assessed the circumstances, and well prognosticated the processes, the reality of the objectives will depend on whether we use the rich armory of available instruments well – in proper combination. Through a proper use of the instruments we can influence and modify even a part of the conditions and the prognosticated processes. It should be obvious that we cannot affect, say, the development of world market prices. We can however, take care that the world market price changes should not gravely affect the development of the economy, but induce such structural transformation that the changes in world market prices should constitute essentially wider constraints.

The armory includes investments, price policy, and even the economic mechanism, the system of regulators – and many other factors as well. (As a matter if fact the armory includes also a series of non-economic instruments belonging to the realm of politics and consciousness etc.) This is precisely the block on which high-level party and government resolutions and actions are needed in order that the goals of the plan should be realized.

It is a basic condition for the successful application of the instruments that the system of the latter should be adequate for and in harmony with the goals. If, e.g., we intend to give important roles to autonomous enterprise decisions in changing the pattern of production and investments, in technological development, in adaptation to needs, but carry on an overtense and cyclic investment policy, the system of instruments called economic mechanism will not operate with the expected efficiency and will not work in the desired direction.

In a debate on long-term planning a few years ago attention was justly called to the following. The individual elements of the plan are of different nature, but there is a danger that later troubles arise in the interpretation of these elements; the interpretation of various elements may get mixed up. E.g. we may believe that decisions have to be made or measures be taken regarding the realization of assumptions or prognosticated elements.

*Programing has done a great service by introducing into economic reasoning the necessity of clearly distinguishing the objective function and the constraints.

Let us say, e.g. that the assumptions of the plan include that geologists would disclose mineral deposits of a definite volume. The trouble arises if we consider this a task and pass a decision that this deposit must be found and exploited. The example may seem absurd, but whoever knows the history of planning in Hungary knows that it has not been produced by the sheer fantasy of the author.

No meritory decision can be made on the growth rate of the national income either. We may decide on increasing the total output of industry, on raising the sum to be invested. But it is the *final outcome* of a diversified and complex process at what rate the national income may actually increase. But instruments can and should be used which make the creation of national income as favourable as possible.

It causes frequently disturbances that the goals and the instruments of planning are mixed up with each other.

The individual elements can follow each other in the course of planning in a definite temporal sequence and it is expedient to "schedule" the planning activity accordingly.

The first stage of the work may be the mapping out of assumptions, this may be followed by an analysis of the past, on this may be built the stage of forecasting etc. Having closed the work stages corresponding to the elements of planning the plan conception may be drawn up and the corresponding document i.e. the plan itself may be drafted.

But the stages of work corresponding to the individual elements of planning cannot be strictly separated. As a matter of fact, every element of planning must be present in every stage of work; the problem is rather on which element to put *the emphasis* in the individual stages. I have several times indicated that there are manysided and mutual close relationships among the various elements in planning. E.g. in the stage concentrating on the use of instruments, on the tasks, the assumptions, the results of analyses and prognoses and, particularly, the system of goals relying on the former have to be constantly kept in view.

A regular iteration is needed between the elements of planning. To continue the above example: in the course of determining the system of instruments it may become necessary to re-examine the assumptions, to complement analyses and prognoses and to reconsider goals.

Long-term planning and the economic mechanism

At the beginning of this study I have pointed out that the starting of long-term planning in Hungary was closely related to the reform of the economic mechanism. A more intensive operation of the market under the conditions of socialism, a planned economy working essentially without plan-instructions, make the necessity of working out an economic and social strategy obvious. The market has to be controlled so that it should work towards the strategic objectives. It belongs to the unity of long-term planning

(in general: planning) and the economic mechanism that the market should be the highest check on the plans themselves. The progress or repression of the reform may be measured also by whether the strengthening role of annual plans weakens the position of the medium-term and much more of the long-term plan.

Yet it has been an experience of the last ten years that a great part of economists supporting the mechanism introduced in 1968 view the works of long-term planning with equanimity or even with suspicion or doubts. Tacitly, but frequently *expressis verbis* they consider long-term planning as something foreign to our mechanism. One aspect of this is the – not quite unfounded – fear that under the guise of improving planning we push back enterprise autonomy and restrict the operation of the market. But this danger arises precisely from quarters other than long-term planning. We have heard arguments that long-term planning wishes to smuggle back the physical approach into the direction of the economy. I have pointed out that, following from the nature of things, in long-term planning the volume indicators are dominating. But with the importance of value categories having come to the fore the expanding scope of the market has to serve the attainment of an ever greater output with our expanding resources, and a faster growth of real income. Among the causes of aversion we may find the idea that the market is capable of selecting the most favourable one from the possible development directions of the economy. It is not the task of this study to refute this romantic idea.

In the preceding section I discussed the proper relationship between strategy and tactics, the desirable primacy of the former over the latter.

It is understandable that a few of the economic politicians should regard long-term planning with not too much sympathy, as something which will bind their hands in manoevring and force them unto a definite path of action. (It is not the strategic conception that raises "irresponsible" demands, expectations, but the other way round: it mostly formulates and comprises into a consistent system the demands and expectations which people justly raise towards our system.) It should be obvious that this antipathy towards long-term planning is not identical or not unconditionally identical with the fear for enterpise autonomy or for the operation of the market. On the contrary, it is usually aimed at defending the operative control of the state.

Finally the advocates of the reform have entered into an unfortunate alliance with its adversaires. The platform of this alliance is opposition to long-term planning.

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The appearance, introduction, and functioning of almost every new institution lives through changing cycles in our economy until it attains full "citizenship" and becomes a self-evident part of the system. Because of objective and subjective, internal and external economic and political reasons offensive and defensive stages of its progress are alternating; ebb and tide in the interest of economists and politicians may be observed. This holds in its entirety for the ten-year history of long-term planning in Hungary. (But also for the economic mechanism.)

But if the given institution necessarily follows from the development of our mode of production, the recessions may only slow down its taking root. (Of course, it is a pity for the time so lost.) It is my conviction that long-term planning is an immanent part of the period facing us, which we usually call developed socialism. Hindering its development also impedes the creation of a developed socialist society.

The economic difficulties which usually serve as arguments against improving both long-term planning and the economic mechanism can be overcome only if an adequate strategy is worked out and implemented and if, simultaneously, the reform of the mechanism is harmonically further developed.

References

1. HOCH, R.: *Real processes and market processes.* Acta Oeconomica. Vol. 8 (2–3) 1972. pp. 171–181.
2. AUGUSZTINOVICS, M. (ed): *Népgazdasági modellek a távlati tervezésben* (Economy-wide models in long-term planning). Budapest, 1979. Közgazdasági és Jogi Könyvkiadó. (Forthcoming in English.)

О ДОЛГОСРОЧНОМ ПЛАНИРОВАНИИ В ВЕНГРИИ

Р. ХОХ

Совершенствование перспективного планирования требует ответа на основе накопившегося за последние десять лет опыта на ряд — до сих пор даже не сформулированных как следует — вопросов. Сознательное формирование общества и экономики требует соответствующей стратегии. Горизонт времени среднесрочных планов слишком узок для разработки и осуществления стратегических целей. В первую очередь этим мотивируется необходимость в долгосрочном планировании (на 15—20 лет).

Можно ли вообще планировать на долгую перспективу? За полтора-два десятилетия могут наступить такие значительные изменения в мировом хозяйстве и мировой политике, которые как бы опрокидывают наши стратегические соображения. Однако более внимательный анализ показывает, что эти изменения не ведут к невозможности перспективного планирования. Как раз такие переломы, скачкообразные изменения требуют соответствующего компаса для ориентации в этом процессе. Если оглянуться на прошедшее десятилетие, окажется, что не изменились ни основные задачи экономической политики в Венгрии (а наиболее важные из них — например, слишком большие нужды экономики в энергии и сырье — даже проявляются еще острее), ни основные цели социальной политики. Естественно, стратегия должна систематически проверяться и корректироваться при помощи скользящего планирования.

Один из самых существенных вопросов долгосрочного планирования заключается в определении его характера. Должно ли оно состоять из по существу независимых друг от друга программ развития некоторых областей общественной жизни? Или же — и автор согласен с этим вариантом — стратегия должна быть единой и взаимоувязанной, охватывающей хозяйство и общество в целом? Другой важный вопрос состоит в том, должна ли общая концепция представлять совокупность частных концепций или же следует располагать такой исходной концепцией (преконцепцией), которая бы играла ориентирующую и координирующую роль в разработке частных концепций.

Фактически еще не разрешено отношение между долгосрочным планированием и планированием на более короткие (средний и близкий) сроки, то есть, иными словами: формирование отношения между стратегией и тактикой. По существу родственно этой проблеме формирование естественной взаимосвязи между целями и средствами. Необходимо выяснить и место и роль отдельных элементов планирования — анализов, прогнозов, плановых целей и т. п. — в общем процессе планирования.

В заключение автор анализирует отношение между долгосрочным планированием и хозяйственным механизмом. Введенная в 1968 году реформа не только не противоречит долгосрочному планированию, а как раз наоборот: регулируемый рыночный механизм, лишенный экономической стратегии, остается без ориентации и не используется его роль как важнейшего контроля стратегии.

Acta Oeconomica, Vol. 24 (1–2), pp. 47–56 (1980)

A. BRÓDY

ON MEASURING GROWTH

There are forces at work (stemming from methodical insufficiencies in statistical measurement) that make us systematically overstate growth rates and living standards. This systematic upward bias seems to be universal and particularly strong in countries undergoing cyclical fluctuations.

Every country now fairly regularly publishes data on its economic growth and living standards. Economic – nay: political – sucess is reckoned increasingly in terms of per capita national income.

Phenomena defying short and numerical description – questions of quality and intensity, that is: public sentiment, moral and aesthetic signals – are in disregard. As if the world turned into a single race track where the Statistical Offices acting as Umpires release the list of Victors – their Development Levels attained and Speeds achieved.

Yet already the object to be measured can be severely questioned: new research has made it clear that per capita income represents neither welfare nor wealth and clearly even less the level of utility, the quality of life or the thrust of economic power. It is an indicator measuring, as it is, only a fairly narrow and artificially demarcated cross section of economic activities, and – alas – even that but with broad margins of error, as already O. *Morgenstern*[10] convincingly pointed out.

What is even more disquieting: the rather large errors show a systematic bias, stumblings that tend to conglomerate and amass.

Thus generally these errors will not cancel and may, even with the greatest precaution, seriously bias the measurement and will indeed usually do so. The published figures – and we have to stress: all the figures of all the countries – are on an unsure footing. Therefore "facts and figures" are always received with the utmost scepticism, simply because they seldom fit in with the day-to-day common experience of the reading public. Perhaps this is one of the root causes of reservation, or even distrust, nurtured against economics and particularly statistics.

Statistical experts of course know about and, at least in principle, acknowledge the limitations of economic measurement as actually applied. The textbooks do caution the students. Yet the professorial warnings seldom produce an echo outside the classroom, and in actual publications we seldom, if ever, find any indication of the possible and probable size of errors. Thus the common reader of newspapers, never being admonished about possible inconstencies and discrepancies, will have rightful doubts not only about honesty of information but also about the actual expertise of the statistical offices.

Recent investigations pointed out errors even larger than experts were accepting in classroom. The discrepancy may surpass the usual magnitude of the yearly growth rate and so it is at least doubtful whether one can accept at all such vague data as health certificates of economic life. Who will feel safe with a faulty thermometer?

About indexing

The indicators of economic growth or of living standards have to represent combined or joint growth of heterogeneous phenomena not posessing any common physical measure.

Statistics accomplishes this by averaging partial intensities, perhaps reliable in themselves. This averaging process results in so-called "indexes" and there is ample indication that already a simple arithmetical mean may be biased. As P. *Köves* [7] writes: "The arithmetical mean ... is commonly considered to possess an upward trend (bias)." Weighted averages are also biased and this bias in particularly strong if base year prices are used for weighting the growth rates of productive sectors (as it is done by the Laspeyres formula).

This unavoidable bias is well explained by F. *Jánossy* [6]: "Around the middle of the last century aluminium was more precious than gold. If we presently value Hungarian production at 1850 prices then the aluminium cooking utensils produced will alone represent a much higher sum than the whole of agricultural production. This example shows that if the time span of comparison is very long then the value of K_{II}* shows an unrealistic growth."

It has to be mentioned here: if a method of measurement is not realistic in the long run, it hardly follows that its result will be more exact in the short run – at most its inexactness will remain better hidden. If a measuring rod is faultily calibrated or not rigid and we hardly can measure meters – it does not follow that it may be more suitable when measuring "only" centimeters or millimeters. Quite the opposite seems to be true: market scales, though measuring pounds or kilogramms correctly, will not do in a laboratory.

But perhaps by renouncing base weights (the Laspeyers index) and reckoning at present prices we may expect better results. The latter (the so-called Paasche type) index is usually considered to be biased downward. This feature had been heavily exploited in Hungary in the fifties to measure prices. By understimating price increases we arrived at seemingly higher living standards than they were in real life.

Such a particular choice of indexes (opting for an upward bias when measuring growth and a downward bias when measuring prices) was usually corraborated with reference to "practical expediency". True, the product of the two indexes does yield the "value index" – the quotient of present and base year value sums. These latter quantities are, of course, the quantities that can be directly observed. Therefore, when opting for the

*The Laspeyres index [A. B.]

above described pair of indexes, one has to construct actually only one index – the other will be obtained by division.

But one could also opt for the other pair: measuring growth by the Paasche formula (perhaps underestimating it) and measuring prices by the Laspeyres index (probably overestimating them). Their product will again yield the value index. But the latter pair is seldom computed. So the suspicion must arise that Statistical Offices try to certify the best results for their respective governments – at least they do their best never to underrate the actual economic achievements. This, I believe, necessarily undermines the creditworthiness of statistical practice.

The deviation of the two indexes is generally significant. Though seldom computed explicitly for longer time series, in cross section analysis – where both countries' prices are equally justifiable – we do find examples. But comparison in space is analogous to comparison in time: the more developed country representing the proportions the less developed one will achieve later. L. *Drechsler* [3] sets out 40 such indexes in the annex of his book. The quotient of the two indexes – Laspeyres divided by Paasche – ranges from 1.017 to 1.85. The interval ranges therefore from 2 to 85 per cent of the measurements and the unweighted average deviation *exceeds 25 per cent.* The difference between the countries compared is frequently much less: the possible error of measurement may surpass the measured magnitude itself. (It had been precisely the differences among countries the measurement, quoted by Drechsler, tried to assess.)

With such a broad, implicit and concealed, indeterminacy crotchety results are unavoidable. "The food prices are higher in Sweden than in the Netherlands, higher in the Nertherlands than in Great Britain and higher in Great Britain than in Sweden".* Such conclusions only prove that the intrinsic errors of measurement obfuscate the levels of food prices – their possible difference does not reach the "critical limit of comparison",** that is, the comparison tolerance overshadows actual measurements.

The *Laspeyres* index standing usually higher than the *Paasche* index when measuring "growth of production", it would be perhaps sensible to compute and publish both. Hungarian scholars advocated already in the fifties the joint use of the two indexes and particularly the computation of their geometric mean, the so-called *Fisher* index. Yet Hungarian statistical practice followed suit only late in the sixties, when – with the gradual introduction of economic reforms – measuring became prime necessity and not only a source of national pride. Yet in spite of the much improved quality of statistical work we still lack official publication of the possible and probable errors of measurement: there is no assessment of the tolerances of published data. Of course we seldom find such indications in Western statistical publications either. But this is hardly a valid argument: planning requires a much more refined concept of measurement than market economies. We ought to endeavour the pioneering role.

*See L. Drechsler [3] p. 61

**This limit can not made to dwindle even in the most exacting scientific measurement. See Jánossy [6] pp. 27–49

About improving the indexes

But it is doubtful whether statistical indexes, as used habitually in the great world, may be much improved. If statistical practice could satisfy the scientific standards, more or less clearly spelled out by now, would it be error-free? First of all: are we sure that actual growth must be *between* the values indicated by the two indexes and thus better approximated by their average? Could it be, at least in theory, that even the Paasche index overestimates growth and growth rates?

According to *Bortkiewicz* [1] the quotient of the two indexes can be set out as

$$\text{Paasche/Laspeyres} = + S_{\Delta p} S_{\Delta q} R_{\Delta p \Delta q}$$

Here $S_{\Delta p}$ and $S_{\Delta q}$ stand for the standard dispersion of price and quantity changes, $R_{\Delta p \Delta q}$ their correlation coefficient. Dispersion being by definition positive, the relative magnitude of the two indexes is governed by the correlation coefficient. In actual economic life we find mostly negative correlation (increase in quantity coupled with absolute or relative decrease in prices – probably due to a pervasive "economies of scale" effect) therefore commonly, but not always, the Laspeyres index surpasses the Paasche index.

An unequivocal situation is created only if the two indexes are equal – that is: if all prices or/and all quantities change uniformly. But if the two indexes differ we can not be sure that the real growth lies between them: they are delimiting each other, but not necessarily reality.

W. *Leontief* [8], analysing an analogous subject, "utility", also analogously delimited by two indexes, came to the conclusion that the real measure of utility can lie with equal probability outside or inside the "limiting" index numbers. And, summing up the merits of the method, he expressed with due scepticism: in those cases, when the method is theoretically correct, it will be impractical to use it, and in the other cases, when its use is practically warranted, it will be theoretically unsound and its results will be faulty or unessential.

In the light of Borkiewicz's result it is easy to construe an illustration. Let us have the following data for 3 periods and 2 products:

Products		Periods		
No 1. Price	p_1	1	1	1
No 2. Price	p_2	1	2	4
No 1. Quantity	q_1	10	15	12
No 2. Quantity	q_2	10	5	12

Quantity – considered in the total of three periods elapsed – rose unequivocally by 20 per cent in both instances, from 10 to 12. Yet both indexes show growth rates considerably surpassing 20 per cent. Therefore even the Fisher index will be strongly biased

Laspeyres index (prices "lagging")

$$\frac{20}{20} \cdot \frac{36}{25} = 1.44 > 1.2$$

Paasche index (prices "leading")

$$\frac{25}{30} \cdot \frac{60}{35} = 1.43 > 1.2$$

The growth rate as measured – according to either of the three indexes – will be therefore double the real rate.

$$\sqrt{\frac{500}{600}} \cdot \sqrt{\frac{2160}{875}} = 0.91 \times 1.57 = 1.43 > 1.2$$

One could argue that this artificial example is obnoxiously precooked and in real life errors will cancel. If one can not deny errors, one can still assume them away by a loose reference to the "law of big numbers".

The Jánossy method

But the errors do not cancel and are not insignificant. This was demonstrated in a Hungarian discussion of the sixties. As a consequence of this discussion we could (and had to) significantly change the appraisal of our growth record.

In the early sixties we thought that Hungarian national income rose more than 2.5 fold between 1938 and 1960, at least this was the official figure published by the Hungarian Central Statistical Office.

My own work [2] though admittedly crude, indicated unavoidably a gross case of overstatement, thus I had to question even a doubling of national income. In answer the Statistical Office undertook new computations and as A. *Mód* [9] stated the two indexes deviated very strongly, the Laspeyers index standing at 248, the Paasche respectively at 202. (The other indexes of consumption, investment etc. had to be modified accordingly.)

But in the meantime new critical voices were sounded. Computing according Mr. *Jánossy*'s theory (this computation is not directly relying on prices and is therefore less sensitive to our embarassing price structure, exceedingly overpricing the fast growing

sectors) É. *Ehrlich* [4] came to the conclusion that per capita national income rose only by 64 per cent between 1937 and 1961. This latter appraisal was more plausible and closer to common experience, though – as can be seen – entirely outside the range bracketed by the Laspeyres and Paasche indexes.

Present day knowledge, however, casts doubt even on this last, much deflated assessment. The overstatement may have been caused by the method itself.

The principle of the Jánossy method is to look for pure quantity indicators, eschewing the distortion due to arbitrary price relations. Yet it has an inherent error, well known and pointed out by the author himself. It accepts the international "scale of measurement" as the basic ordering as it emerged during the last century through the unified efforts of the statistical offices of the developed countries. Jánossy's method therefore may circumvent the bias stemming from a national system of prices – but can not avoid the pitfall inherent in the international scale.

If this international scale is biased – and I will argue that it is "too steep" and results in overstating real growth – the assessment by Ehrlich stands or falls with it. I do not mean Ehrlich overstated in relation to the common usage of measuring growth nowadays. The statisticians of the Department of Commerce of the U.S., if asked to apply their own methods and scrutinize our development between 37 and 61, would come up with figures much like hers. Yet these figures would be none the less biased and still far from real growth which may have been rather more modest.

The measuring scale

The irreality of almost all the measurements of growth is indeed striking – we only got so used to it, that we seldom give it the necessary examination. Jánossy, for instance, takes a 1700 $ per capita income for the U.S. in 1955. We know that the "poverty line" – some flexible limit of physical subsistence – stood around 3 to 400 $ at the same time. And still he and the statisticians accept on the same list India with 61, Belgian Kongo with 56, Burma with 54 $ yearly per capita income. What did those people do? They must have all starved since.

All right: protein or textile consumption may be more than tenfold in the U.S. – but surely not thirty- or fourty-fold. And living on thin air granted by the $-s ascribed on the more or less "official" and surely universally accepted list – must lead to starvation.

But we find the same nonsense in national historical statistics. For instance U.S. statistics [1960] claims a more than sixfold increase in per capita GNP between 1870 and 1955. If we start imagining the living pertaining to 1870 it comes out all too low – around 200 $ yearly in 29 prices is not much. The U.S.S.R. data are even more interesting. Between 1927 and 1977 a more than hundred-fold real increase is chalked up in national income [1977]. Even if we reckon with the increase of population etc. we must calculate with an approximately 20 rouble per capita yearly income in 1917 of present pruchasing power – not very likely. The measurement, however correct and detailed

perhaps otherwise, is "faster" than acceptable – its scaling is to steep. How steep indeed? *Gilbert* and *Kravis* [5] made a very painstaking study of western countries, using both the more developed countries' prices ("Paasche"), the less developed countries prices ("Laspeyres") and also official national income estimates recomputed according to the official exchange rates.

Comparing now, say, Italy to U.S. in 1950 they found the difference

according exchange rates	6.25-fold
according Italian prices	4.75-fold
according U.S. prices	3.33-fold.

The "gradient" of the "exchanges rate" scale is therefore almost twice as steep as the measurement with U.S. prices (and the latter still may overestimate the real difference). Now, *Jánossy-type* measurements (and let us add: most of the international statistical practice) accepted the steepest scale.

I do not claim, though think it possible, that the data of É. Ehrlich (64 per cent increase) may yield almost the double of-real growth. Anyhow – if they have a bias, it will be an upward one, particularly if we acknowledge that actual growth may be even less than indicated by Paasche indexes.

But how come such a heavy bias in painstaking measurement – what may be the root cause of overstating?

The mirage of growth

Investigations carried out by U.P. *Reich* [11] demonstrated that in an economy, undergoing cyclic fluctuations, a characteristic and regular measuring error will arise. And as all the known economic systems do fluctuate cyclically, the bias will be regular, persistent and not negligible.

To sum up his train of thought: Pigou already showed that albeit an economy may return to its starting point, its "ideal" chain index, measuring growth, will not. The chain index can not be integrated (summed up) in an unambiguous manner because the result depends not only on its two endpoints but also on the actual path the economy is travelling between those two points.*

This is demonstrated by U.P. Reich by a simple example. Let quantities move according to $q_t = q_0 + \sin t$, and prices as $p_t = p_0 + \sin(t + \varphi)$. This economy is clearly "stationary", returning in each period to the same situation. If we now set out the growth of real production, Q, as

$$\Delta Q = pdq$$

then of course $\dot{Q} = dQ/dt = p \cdot dq/dt = p\dot{q} = [p_0 + \sin(t + \varphi)] \cdot \cos t.$

The increase during a total period, from 0 to 2π, will be accordingly

*Harmonic analyis of time series already indicated a "leakage" in the amplitude of slow waves. This may be the other side of the same phenomenon.

$$Q = \int_0^{2\pi} Q dt = \int_0^{2\pi} p_0 \cos t \, dt + \int_0^{2\pi} (\cos \varphi \sin t + \sin \varphi \cos t) \cos t \, dt =$$

$$= \int_0^{2\pi} \sin \varphi \cos^2 t \, dt = \pi \sin \varphi.$$

The chain index therefore indicates an *increase* of $\pi \sin\varphi$. The chain index of prices will register an equal *decrease.*

What is the significance of this result? First of all: it shows that our problem does not stem from "weighting" the index, because it arises already with a single product. Secondly: weighting may only bias measurements and overstate actual growth. Here the situation is more grave. We are indicating growth in circumstances when it is nonexistent. This is not a bias, this is a mirage.*

Of course $\sin \varphi$ could be just as well negative in itself (and if $\varphi = 0$, even zero). But prices can manifest themselves in statistical work only with lags – they will be acknowledged only when their changes are already too big to remain neglected.

It is very easy to construct a little numerical example highlighting the essence of the problem. Let us have a 4-year cycle, with the following magnitudes:

	p	x	Δx	$p\Delta x$
1st year		80		
2nd year	1	100	+20	+20
3d year	1.2	120	+20	+24
4th year	1	100	−20	−20
5th year	0.8	80	−20	−16

Adding up the last column yields 8. Therefore at the end of the fourth year we can boast with an increase of 8 points, though the economy returned to its starting point.

Analogously a price decrease will be manifest:

	p	x	Δp	Δpx
1st year	1			
2nd year	1.2	100	+0.2	+20
3d year	1	120	−0.2	−24
4th year	0.8	100	−0.2	−20
5th year	1	80	+0.2	+16

The last column registers a decrease of 8 points, though the price returned to its starting point. In such a simple case we could have measured the real process in a much

*Mathematically speaking the chain index is not "analytic" and does not satisfy Cauchy's integral theorem.

simpler way, by not changing the price at all. But exactly by striving to improve the measuring methods the pitfall becomes unavoidable. We are measuring growth (entailing raising prices) with greater weight than recession (entailing absolutely falling or relatively slower rising prices). In the same way we are overstating price decreases and regularly understating price increase.

The order of magnitude of the illustrated fluctuation is not far from reality – and thus also the systematic error caused. We may measure a yearly almost 2 per cent decrease of prices (and if prices happen to rise all the time, we will understate the rate of inflation by the same amount). Therefore, after 35 years of measuring we will end up with a double living standard according our statistical wisdom though actually nothing really happened and living standards stagnated, or only fluctuated around a set level. The same order of magnitude will falsify the record of growth – making the two false statements seemingly harmonize.

This is a fairly gross error – and there seems to be no warranty against it. We indeed may be quite close to such a misrepresentation, difficult to check or avoid. And yet we did not consider other sources of overstatement, though already better known (but, alas, usually not spelled out in the reports and seldom corrected for). Such other (mostly upward) pressures are: changes in representation (product mix), neglect of "unofficial" and "black" markets, neglect of quality changes and the shortening of durability, of life expectation of the products, mixing up consumption with monetary outlays, neglect of phenomena that have no price tag, but nevertheless heavily influence living standards, as pollution, crowdedness etc, and finally considering certain cost items, that in reality do depress living standards (as f.i. the rising amount of time spent commuting to the work-place), as increase of the same.

Summing up this short review of measuring growth and living standards I have to stress that probably everywhere, in almost every country of the world an almost perpetual overstatement is at work. The growth of our age is far from being so fast as we believe or would like to think and as our methodically, and often purposefully, overstated indicators show. At the time: unraveling causes for the error in measurement is a first step toward improvement and a more realistic grasp of the situation. Considering the concentrated effort of scholars, the problem may be tackled in the next decade – and if not ideally "solved", certainly much improved. To make a chain index into an analytic function does not seem to be impossible and could be achieved soon.

References

1. BORTKIEWICZ, L.: *Zweck und Struktur einer Preisindexzahl.* Nordisk Statistik Tidskrift. Vol II. és III. (1923)
2. BRÓDY, A.: *Gazdasági növekedésünk üteme 1924–1965-ig* Közgazdasági Szemle, No. 4. pp. 417–431. (1967) (English translation in BRONFENBRENNER(ed): *Is the Business cycle obsolete?* New York 1970. Wiley.)
3. DRECHSLER, L.: *Értékbeni mutatószámok nemzetközi összehasonlításának módszertana* (Methods of international comparison of value indexes.) Budapest, 1966. Közgazdasági és Jogi Könyvkiadó.

4. EHRLICH, É.: *International comparisons by indicators expressed in physical units.* Acta Oeconomica Vol. 2, Nos 1–2 (1967)
5. GILBERT, M. – KRAVIS, I. B.: *An international comparison of national products and the pruchasing power of currencies.* Paris, 1953. O.E.E.C.
6. JÁNOSSY, F.: *A gazdasági fejlettség mérhetősége és új mérési módszere* (The measurability of economic development and a new method for measuring.) Budapest, 1963. Közgazdasági és Jogi Könyvkiadó.
7. KÖVES, P.: *Statisztikai indexek* (Statistical indexes.) Budapest, 1956. Közgazdasági és Jogi Könyvkiadó.
8. LEONTIEF, W.: *Composite commodities and the problem of index numbers.* Econometrica Vol. 4. No. 1. (1963).
9. MRS. MÓD: *A nemzeti jövedelem hosszú idősorainak problémái* (Problems of long time series of national income.) Közgazdasági Szemle, No. 6 pp. 692–707 (1968).
10. MORGENSTERN, O.: *On the accuracy of economic observations.* Princeton University Press, 1965.
11. U. P. REICH – R. SONNTAG – W. HOLUB: *Arbeit-Konsum-Rechnung*, Köln 1977, Bund Verlag.

ОБ ИЗМЕРЕНИИ РОСТА

А. БРОДИ

Есть основания предполагать, что индексы экономического роста (и уровня жизни) искажают. Темпы роста систематически переоцениваются. Неверно, что фактическая мера роста всегда находится или где-то между индексами Ласпера и Пааше, и поэтому индекс Фишера также может быть очень искаженным.

Измерения по методу Яноши также ведутся по слишком «крутой» шкале, и поэтому расчеты Евы Эрлих, вероятно, также искажают в сторону завышения.

Основной недостаток или трудность измерения состоит в том, что ни один из известных методов измерения не дает аналитической функции — две точки не могут быть сравнены между собой, если не известен путь между ними.

Исследования У. П. Рейха указывают также и на то, что циклически колеблющаяся экономика дает видимость роста и видимость спада цен даже тогда, когда она совершенно стационарна.

Поэтому рассчитанные и опубликованные показатели роста во всех странах могут быть и, по всей вероятности, являются неточными. Темпы роста в наше время ниже, чем мы думаем или хотели бы думать.

Acta Oeconomica, Vol. 24 (1–2), pp. 57–80 (1980)

É. EHRLICH – GY. SZILÁGYI

INTERNATIONAL COMPARISON OF THE HUNGARIAN INFRASTRUCTURE 1960–1974

Covering a period of fifteen years (1960–1974) the article examines the development of Hungarian infrastructure and confronts it with international tendencies. The comparison exploits data of 29 countries (22 capitalist and 7 socialist). The analysis relies on two approaches: 1) it elaborates a so-called "infrastructural point system" expressing physical indicators which synthetize the stock and the performance of infrastructure and 2) it quantifies the productions factors, measuring the weight and internal proportions of infrastructure according to labour and investment inputs.

Beside investigating general tendencies, the analysis of infrastructure in the socialist countries, particularly in Hungary, obtains special emphasis. A synthesis relying on 23 physical indicators testifies that in 15 years there were no abrupt changes in the order of the countries. Although the number of infrastructural points of the socialist countries did increase, no change in ranking ensued because in the meantime the infrastructure of capitalist countries on similar levels of development increased at the same or at a faster rate. The global picture is complemented by an international comparison of five important areas of infrastructure: transport, communications, housing, health, education and culture.

In a book published four years ago [1] we investigated the development of infrastructure by covering about a hundred years (1860–1968) and exploring the internationally recognizable tendencies. Now, essentially with the same methods that were employed in the book, we examine a shorter period, fifteen years, in the following manner: three years will be selected from the period 1960–1974: the starting and the end points and a year in between – depending on the availability of data the latter is generally 1968 or 1970.* Similarly to the mode of treatment in the book, the analysis is presented in two cross-sectional approaches:

1. On the basis of so-called infrastructural points, synthetizing the infrastructural stock and performance and based on physical indicators.

2. On the basis of factors of production, presenting the weight and internal proportions of infrastructure as labour and investment inputs, the latter in lack of internationally comparable data on national wealth.

*Thanks are due to Margit *Lukács* and Szabolcs *Ráth* (Central Statistical Office) for the collection of data and the computations performed.

Level and pattern of infrastructure

The infrastructural level of the countries will be expressed numerically with the aid of a rather rough yet adequate estimator, by so-called infrastructural points, interpreted for the infrastructure as a whole and for its parts, here investigated. In this part of the analysis we distinguish the following areas: transport, communications, housing supply and equipment, health service, educational and cultural supply levels.

The point system is established on the basis of 23 indicators, characteristic of infrastructure (for their list see the Annex).* The data of the country with maximum value was taken as 100 points in the case of every indicator and the others are expressed as percentage of this maximum. The points thus attained for every indicator were first averaged for each individual infrastructural field (as transport, housing etc.) and then the points of each individual country were established in respect of the whole infrastructure as the average across the former fields. Thus the number of infrastructural points lies between 0 – 100. The maximum value would be taken theoretically by a country which would score 100 points in respect of every indicator considered in the computation. The points of the individual countries express the level of infrastructure in percentage of this theoretical country.

Infrastructure as a whole

The order of the countries and their infrastructural points are shown for the whole of infrastructure for three selected years in *Table 1.*

It is not particularly surprising that in these 14 years no abrupt changes took place in the order of the countries. But some essential changes in ranking (and among them the reversal of USA and Sweden, at the head of the list, being the most remarkable) have to be mentioned. Such is e.g. Japan's jump from the 18th to the 9th place or Finland's from the 16th to the 11th. The situation of other developed capitalist countries has, on the other hand, deteriorated: e.g. Switzerland, Australia and Austria slipped back by three places. Another conspicuous change is a certain narrowing of the scale of points, first of all the considerably rising number of points in the second half of the list.**

The number of infrastructural points of the *socialist countries* generally increased between 1960–1974 The increase falls mostly to 1968–1974. The rise in the number of

*The methodology will not be reviewed here in detail. For its merits and problems see [1]. pp. 56–75.

**It has to be emphasized that a rise in the number of points does not necessarily imply a corresponding improvement in absolute terms in the level of infrastructure, since the number of points always depends on the level of the country serving as a basis of reference (having the maximum number of points).

Table 1

Infrastructural order and points of 29 countries

Countries (by order in 1974)	1960		1968		1974	
	order	points	order	points	order	points
Sweden	2	75	2	77	1	81
USA	1	82	1	78	2	80
Canada	3	72	3	70	3	73
Denmark	5	68	6	67	4	71
New Zealand	6	66	5	68	5	69
Norway	8	64	7	65	6	69
Switzerland	4	70	4	69	7	68
UK	9	62	9	58	8	63
Japan	18	42	11	52	9	62
Australia	7	64	8	62	10	62
Finland	16	45	13	51	11	62
Netherlands	10	55	10	55	12	61
Belgium	11	54	12	51	13	59
Germany (Fed. Rep.)	12	51	14	51	14	59
France	15	47	16	47	15	55
Austria	13	48	15	48	16	54
Italy	19	39	19	42	17	48
Ireland	21	34	20	41	18	48
GDR	14	47	17	46	19	48
Czechoslovakia	17	43	18	43	20	47
Spain	22	33	22	34	21	44
Hungary	20	34	21	34	22	40
Greece	25	29	24	32	23	40
Bulgaria	23	33	23	34	24	39
Poland	24	32	25	29	25	37
Portugal	26	28	26	26	26	33
Yugoslavia	27	26	27	26	27	33
Romania	28	23	28	24	28	31
Turkey	29	10	29	14	29	20

points was not accompanied by an improvement in ranking, but by maintaining or falling back by two or three places. Thus, the recent efforts, however significant, have not been sufficient to improve the relative situation of these countries, since in the meantime the infrastructure of the other countries (mainly of capitalist countries on a similar level of development) has developed to similar or even greater extent.

The infrastructural points of *Hungary* increased from 34 to 40, yet Hungary fell from the 20th to the 22nd place among the 29 countries. This increase in the number of points is particularly remarkable if we consider that it took place entirely between

1968–1974, reflecting the economic policy recognizing the role of infrastructure and the implementation of this recognition. But the few years were insufficient to make up for the basic and inherited backwardness in respect of infrastructure.

Table 2

Infrastructural order and points of 38 countries in 1974

Countries	Order	Points
Sweden	1	80.9
USA	2	80.0
Canada	3	72.9
Denmark	4	70.5
New Zealand	5	69.4
Norway	6	69.3
Switzerland	7	68.4
UK	8	62.7
Japan	9	62.3
Australia	10	62.0
Finland	11	61.9
Netherlands	12	61.0
Belgium	13	59.0
Germany (Fed. Rep.)	14	58.8
France	15	54.7
Austria	16	54.4
Italy	17	48.4
Ireland	18	48.3
GDR	19	47.7
Czechoslovakia	20	46.5
Israel	21	46.2
Spain	22	43.8
Hungary	23	40.2
Greece	24	39.8
Bulgaria	25	39.4
Poland	26	36.7
Argentina	27	36.2
Portugal	28	32.9
Yugoslavia	29	32.9
South Africa	30	31.5
Romania	31	31.3
Chile	32	28.0
Brazil	33	24.7
Mexico	34	23.1
Peru	35	22.0
Egypt	36	20.9
Turkey	37	19.9
India	38	16.9

For 1974 the data cover a somewhat wider area, 38 countries.

It seems obvious to relate these points to the general level of the economy. This is done in *Figure 1*. Without entering into more detailed explanations regarding the notion and measuring methods of the general development level of the economy, we use the comparative estimates for 1970 of per capita GDP, [2] extrapolated with the aid of the growth rates achieved between 1970 and 1974 in the individual countries. We have no intention to discuss again the problems of GDP comparisons, far from being settled, and we do not wish to take a stand on this occasion. From the aspect of the given purpose the measurement of GDP is not a primary problem either. From the numerous variants of GDP estimations that one was used where only the physical indicators of flow type played a role (those of stock type did not). In this variant, namely, the elements of productive and final uses are expressed in the GDP data, that is, the processes which the infrastructure is called upon to serve.* This indicator will be called henceforth the flow-level.

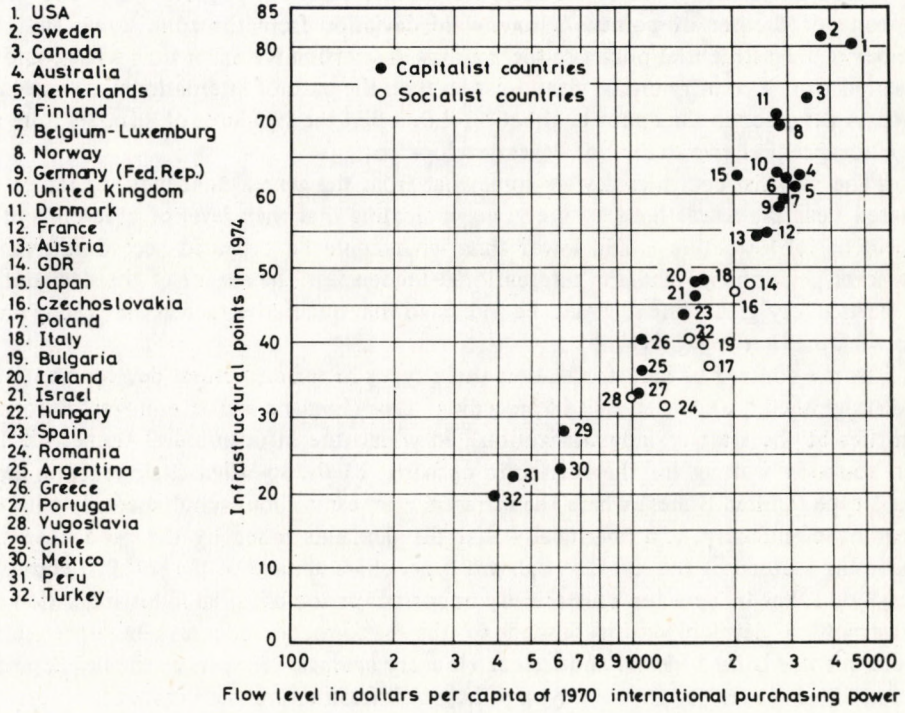

Fig. 1 Interrelation between infrastructural points and the flow level in 1974

*Thus the indicator of development level is the per capita final domestic product flow of 1974, expressed in 1970 dollars. [3]

As can be seen from *Figure 1*, the points indicating the individual countries are situated in a relatively narrow zone, showing that there is a close relationship between the flow level and the infrastructural level. In general, the higher the flow level of a given country, the higher also its infrastructural level. This close relationship also verified the interaction between economic growth and infrastructure. A well built infrastructure provides favourable space for general economic development by eliminating bottlenecks, by making available the objective and human factors necessary for growth, by expanding markets, while economic growth provides resources for further development of the infrastructure.

But the set of points is still situated in a zone and not along a single line. Not only because among such and similar economic variables there is, in general, "only" a stochastic and not a deterministic functional relationship, but also because it cannot be expected that the level of infrastructure should consistently run parallel to the flow level. In development there always are lags and relative advances, in consequence of which in one period one country and in another period some other country will "strut out" from the zone of the set of points. A downward deviation from the zone shows that the number of infrastructural points of the country in question is smaller than what could be expected from a country on the given flow-level on the basis of international averages and ratios. A deviation in the opposite direction shows that the standards of infrastructure are more advanced relative to the flow-level development.

The socialist countries deviate somewhat from the general tendency, or rather are situated near the lower limit to the zone, indicating that their level of development in respect of infrastructure is still lower than what could be expected according to their flow-level performance and the international tendencies. The extent of the deviation is not particularly great, but it should be indicated that qualitative factors are lagging more than the quantitative lag shown.

In the context of industrialization three types of infrastructural development may be distinguished.* a) The so-called "preceding" type (England and several West-European countries at the start of industrialization), in which the infrastructural framework has been so-to-say waiting for the economic upswing; b) the so-called chain reaction inter-linked type (United States) where the infrastructure came about simultaneously with the spreading of industry, and continually met the demands raised by the productive and consuming sectors; c) the so-called delayed type, characteristic of the socialist countries after World War II, here for a historically important period of initial industrialization the infrastructural development is pushed to the background, behind general economic development. *Figure 1* clearly shows that Hungary belongs – in spite of the development level attained – even today to the type of lagging infrastructural development.

*We cannot mention here the reasons. See [1] pp. 75–90.

Infrastructural areas

Transportation. Considering the number of points of transportation – formed as an average of the points of 8 transportation indicators – the countries essentially take the same order as in the whole of infrastructure. A conspicuous exception is the first place occupied by Canada and the fifth by Sweden.

The general development of transportation after World War II is characterized partly by the fact that motoring became a mass phenomenon in Western Europe while railway transportation declined and partly by the technical reconstruction of the whole of transportation. Our indicators and the numbers of points formed with their aid reflect rather the quantitative effects, while those of reconstruction nature do not or hardly come to expression.

The transportation points of the socialist countries are somewhat lower than their average for infrastructure as a whole, indicating that transportation belongs in these countries to the less developed infrastructural areas even in terms of quantity. But the present level reflects considerable improvement. Up to 1960, namely, rather a relative decline in the level of transportation could be observed in the socialist countries (with the exception of the GDR and Yugoslavia). The decline came to a halt in the sixties and then, if slowly, modernization of the road network started and the pattern of division of labour among the branches of transportation began to transform: road transportation made quick advance and the role of the railways diminished. Modernization of the railway network, of the rolling stock was put on the order of the day, electrification and the introduction of diesel engines accelerated. As a consequence, the ranking of the majority of socialist countries no longer deteriorated between 1960 and 1968, but kept pace with the development of transportation in other countries. After 1968 this process generally accelerated, particularly in railway transportation and shipping. The socialist countries not only scored higher points, but their placing improved somewhat: Czechoslovakia and Romania advanced by five, Poland by two places, while the placing of the other countries did not change. In spite of the considerable increase in the number of points, Hungary's placing did not improve, since growth was faster in other countries (first of all in Romania and Poland).

From all indicators of transportation the growth in the stock of passenger cars (automobiles) was the most dynamic, particularly in the socialist countries, where the number of cars more than doubled between 1968 and 1974. (There was a similar growth in Greece and Spain.) It is a different problem to what extent the infrastructure of motoring (repair and servicing network, filling stations, garage and parking places) could keep pace with the quantitative development. Bottlenecks can be frequently found. Another important factor of motoring, the road network did not considerably change in these years. The ranking established among countries for several decades in respect of the density of the road network proved to be rather stable, that is – in spite of some approximation – there was no substantial change in the order of countries with developed and less developed road networks. But the lack of indicators quantifying the effect

of reconstructions somewhat distorts the picture. A part of road building means the expansion and modernization of the existing roads and this is not expressed in the indicator showing the length of roads. It may therefore happen that road building activities of considerable volume do not increase the density of road network, while in other countries a smaller volume of road building appears as a considerable progress.

Communications. The level of communications could be characterized only with a single indicator, the number of telephone sets. The scale of this indicator is wider than in other fields of infrastructure. Differences between groups of countries on different levels of development are relatively greater. The socialist countries occupy very unfavourable places and represent a low level.

Table 3

Infrastructural order and points of 29 countries in transportation

Country (by the order in 1974)	1960		1968		1974	
	order	points	order	points	order	points
Canada	1	51	2	55	1	58
USA	5	43	1	56	2	53
Denmark	2	47	10	42	3	52
New Zealand	11	34	3	48	4	52
Sweden	3	45	7	43	5	51
Japan	18	21	6	43	6	51
Belgium	12	31	13	35	7	49
Norway	9	36	8	43	8	47
Ireland	7	38	12	36	9	45
Australia	4	43	5	45	10	45
Switzerland	6	41	4	47	11	45
Netherlands	10	35	9	43	12	45
Germany (Fed. Rep.)	14	23	16	30	13	44
UK	8	37	11	37	14	43
France	13	29	14	34	15	43
Czechoslovakia	19	20	21	23	16	40
Finland	15	23	19	24	17	40
GDR	21	16	17	26	18	39
Austria	16	22	15	30	19	39
Italy	20	18	18	24	20	35
Poland	23	12	23	18	21	33
Greece	17	22	20	24	22	32
Romania	28	6	28	9	23	31
Hungary	22	15	22	21	24	31
Bulgaria	25	11	25	14	25	30
Portugal	22	11	26	13	26	28
Yugoslavia	26	10	27	12	27	27
Spain	27	9	24	15	28	26
Turkey	29	4	29	4	29	14

Table 4

Infrastructural order and points of 29 countries in communications

Country (by the order in 1974)	1960		1968		1974	
	order	points	order	points	order	points
USA	1	100	1	100	1	100
Sweden	2	86	2	91	2	94
Switzerland	4	75	3	80	3	88
Canada	5	74	4	78	4	81
New Zealand	3	76	5	77	5	71
Denmark	6	57	6	57	6	63
Australia	7	50	7	52	7	56
UK	9	38	9	43	8	54
Finland	11	33	11	40	9	53
Japan	20	14	14	32	10	53
Netherlands	10	34	10	42	11	51
Norway	8	50	8	50	12	50
Germany (Fed. Rep.)	13	28	12	36	13	45
Belgium	12	31	13	35	14	40
Austria	14	24	15	31	15	39
Italy	17	18	17	27	16	36
France	16	23	16	28	17	35
Greece	25	7	22	16	18	31
Spain	19	14	20	21	19	30
Czechoslovakia	18	18	18	23	20	25
GDR	15	24	19	22	21	21
Ireland	21	14	21	17	22	19
Portugal	22	11	23	13	23	17
Hungary	23	10	24	12	24	14
Bulgaria	26	5	26	8	25	12
Poland	24	8	25	9	26	11
Yugoslavia	27	3	28	5	27	8
Romania	28	3	27	5	28	8
Turkey	29	0.3	29	3	29	3

The socialist countries' position did not improve in respect of communications in these 14 years, and the ranking of some (particularly of Czechoslovakia and the GDR) even deteriorated. Quantitative growth was very moderate, it remained well below that in capitalist countries on a similar level of development, and we find even countries where growth was faster between 1968 and 1974 in spite of the fact that the density of the telephone network was a multiple of that in the socialist countries from the outset.

In Hungary growth was slow even relative to the other socialist countries. Communications is a field of infrastructure which – beside being traditionally obsolete –

developed too slowly by international standards and thus its lag, its backwardness increased.

Housing supply and equipment. The number of points and the ranking show traditionally established proportions among the capitalist countries. The favourable situation of the North-European countries is conspicuous, expressing the generally acknowledged high housing culture of these countries. As regards the socialist countries, the GDR is situated in the middle zone, while the placing of the other countries corresponds to their general position in respect of infrastructure.

The range of the points of housing supply is relatively less wide. Between 1960 and 1974 the already favourable situation of the Scandinavian countries continued to im-

Table 5

Infrastructural order and points of 26 countries in housing and equipment

Country (by the order in 1974)	1960		1968		1974	
	order	points	order	points	order	points
USA	1	94	1	95	1	92
Norway	4	86	2	95	2	90
Canada	6	83	6	88	3	89
Sweden	7	71	7	80	4	88
UK	2	92	5	89	5	88
Denmark	3	91	3	95	6	79
Belgium	8	69	9	69	7	77
Switzerland	5	86	4	92	8	77
Germany (Fed. Rep.)	10	64	10	68	9	74
Japan	11	57	13	56	10	70
Austria	12	53	12	57	11	69
Netherlands	9	65	8	71	12	68
France	13	53	14	55	13	65
Italy	16	45	11	57	14	62
GDR	14	50	16	48	15	61
Finland	17	37	18	44	16	57
Spain	15	46	15	51	17	56
Czechoslovakia	18	36	19	43	18	52
Greece	22	27	17	44	19	42
Hungary	24	24	21	30	20	39
Poland	21	28	24	22	21	38
Yugoslavia	20	30	22	28	22	38
Bulgaria	23	26	23	27	23	37
Portugal	19	30	20	34	24	30
Turkey	26	–	26	–	25	22
Romania	25	–	25	–	26	21

prove. But the most conspicuous phenomenon is the development of the socialist countries, particularly between 1968–1974. This closing up is greatest in respect of *the number of flats* which, since these are new flats, also entailed an improvement in the quality factors of supply. In this latter field however (as e.g. piped water, crowdedness, use of electric energy as an indicator of the mechanization of households), the difference between the socialist and the capitalist countries is greater (with the exception of the GDR) than in respect of the number of flats. This is also related to the fact that maintenance, and particularly the modernization, of the stock of existing older flats does not keep pace with the rate of new constructions.

Throughout the whole period the development of housing supply and equipment was fastest among the socialist countries in Hungary. Between 1960–1974 Hungary advanced by four places and no similar change can be found with any of the countries examined. But even this highly favourable development could not rank our country higher than the 20th place.

Health. The level of supply with health services was characterized by the average of the points of four indicators. The ranking and the number of points of the countries are quite different from those of either the economic development level or the whole of infrastructure.

The position of the North-European countries is the most favourable: from the first five places they occupy four. Against that, the USA take the 9th, Canada the 10th. The decline of the USA falls essentially to the decade of the fifties. The state established in North-America much later such important health programs as the majority of European countries, and social insurance is not as generally widespread, even today, as in Europe.

In the fifties and sixties the difference between the socialist and the advanced capitalist countries in respect of the health service diminished considerably. This was an expression of the great efforts made at a fast and effective improvement of health protection. The health service supply of Czechoslovakia, the GDR, Hungary, Bulgaria and Poland are nearer to the standards of the advanced West-European countries than in other areas of the infrastructure – at least in quantitative terms. In recent years, however, great advances can be discerned in the health services of Western Europe and thus the efforts of the socialist countries have not led to a considerable improvement in their relative rankings.

In 1960–1974 some rearrangement took place among the capitalist countries. The situation of the socialist countries did not essentially change, though the table suggests as if the situation in 1968 had been considerably more favourable for some countries than in 1974. But the reason is only that for 1974 we succeeded in including the health service staff into our indicators, while earlier only the number of doctors had been available. The number of doctors is outstandingly favourable in the socialist countries, but the situation is far from being the same in respect of the auxiliary staff, making their work effective. In our opinion, the indicators applied in 1974 characterize the health situation more realistically than the set of indicators used for 1968.

Table 6

Infrastructural order and points of 29 countries in the health service

Country (by the order in 1974)	1960		1968		1974	
	order	points	order	points	order	points
Sweden	1	97	1	89	1	100
Finland	15	71	2	78	2	89
Norway	3	85	9	70	3	82
New Zealand	6	82	10	69	4	82
Denmark	4	83	7	70	5	80
Japan	17	67	4	74	6	79
Australia	5	82	8	70	7	77
Netherlands	8	80	21	55	8	75
USA	10	79	17	73	9	74
Canada	14	75	13	64	10	72
Switzerland	2	91	6	59	11	72
France	18	67	20	56	12	72
Germany (Fed. Rep.)	9	79	14	63	13	71
Ireland	28	33	11	67	14	69
UK	7	81	16	61	15	67
Czechoslovakia	11	77	3	75	16	66
Austria	13	76	15	62	17	62
GDR	12	76	5	74	18	61
Belgium	16	71	18	57	19	60
Hungary	20	63	19	56	20	59
Bulgaria	19	64	12	66	21	58
Italy	22	63	22	53	22	58
Poland	23	59	23	53	23	56
Spain	21	63	26	39	24	53
Greece	25	51	25	42	25	51
Romania	24	58	24	49	26	50
Yugoslavia	27	41	27	36	27	45
Portugal	26	47	28	29	28	44
Turkey	29	12	29	19	29	32

In spite of the relatively high number of points of Hungary (59) we cannot remain tacit about such quality factors as the ever graver situation of hospitals. The long delayed development entails in this field serious social dangers.

Educational and cultural supply. The level of supply expresses the schooling of the various cohorts, the supply with teachers, the stock of TV sets and the number of books published. After World War II the importance of education, as one of the most significant conditions of economic development, came generally to the fore, and thus its development became a central task of the state. In capitalist countries the highest requirement in

training the labour force is the great trade mobility relying on high general standards of education. General economic and technological progress attribute increasingly high value to the "convertible" labour force. The most essential feature of the decisive change taken place in the socialist countries after the war was that wide social strata were drawn into secondary and higher education. Also the ratio of expenditure on education increased substantially.

These tendencies are valid in substance even today. The standards of schooling are rising all over the world. In the advanced capitalist countries, however, there are definite signs that the output of the educational institutions begins to exceed the actual needs of

Table 7

Infrastructural order and points of 28 countries in education and cultural supply

Country (by the order in 1974)	1960		1968		1974	
	order	points	order	points	order	points
USA	1	92	2	80	1	81
Denmark	10	62	3	70	2	78
Norway	12	62	5	66	3	78
Sweden	3	75	1	81	4	71
Finland	16	59	4	69	5	71
Belgium	4	71	9	62	6	69
Netherlands	13	60	6	65	7	67
Canada	2	76	7	63	8	64
Austria	6	64	10	61	9	64
UK	8	63	8	62	10	62
New Zealand	7	63	11	60	11	61
Switzerland	18	56	17	54	12	61
Germany (Fed. Rep.)	15	60	15	57	13	61
France	11	62	12	60	14	60
Japan	21	53	14	58	15	59
Hungary	17	56	18	52	16	59
Australia	14	60	16	57	17	56
GDR	5	70	13	60	18	56
Spain	27	35	25	44	19	54
Italy	20	54	20	51	20	51
Czechoslovakia	9	63	19	52	21	50
Ireland	22	50	24	45	22	49
Yugoslavia	24	44	22	47	23	48
Romania	23	48	21	49	24	47
Portugal	25	40	26	40	25	45
Poland	19	54	23	45	26	45
Greece	26	40	27	36	27	44
Turkey	28	25	28	29	28	29

society – at least in certain occupations. Democratization of learning possibilities (for which there is a strong social pressure and which is aided by scholarships of different extent and form) opens up wide chances for choosing a school and obtaining a diploma, but, of course, it cannot help in providing jobs corresponding to the qualifications. Thus the number of areas is growing where tensions usually called structural unemployment are emerging. In some countries this phenomenon is indeed "only" structural: people do not find employment in jobs corresponding to their qualifications, but only in lower ones with lower wages. In other countries unemployment emerges also in absolute terms: people holding diplomas cannot find a job, because the supply of workplaces does not correspond to their qualifications. In lack of coordination (and planning) between the needs of the economy and education, a brake is put on structural uneployment only through a mechanism working with a lag of several years: difficulties in finding employment sooner or later weaken the attraction of the schools in question.

In Hungary the planning of education which sets out from the demand for labour, the system of enrolment and entrance examinations (its method is frequently criticized recently, but its existence is not challenged) provides a possibility for avoiding "overreducation" and the deriving structural unemployment. But an optimal use of this framework is not automatic: harmony should be established between the structure of education and the future demand for qualified specialists on the one hand, and the constantly growing demand for raising educational and cultural standards on the other hand; the two can be satisfied simultaneously only at the expense of making concessions in one or in the other direction. This is no small task for rational foresight and long-term planning.

From among all infrastructural areas Hungary is placed most favourably in respect of education and cultural supply: occupying the 16th place among 28 countries.

Structural statements based on the number of points. After a review of the level of infrastructure as a whole and that of the individual areas it is justified to examine how even the infrastructural pattern of the individual countries is, or what relative dispropor-

Table 8

Indicators of relative difference in the socialist countries

Country	1960	1968	1974
GDR	4.6	3.4	2.9
Czechoslovakia	4.3	3.4	2.9
Hungary	6.2	4.6	4.2
Poland	7.8	5.6	5.4
Bulgaria	12.0	8.1	5.0
Yugoslavia	13.0	9.4	6.0
Romania	22.1	9.2	6.6

tions may be found. We tried to answer this question by constructing an indicator of relative difference. This is the quotient of points scored by some country in the areas with the highest and the lowest number of infrastructural points. The greater the value obtained in this manner, the wider the dispersion in the given country among the levels of infrastructural areas. The relationship between general economic development level and this quotient is shown in Figure 2.

In countries with a higher flow-level the infrastructural pattern is generally more even than in those with a lower level. Thus, the difference between the levels of infrastructural areas is smaller in countries where they are built out to greater extent. The indicator of relative difference is somewhat greater in the socialist countries than in European capitalist ones on a similar level of development. These ratios may come about under the effect of several different factors, and transitorily they may be even favourable for economic development or the solution of some problem; in the long run, however, they may become sources of essential contradictions. A gradual alleviation of these contradictions is indicated by the fact that the relative difference shows a definitely diminishing tendency in the socialist countries.

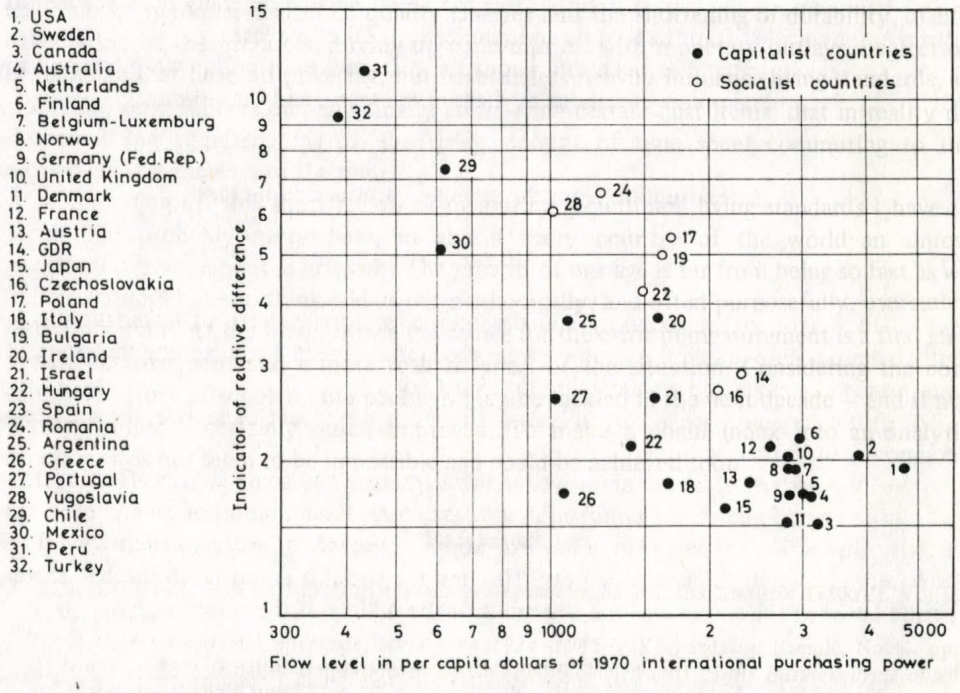

Fig.2 Interrelations between the flow level and the indicator of relative difference in 1974

Table 9

Infrastructural order and points of Hungary*

Area	1968		1974	
	order	points	order	points
The whole of infrastructure	21	34	22	40
Transportation	22	21	24	31
Communications	24	12	24	14
Housing supply	21	30	20	39
Health service	19	56	20	59
Educational and cultural supply**	17	52	16	59

*from 29 countries
**from 28 countries

From among the infrastructural areas the health service generally occupies the first place in the socialist countries, while communications takes the last.

To sum up what has been said about the infrastructural points we present in the following the general points and those by areas of Hungary, and their order.

Infrastructure from the aspect of production factors

Labour

The weight in the economy and the internal sectoral pattern of infrastructure are rather sharply illuminated if examined from the labour aspect. From among the groups of questions to be examined we are going to stress two:

a) the economic weight of infrastructure from the aspect of labour, the sources of manpower for infrastructure;

b) the pattern of labour employed in infrastructure and some factors affecting it.

The size of manpower emloyed in infrastructure. Examination of general economic activity shows that – apart from a few exceptions – *the rate of economic activity* did not or hardly change in the developed capitalist and the socialist countries in the 10–15 year period between the sixties and the beginning or the middle of the seventies.*

*At this place we cannot extend our investigations to a detailed examination of the stagnation of the rate of employment, and particularly not to presenting the differentiated causes which point towards a relative stability of this rate.

Thus, *those entering newly the labour force do not constitute a considerable source* for the expansion of employment in the infrastructure.

As a matter of fact the source can be thus the existing stock of manpower. The question arises then from what industries (from the primary or the secondary sectors) and to what extent labour flows into the infrastructure. The ratio of those employed in the tertiary sector is in a rather close relationship to the level of economic development. In the advanced West-European countries this ratio is between 45–58 per cent, in the USA 64, in Canada 66 per cent. The extent of change has been comparatively small in the most developed countries in recent years, though greater in the less developed ones. Since the ratio of agricultural employment in the developed capitalist world has already attained the minimum delimited by the natural and social endowments of the countries (4–5 per cent), the source of labour for the tertiary sector is essentially the secondary one. The ratio of the secondary sector has been unchanged in these countries in the last decade, and in the economically most developed countries it has even declined.

In the socialist countries the ratio of those employed in the infrastructure is much lower. It attains 40 per cent only in the GDR, and moves in the other countries between 28–35 per cent. But the change was considerable in the fifteen years examined and, within that, a conspicuous turn may be observed between the sixties and the seventies.

a) In the sixties the ratio of agricultural employment fell significantly in the majority of the socialist countries (the decline was smaller in the GDR, but there the level essentially corresponds to that in the developed capitalist countries). But the greater part of the labour released was absorbed by the secondary sector, not by the tertiary. The situation was different only in the GDR and Czechoslovakia.

b) Between 1970 and 1974 the tertiary sector already received labour from the secondary sector, not merely from the primary one. In fact, with the exception of a sole country – Romania – a greater part of the labour released from agriculture went into the tertiary rather than the secondary sector.

It follows that the development of the tertiary sector is closely dependent on changes taking place in the other sectors, it assumes, as it were, an essential rearrangement of the industrial structure as well.

The next table shows the extent of flows among the three sectors in seven socialist countries.

Pattern by branches of the infrastructural labour force. The employment ratio of transport and communications (henceforth: transport) as percentage of the total labour force is generally around 7 per cent in the developed capitalist countries, or rather below it, except for such countries as Norway, Australia, New Zealand where the importance of shipping is particularly great.*

In some of the socialist countries this ratio is above or near to 7 per cent, in others higher than what could be expected on the basis of the level of development. But this relatively high ratio does not indicate an actually high ratio of transportation within the

*For the development and stability of this ratio see [1] pp. 31–33.

Table 10

Flow of labour among the main sectors, in percentage of total employment

Country	1960–1970			1970–1974		
	primary	secondary	tertiary	primary	secondary	tertiary
	sectors					
GDR	–4.3	+1.3	+3.0	–1.5	+0.1	+1.4
Czechoslovakia	–7.6	+0.9	+6.7	–2.4	+1.1	+1.3
Hungary	–12.5	+9.2	+3.3	–3.1	+0.8	+2.3
Poland	–9.5	+5.4	+4.1	–3.3	+1.5	+1.8
Bulgaria	–19.8	+11.7	+8.1	–5.6	+2.0	+3.6
Romania	–16.3	+10.8	+5.5	–9.3	+6.9	+2.4
Yugoslavia (1961–1971)	–12.7	+9.7	+3.0			

Source: Statisticheski ezhegodnyik stran-chlenov SEV, 1975 Moscow, for Yugoslavia: Yearbook of Labour Statistics, ILO, Geneva, 1976.

economy, rather the fact that in these countries the technological equipment of this highly capital intensive branch is relatively backward and a part of the additional manpower is called upon to make up for this backwardness. On the other hand, behind the relatively higher employment figures we indeed do find additional transport performance. But this surplus can be attributed to the given structure of the economy, or rather to certain deficiencies of the structure. Such are:

– inherited and created conditions of the situation and location of raw material extraction;

– the transport-intensive and technologically not sufficiently up-to-date pattern of production;

– irrational transportation triggered by the frequently arising commodity shortages, and finally

– deficiencies of a not sufficiently modern organization of transportation.

The ratio of commercial employees is rising fast in the capitalist countries. At present it is 21–26 per cent in the most developed overseas capitalist countries, and about 20 per cent in the European ones. In the socialist countries the corresponding figures are very low, even at present, reaching 16 per cent only in Yugoslavia, and moving around 10 per cent in the others, or even less. This difference exposes sharply the insufficient density of the shop network in socialist countries, the transitory or lasting disturbances in commodity supply, thus an ensemble of factors which exert a considerable effect on living standards (without adequately appearing in the indicators of living standards). The pressure on trade is increased, beside the rising demands of the

domestic population, also by the sudden increase in tourism. All that makes it unavoidable to develop the commercial sector through amalgamation of the traditional and modern forms of distribution in such a manner that sources and demands waiting for satisfaction can be harmonized in the best possible way.

The other branches are extremely heterogeneous. They comprise, among other things, the health service, education, research and public administration. We may roughly say that the higher the level of economic development, the greater the weight of these in employment. But their share shows a wide dispersion, much wider than in the case of either transportation or trade. The growing share may be explained partly by the increased social importance of the activities included (e.g. the health service, or education), and partly by the relatively low technical sensitivity, the scant possibilities to increase productivity, and the related high labour intensity.

Investments

One of the characteristics of infrastructural investments is that their share in total investment is rather losely related to the economic development level. This does not mean that countries, scattered widely according to their development level, realize infrastructural investments of an identical kind and extent, but merely that their level of development is not determinant factor.*

It should be noted that the economic decline in the mid-seventies can not, or hardly, be felt in these investment ratios. Today we do not know whether the crisis did influence infrastructural investments or not.

Despite every uncertainty, inherent in the figures, the comparison of the two groups of countries shows significant differences. The ratio of infrastructural investments is 50–70 per cent in the capitalist countries while it moves between 40–50 per cent in the socialist countries.

The share of transport and communications investments is between 10–20 per cent in the capitalist countries, thus about double the share of employment. This expresses the generally high capital intensity and technical sensitivity of transport and communications. A less than 10 per cent share in investments can be found only in countries where transport and communications are extensively built out. In the socialist countries this share is between 10–15 per cent but, in view of the technological backwardness of the sector, it is lower than what would be needed for the necessary development.

*The possibilities for an international analysis of infrastructural investments are rather limited. Since the reform of the System of National Accounts the industrial classification of investments is suppressed. Therefore, the industrial distribution of investments can be established only indirectly, relying on rather uncertain estimates. On this account, there is no possibility for comparison with years where data are available only in the old system. It is also difficult to compare the investment pattern of capitalist and socialist countries because of different industrial classification. Certain tendencies are, nevertheless, obvious in spite of these limitations.

Table 11

Share of infrastructural investments in total investments, per cent (1974)*

USA	66.1	Japan	68.5
Sweden	60.8	Italy	59.3
Canada	63.5	Portugal	53.3
Netherlands	67.8	Czechoslovakia	48.2
UK	65.9	Hungary	51.2
France	70.4	Poland	41.2
Norway	59.3	Bulgaria	42.5
Finland	57.2	Romania (1963)	30.5
Belgium	66.4	Yugoslavia	51.8

*By infrastructural investments the sums invested into the sectors of infrastructure are meant. The data do not include energy, water and gas, since in the socialist countries these are included in the productive sectors.

Source: Yearbook of National Accounts U. N. New York 1976.

Investment into housing amounts to about one fourth, in a few countries to one fifth, of total investments in the few capitalist countries where this could be established. In socialist countries the ratio moves between 7–13 per cent, with the exception of Hungary, where it was 19 per cent in 1974.

Summary remarks on Hungary's infrastructural situation by international comparison

The Hungarian infrastructure is characterized even today by a lagging development relative to the general economic level and considering its progress in industrialization. But it has to be stressed that in the last fifteen years, particularly in their second half, exremely much has been done to reduce and make up for the infrastructural backwardness.

Development of the infrastructure has become an integral part of the Hungarian policy objectives. Ever since the sixties the raising of living standards has obtained an increasing emphasis in economic policy and this has an impact on several infrastructural areas, directly related to living standards. The first place is occupied by residential construction, which has particularly grown in the seventies, but quantitative shortages have decreased also in other fields – commerce, culture, the fast spread of television, the start and quick development of motoring – and there is also a certain improvement in quality. There have remained, however, grave deficiencies in other areas, such as e.g. hospital supply.

As regards the productive infrastructure, considerable progress has been made in the modernization of the road network, the first motorway of the country has been built, a modern network of filling stations emerged etc. But as concerns the whole of productive infrastructure, no considerable improvement can be reported. This fact is certainly responsible for the low level of productivity in the productive sectors.

In the late sixties both the level and share of infrastructural employment started to increase. In view of the fact that in this period the rate of economic activity (the ratio of economically active persons within the population) became already stabilized, the rising share of infrastructural employment was secured – though with various transfer linkages – by the declining share of agricultural emloyment. The growing labour demand of infrastructure also entailed that the share of industrial employment ceased to grow in the seventies.

But infrastructural employment increased – contrary to international tendencies – also in areas which are sensitive to technology (transport, communications, trade, warehousing, housing supply), though in the latter there is a greater possibility to substitute labour by capital than in other fields of infrastructure. Thus, the infrastructural areas developed almost everywhere by attracting a considerable amount of manpower, mostly from other sectors.

From the sixties onward the volume and share of infrastructural investments has been continually increasing. Up to the end of the sixties their share could rise mainly at the expense of the extracting industry, while in the early seventies at that of the manufacturing industries.

Tensions in both labour and investment are, however, considerable, in spite of the progress. In order to make up for the existing backwardness, partly a historical inheritance, for the quantitative and qualitative lag showing with incrasing strength in the course of progress, and to satisfy the new and growing needs arising in the meantime, related both to production and to living standards, considerable resources would be needed. Nor is it immaterial how we manage the existing resources or the additional ones channelled towards the infrastructure. There are indications that managament is far from being optimal. Some services have been enjoying priorities, special supports for some time. These only improved the economic situation and profitability of the enterprises in the sector in question without improving actual supply, the satisfaction of needs, to a comparable extent. No doubt, one cannot approach a considerable part of the modern infrastructure with the same requirements in respect of efficiency and profitability as in the case of the productive industries. This part of the infrastructure is not necessarily economical or "efficient" in itself, yet it renders the functioning of the whole economy more efficient. But the requirements of efficiency can be directly raised in quite a few fields, it can be demanded that the resources available should be used rationally and effectively. One of the "secrets" of the optimal development of infrastructure may be perhaps found in this distinction.

Adapting ourselves to the availability of international data we closed the analysis, serving as basis of this article, with 1974, the later years found no place in our analysis.

Annex

Indicators used in the international comparison of infrastructure

Indicator	Years in which they are used
Transportation	
length of roads per 100 km²	1960, 1968, 1974
length of roads per 100 000 inhabitants	1960, 1968, 1974
length of railway tracks per 100 km²	1960, 1968, 1974
length of railway tracks per 100 000 inhabitants	1960, 1968, 1974
share of electrified railway lines	1960, 1968
commercial shipping park per 1000 inhabitants (GRT)	1960, 1968, 1974
oil-fuelled ships as percentage of shipping park	1968, 1974
automobiles per 1000 inhabitants	1960, 1968, 1974
buses, trucks and motorcycles per 1000 inhabitants	1960, 1968, 1974
Communications	
telephone sets per 1000 inhabitants	1960, 1968, 1974
Housing supply and equipment	
inhabitants per room	1960, 1968, 1974
ratio of flats with running water	1960, 1968, 1974
household consumption of electric energy per inhabitant	1960, 1968, 1974
stock of flats per 1000 inhabitants	1974
Health	
infant mortality	1960, 1968, 1974
average expectation of life at birth	1974
average expectation of life at one year of age	1960, 1968
hospital beds per 1000 inhabitants	1960, 1968
doctors per 1000 inhabitants	1960, 1968
auxiliary health personnel per health employee with higher qualification	1968
health personnel per 1000 inhabitants	1974
Education and cultural supply	
primary and secondary school pupils as percentage of the population in the corresponding age group	1960, 1968, 1974
pupils per teacher in primary schools	1960, 1968, 1974
secondary school pupils as percentage of the population in the corresponding age group	1969, 1972
students in higher education as percentage of the corresponding age group	1960, 1969, 1972
outlays on education as percentage of GDP	1968
radio receiver sets per 1000 inhabitants	1960
TV sets per 1000 inhabitants	1968, 1973
books published per 100 000 inhabitants	1968, 1973

We could not make any international comparison in regard of the new situation and the external and internal economic troubles arising after 1974–75. No doubt, this situation somewhat restricts the scope of movement of infrastructural development and may even channel it to forced paths. But this must not mean renouncing on the development of infrastructure. The importance and place of infrastructural development has been clearly formulated in our economic policy objectives. In the new situation it is more important than ever to establish correct priorities among the many demands. It is no less important to form and spread such organizations and forms of management – not only and not mainly in the infrastructural branches, but first of all in those using the infrastructure – with which a relative maximum of infrastructural development and the best utilization of the resources invested there can be attained.

References

1. CSERNOK, A.–EHRLICH, É.–SZILÁGYI, Gy.: *Infrastruktura. Korok és országok* (Infrastructure – ages and countries.) Közgazdasági és Jogi Könyvkiadó, 1975.
2. EHRLICH, É.–PÁRTOS, GY.–CSORBA, MRS. M.–SZARVAS, P. *Fejlettségi szintek, arányok, szerkezetek* (Development levels, proportions, structures.) OT Tervgazdasági Intézet, Manuscript. 1977.
3. EHRLICH, É.–PÁRTOS, GY.: *A fejlettség inhomogenitása* (Inhomogeneity of the level of development. An experiment.) Part I and II. Gazdaság. 1979. Nos 2 and 3

ИНФРАСТРУКТУРА ВЕНГРИИ В МЕЖДУНАРОДНОМ СОПОСТАВЛЕНИИ (1960—1974)

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В статье рассматривается развитие инфраструктуры, его тенденции в международном сопоставлении за период, охватывающий полтора десятилетия (1960—1974 гг.). При этом используются данные по 29 странам (по 22 капиталистическим и 7 социалистическим). Выводы излагаются в двух разрезах: 1. на основе количества т. н. инфраструктурных очков, синтетизирующих объем инфраструктуры и строящихся на натуральных показателях; 2. на основе факторов производства, устанавливая количественный вес и внутренние пропорции инфраструктуры в отношении рабочей силы и капиталовложений.

Наряду с изучением общих тенденций особо подчеркивается анализ инфраструктуры социалистических стран, в том числе Венгрии. Синтез 23 натуральных показателей, служащих для определения количества инфраструктурных очков, свидетельствует о том, что за пятнадцать лет в порядке стран не произошло бурных изменений. Хотя количество очков социалистических стран и увеличилось, это не привело к изменению их порядка, так как за этот же период инфраструктура капиталистических стран с подобной степенью развития развивалась такими же или более высокими темпами.

Общая картина дополняется международным сопоставлением пяти важных инфраструктурных областей: транспорта, связи, жилищного обеспечения, здравоохранения, а также образования и культуры.

Рассмотрев потребности инфраструктуры в рабочей силе и ее капиталоемкость, авторы в последней части статьи обобщают выводы относительно инфраструктурного положения в Венгрии. В середине шестидесятых годов в Венгрии развитие инфраструктуры стало составной частью целой экономической политики. В ряде областей инфраструктуры (например, в жилищном хозяйстве) были приложены значительные усилия и достигнуты определенные результаты. Однако вопреки этому имеются диспропорции, которые выражаются в том, что в Венгрии инфраструктура по-прежнему следует типу т. н. «запоздалого развития».

Acta Oeconomica, Vol. (1–2), pp. 81–94 (1980)

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ON HIGH PERSONAL INCOMES IN HUNGARY

The author seeks ways for easing the tensions related to high personal incomes in a socialist society in two directions: partly in restricting the economically and socially unjustified incomes and partly in expanding the possibilities for spending the justified incomes. She discusses in detail the latter scope of problems, and within that particularly the uses having the nature of accumulation.

The average standard of living in Hungary is on the whole in agreement with the general level of her development. There exists, however, a stratum drawing amounts far higher than could be reasonably spent – at least legitimately – on personal consumption or on individual or family investments serving consumption. The consequences are spendthrift consumption and investments, evasion of the provisions of law, and the spreading of such forms of use which cause damage to the whole of the national economy. This is a relatively new but aggravating problem of this society. It follows that it has to be tackled.

In this study the term high personal income* stands not for incomes above a certain absolute amount but for a symptom with relative and subjective implications. An income containing a substantial surplus over the needs (i.e., over current consumption and investments directly serving consumption) of the individual or the family enjoying it is a high one. For example, the same income which an urban intellectual family spends with no "difficulty" and which is consequently not high might contain a substantial not reasonably usable surplus for a rural family accustomed to much more moderate circumstances and whose disposing of their income is limited by the backward service system of the village.

Most high personal incomes accrue in concurrence with professions and are enjoyed by four major categories.

1. Artists, scientists, high officials, some specialists with very high qualification and mostly when considerable extra earnings are added to salaries paid for full-time jobs. (Patent fees, royalties, performance fees, money made abroad, etc.).

2. Part of private artisans and private retailers.

*The existence of high personal incomes is extremely difficult to demonstrate statistically. It will be somewhat revealing to know that on December 31st 1977, the National Savings Bank recorded 122 000 savings deposits in the range of 100 000 to 500 000 forints and 1000 deposits of more than 500 000 forints while it is known that especially well-off people deposit their savings in more than one account.

3. Recipients of large amounts of invisible incomes. The sources of such incomes are tips and doctors' fees etc. on the one hand and payments for unauthorized (moonlighting) work done for the population (sometimes using the materials of an enterprise).

4. Part of the peasant or mixed (that is, worker-peasant, employee-peasant) households where above the money earned in the socialist sector (state and cooperative enterprises) significant revenues are brought home from household plots.

Also incomes unrelated to profession play a role in the creation of high personal incomes, mostly in the form of occasional or random receipts such as heritage, presents, etc. The importance of these increases at a fast rate along with growing welfare. Such incomes are cashed also from sales of highly valuable personal properties (apartments, other immovables, objects of art, jewels, etc.). Regular incomes unrelated to professions (from the letting of flats, rooms, holiday homes) in themselves normally do not result in high incomes as specified here, yet they may have very important complementary roles.

It is extremely difficult to estimate even the approximate number of people enjoying high incomes. Some reference is nevertheless available with respect to incomes related to profession. According to relatively recent estimates the recipients of tips and doctors' fees are in the range of half a million.* According to the data of the Ministry of Finances in the year 1975, from smallscale farmers (farming on household plots) and people with independent intellectual professions as well as private artisans and private retailers, 7 per cent of the taxpayers were taxed after 100 000 to 200 000 forints assessable income, which means more than 130 000 people altogether. These figures alone do not tell much. Obviously only some of those taking tips or doctors' fees draw really high incomes and, in most of the cases, a 100 000 to 200 000 forints yearly income was already in 1975 not "difficult to spend". It must be considered, however, that the assessment was made decisively according to the returns of those concerned and is thus downward misrepresentative, often quite appreciably. It must be also considered that these figures do not contain incomes earned as emloyees by people engaged *also* in independent intellectual work, nor do they show those receiving high incomes in their exclusive capacity of employee (leaders, experts). In view of the above it will be clear that we have to consider not some small and negligible stratum at all but one that may well be estimated at tens or rather hundreds of thousands.

The ways towards relieving the problems caused by high personal incomes should be sought in two directions: in restricting economically and socially unjustifiable incomes on the one hand and in expanding the opportunities for using incomes that may be considered as justified on the other hand.

*The medical service in Hungary is free of charge by right of citizenship, yet patients frequently pay a fee in the hope of better service. – Ed. note.

The ways of restriction

From the point of view of restricting high incomes the source and magnitude of the income are of relevance. The aim should be to eliminate incomes originating from unauthorized sources and to moderate those which, though originating from authorized sources, yet are disproportionate, through controlling the accruing of income and through expost taxation, respectively. There is no room for restrictions in case of justifiable incomes even if they are considered to be high.

Behind the outstanding incomes of artists, scientists, high officials and some *experts with especially high qualification* there normally are activities of particular value for the society. (It is also true that another part of them do not get but rather moderate rewards *for their no less valuable work.* The analysis of this disproportion is, however, beyond the scope of this study.) At the same time this income, accruing mostly from state or social organizations, is easy to control and is adequately taxed in the form of contribution to pension and of a strongly progressive personal income tax on independent occupations. Except for very rare extremities, any further restriction here is found to be inappropriate.*

The incomes of *private artisans and private retailers* cannot be controlled accurately. Disproportionately high incomes in this category can be traced back mostly to shortages in products or services and to the lack of the necessary competition.It follows that these can be curbed first of all through putting an end to commodity and service shortages and through the boosting of competition. Much more vigorous competition is required between the socialist and the private sector and, within the private sector, among individual artisans and retailers. This also necessitates to increase the number of private artisans and private retailers in certain trades and implies, as a rule, the elimination of tendencies characteristic of a shortage economy.

Disproportionately high incomes enjoyed in the private sector can be traced back furthermore to blatant laxity of taxpayers and in this context mainly to their concealing of assessable incomes. This is related to the professional and moral weakness of the control authority which has really grave impacts reaching beyond the private sector. The purity and integrity of the supervisory and control authority must be absolutely guaranteed on every level. This is a principlal issue in the present state of affairs.

The grave negative consequences of the prevalence of *tipping, doctors' fees and "grease money"* are often quoted these days in Hungary. These admittedly need to be restricted even though little is done in practice to this end. One of the reasons must be the disagreements in judging the ways of solution.

The widespread use of tips and doctors' fees is often explained with the low official remuneration for the jobs in question and so the elimination of this state of affairs is

*This is one of the reasons why the introduction of the so-called family income tax is not recommended. This would only inflict upon strata with easily assessed incomes whereas the major disparities are not in this group.

supposed to resolve the problem. In fact, only some of the jobs where tips and extra fees are paid are poorly rewarded and the official earnings of people working in these fields are not smaller than of those other categories with similar standard of qualification and responsibility and so on. The other cause frequently quoted is the shortage of goods or labour. This is also short of the truth. Tips are paid often in areas where there is no shortage or where it is artificial and has been created deliberately by those concerned. The restriction of tips and extra fees implies the raising of disproportionately low salaries and the easing of commodity or labour shortages wherever these really exist but this alone is not enough. It requires the shaping of the public spirit as well as unambiguous prohibition and in case of nonobservance also severe retaliation where the user of the service is obviously at the mercy of the seller. The asserting of the interest of the whole society or of the majority must prevail even if this runs against certain partial interests.

Giving and taking of "grease money" has been for long prohibited; only the law should be strictly enforced. It is a naive idea to think that such abuses could be brought to an end simply through the improvement of material incentives. Nobody can be paid so much as to be better off if he keeps his integrity than if he takes bribes. One cannot financially compete with corruption.

The problem of unauthorized moonlighting work ought to be judged in a different way when it is performed after working hours. Unlike tips, doctors' fees and "grease", this is a type of income originating from extra work and one needed by the population. Therefore, the first aim should be to channel these activities onto a legal path (by issuing licences) and this would in turn entail a levelling of incomes through expansion of competition and adequate taxation.

The income of peasant households, like that of private artisans and private retailers, cannot be controlled accurately. Overrestriction and limitation have grave consequences – also according to historical experiences – and endanger food supply to the urban population and raw material supply to the food industry. Work done in the household plots (of prominent significance in high peasant incomes) is going to remain indispensable and is at the same time a most tiresome activity which society should duly reward.

Restriction of *occasional incomes unrelated to profession* could be implemented in the first place through levying taxes on presents and heritages of great value as well as through skimming the profit accruing from the soaring prices of properties. The feasibility of both is however limited. (Taxation can be enforced especially in the case of immovables.)

It is absolutely necessary to restrict high incomes but it may be seen that restriction itself is limited with respect to feasibility and, in a good part of the cases, to expediency. Therefore also the other way, i.e., wider opportunities for spending, must be resorted to.

Expanding the opportunities of use

High personal incomes are partly consumed and partly accumulated. The opportunities of using them may be expanded in these same two directions.

The main purpose of personal incomes is to provide for adequate consumption. There is an approach in Hungary accepting differences in earnings or incomes but contending differences in ways of life with respect to consumption. This is an absurd idea. Once differences are allowed in personal incomes they should be allowed to realize themselves in consumption differences too. Accordingly, people having the money must be given the chance to satisfy their special consumption demands. This requires provisions for the necessary coverage in goods and services to be bought as commodities. Experiences learned in Hungary and abroad have shown that from this point of view, over and above the traditionally luxury type articles, a wider choice of products related to home culture and of services helping the intelligent spending of leisure time deserve special attention. [2] Of course the prices of the above things as well as of other commodities and services satisfying special demands of high-income strata have to contain a relatively high net social income for this way of spending to be fruitful for society as a whole.

Promoting the proper consumption-type spending of high peasant (agricultural) incomes is a specific problem of its own. It implies development of the rural service network and expansion of the local spending opportunities, along with raising the standard of the peasantry's (rural population's) cultural requirements.

The consumption-type use of high incomes has its limits. It belongs to the nature of socialism to moderate differences in incomes relative to capitalism and especially in wealth between people and on this basis the differences between the financial conditions of ways of life. Under these circumstances people are extremely concerned about great differences in consumption or ways of life. This is the outcome in part of the notion of social and human equality in socialism and in part of the rapid approximation of the standards of demands of various social strata, the higher schooling standards and the significant social movements that have taken place. In Hungary before the war, when society was much more closed and the different strata were much more powerfully segregated, also consumers' demands were more differentiated. A workman or peasant wanting to imitate the way of life of the capitalist or the landlord and assuming the latter's consumption and way of life as his direct ideal should have been considered positively crazy. But now, when the chairmen of cooperative farms and general managers come from their relations or neighborhood, also the so-called "simple" families want to follow them directly or using the term of sociology: the two levels of aspiration have come next to each other.*

*"In socialism relations between strata are stronger, the different strata are more strongly interwoven and get nearer to each other also with respect to consumption habits. This process of approximation is enhanced also by technical progress, by improvement of the means of communication, industrialization and the service network."[3]

The blatantly lavish ways of life of certain strata or groups has unfavourable social and political impacts. It provokes wide discontent and unrealistic demands and, accordingly, defective forms of misbehaviour. The wasteful spending of certain strata is harmful also from the purely economic point of view. *Therefore, expansion of the opportunities for using high personal incomes cannot be kept within the bounds of the sphere of consumption. It should be made possible for part of them – and in my opinion a bigger part of them than at present – to return to the process of reproduction.*

Along with increasing welfare an ever growing part of personal incomes is put aside and accumulated. This is the only way for an individual to come into possession of valuable estate and effects and to establish a safe financial status. The savings of the population, again, are utilized by the whole society,* and the entire national wealth is enriched by immovables and effects owned by individuals. Moreover, above a certain ceiling greater opportunities of only current consumption are no longer stimulating. The incentive power of opportunities to build up reserves and to accumulate is also needed. That is, society has to encourage a way of life aspiring after solid accumulation as against lavish spending. (The conception spreading in the postwar years and especially in the United States and claiming that waste was advantageous for the economy because it was a precondition tc a high level of production and employment was proved to be wrong also with respect to the capitalist world.) This postulate does not seem to assert itself in this country. High-income families already possessing the allowed amount of immovables are rather driven towards spendthrift consumption. We are facing here an extremely difficult task and dilemma of the socialist system that has attained a relatively high level of material wealth: *to combat wasteful consumption in a way that at the same time trends towards excessive opulence are controlled.* A question suggests itself: what is the way of easing the problem under the present circumstances through expansion of opportunities for accumulation-type uses of incomes, without risking the socialist establishment of society, what is the way of feeding back into the reproduction process incomes that can be no longer spent reasonably on consumption?

Some of the accumulation-type uses of personal incomes will be studied from this point of view hereunder.

Forms of accumulation unrelated to profession

Savings deposit is the basic form in which the people's income is accumulated. The rate of savings is known to be higher on higher income levels, the better-off strata set aside a higher percentage of their income. It can be seen, however, and it is also backed up by foreign experiences [4] that this holds only up to a certain limit. The saving

*The voluntary savings of the people mean voluntary renunciation of a part of current consumption which helps the expansion of social accumulation, productive or not productive, or the expansion of social consumption.

propensity of individuals or families has a point of "satiation". When the amount saved approaches this point, the ratio of the amount saved relative to income (the savings rate) does not increase any more. In Hungary the average amount of savings is estimated by experts to correspond to the average income level. But this average correspondance most probably hides bigger amounts of savings than what many people could really afford and at the same time relatively small savings (deposits) of people with outstanding income.

A major impediment to the increase of deposits of high-income people is the rate of interest which compensates for only part of the price increases, or the fear of the latter. (In this respect it is not the general price level that counts but the price trends mainly of those goods and services at which the saving is directed. And the building industrial and real estate prices increase at a much higher rate than the average price level.) By this circumstance the formation of short-term deposits is not retarded but that of long-term ones, a special concern for society, is. At present in Hungary the highest rate of interest on deposits is 6 per cent p.a. paid on a time deposit left untouched for at least three years. A kind of longer-term time deposit with suitably higher interest rate should be made possible and this would ease the problem.

The system of *private insurance* and in this context the system of personal (life) insurance is also suitable for engaging part of the high incomes.* Even though our social insurance scheme is comprehensive and is of higher standards than in many economically more advanced countries, it is capable of satisfying only part of the just demands of the people. Fuller satisfaction requires the people's own funds, too.** For example, a retired elder understandably wants more than to satisfy his primary demands: he also wants to continue the way of life he has been accustomed to and also to keep pace with the general improvement of welfare, while he is burdened by special costs owing to his failing health. However, our pension scheme cannot meet these expectations for a long time ahead. The problem could be partly resolved or at least eased*** through an appropriate pension-complementing insurance which mainly the higher income strata can afford. Also the other kinds of personal insurance (against disablement, illness, death, etc.) could find wide room with these strata. These forms of insurance would mean that free assets are engaged really durably, for some long term, and through the profit accruing also the resources of the budget would be increased. However, the scheme of private insurance (personal insurance) has not been given its due place yet. I suppose the main reason is, besides other minor factors, the lack or poorness of a mechanism hedging these forms of insurance against the climbing price level.**** One ponders whether the magnitude

*By private insurance I mean the types of non-compulsory insurance but in the framework of the national insurance scheme.

**The question arises whether "on the present level of development of social care and self-care, and under the changing financial and income circumstances, self financing should not be involved into the solving of certain social problems to greater extent." [5]

***A similar solution was devised by Zs. *Orolin* [6] but in the framework of the national scheme of pensions. The difference has only technical implications.

****At present the State Insurance Enterprise, similarly to the Pension Institute, increases the amounts of various allowances by 2 percent a year.

of payable amounts could be in some way linked to the changes in the consumer price index? The proposition to increase the amount of benefit at an annual rate according to a preliminary agreement between insured and insurer (in this case the insurance premium would be also progressive) is also worth of consideration.

The hoarding of *valuable effects* (objects made of rare metals, objects of art, antiques, etc.) has been since early times not only a fancy occupation but also a traditional way of preserving values. Owing to the accelerated rise in price levels this function has become especially meaningful these days all over the world. In Hungary there are additional specific circumstances such as the restriction on immovables a person may own. The investing of part of the high incomes into this sort of effects is advantageous for the whole of the economy when they are traded by official commerce and when the state has sizable net income from the various taxes and duties. On the other hand, the appreciation of such effects can be easily withheld from taxation as it is not always possible to follow up their transfer (nor, in some cases, their exportation from the country).

In Hungary the possibility for a continued hoarding of objects of arts and antiques diminishes. Namely, they are hard or impossible to multiply, a fact that lends them their value. And most of the really precious effects have already "settled" in private ownership and have stiffened into treasure. The owners are not, nor are they predictably going to be, short of money. Therefore they cannot be expected to come to the market as sellers. At the same time, because of great demand also in foreign markets, importing meets growing obstacles. For this reason the volume of turnover in objects of art will most likely decrease along with rapid price increases. (Else, the market of rare metal objects and jewels has shown this same trend since the early seventies.) Supply is going to be smaller and smaller vs. invariably high demand and this strengthens the speculative tendencies. [7]

Building of holiday homes. The building of weekend or holiday homes is in most cases not motivated primarily by accumulation strivings but is often encouraged by such and by profitability considerations. This is especially true for the popular holiday areas.

The building of tourist and holiday accomodations from private funds is a national economic concern. For example, it normally does not pay to build state holiday hotels on Lake Balaton which would be run for three months a year. At the same time, according to provisions of the law in force, a family may own only one holiday home limited also in its dimensions to be more or less suitable for one family. The inconsistency is usually solved by people in command of more money by building unlawfully big houses through different kinds of manipulations and then letting part of them either legally or frequently illegally, i.e., by avoiding the tax office. But this solution is hardly a desirable one,* Today paying guests, especially foreigners, prefer the hotel-type suites and would pay for such ones. Also the rapidly shrinking area of building plots and the economic consider-

*The other chance is given when the family lives in a (state-owned) lease. It may namely buy or build a property which is qualified as flat but which can be utilized as a holiday home.

ations of infrastructural investments stand for big habitation complexes of the hotel type. Whereas once a family has only a one-room apartment in such a habitation complex, it has depleted its legitimate claims for an own holiday home. Perhaps it could be allowed that a family should own besides a weekend home for its own recreation also a holiday suite for the express purpose of letting it in a hotel-type holiday house provided that they duely let it to the tourist organizations as stipulated by the actually effective rules and pay tax after the revenue accruing therefrom. This way the state, too, would get its due share. But in areas where circumstances do not justify the building of so big hotel-type houses it might be expedient to permit the building and properly controlled running of smaller private boarding houses also for touristic purposes. Thereby, in addition to the useful engagement of "capital", also the utilization of the labour power of persons who cannot be employed elsewhere, e.g. elderly people, could be also sponsored. This has already led us to the problems of accumulation related to profession.

In *housing* private capital should not be given more room than it now has. Possession of an adequate home is the primary need of every family and individual and it falls absolutely in the sphere of competence of society to care for this need. Private construction or purchase of houses for the purpose of letting is impermissible. Owing to physical limitations, this would not make the housing cicumstances better, but would let some people draw big unearned incomes and under the influence of supply and demand conditions it would necessarily lead to usurious rents.

Accumulation related to profession

In the above such forms of accumulation of high incomes have been treated which do not depend on the type of work or profession of a person. The ways that feed back the saved incomes into the reproduction process linked to the profession appear to be even more promising. In certain cases these also promote a higher efficiency of work.

Investments into private small scale industry and private retail trade. In Hungary the activities of private artisans and private retailers are necessary, the general preponderance of the socialist sector notwithstanding. The setting up or development of such shops are obvious investing opportunities for people working in the corresponding trades. In capitalist countries the small producer is pressed by competition to regularly spend a significant share from his net profit on the modernization and development of his shop. Here he is not forced to, on the contrary, it would often run against his interest and he is not in a position to do so: investments in this sector come up against legal and physical barriers (those of procurement). Of course it is not possible to lift every barrier in this field, we cannot give free way to capitalization. But in many fields it may be to the prupose to somewhat amend the system of regulations and to render the limitations of law more flexible (such measures have been taken recently), as well as to improve the supply of artisans with materials, parts and machinery. In this context the latest initiatives and experiences of other socialist countries e.g. Poland should be studied.

It seems that private activity and along with it private funds could be involved into some branches of the non-productive services, something that has been almost lost from sight up to now. Properly qualified people could be given licences e.g. to open private nurseries, kindergartens, day-time homes (for school children), and even private boarding houses attending old people. From these, only private nurseries exist now in very small number although such demands are enormous and such solutions would ease the burden of the budget as well.

The lessee system can also help channelling the accumulated funds of people back to production. But this system is not as widespread in Hungary as it should be and, besides, it is often realized in ways which do not need the lessee to command any capital of his own. This ought to be changed. Today in Hungary the lessee system is used in retail trade and in the catering trade but it could be extended e.g. to the running of gas stations and passenger transport by (taxi) cabs.* It has been found that shops run under the lessee system are capable of transacting the same turnover with much fewer staff and are consequently more lucrative than the other types.**

Setting up industrial and service cooperatives of a new type. Small factories and small enterprises are mostly missing from the Hungarian economy. Neither the private artisans nor the cooperatives nor the state enterprises subordinated to councils are able to successfully perform that function. We seem to need small enterprises with 10–20–25 employees, with modern equipment for independent industrial production and services which should be capable of instant adaptation to the changes in demand and of promptly satisfying buyers' demands. (The viability of such enterprises is particularly obvious e.g. in the building industry, in home maintenance and in repair and fitting services.) In my opinion cooperative enterprises of a new type would suit the purpose the best.*** These small-size cooperatives would be given much economic independence. The necessary capital would be contributed by the members themselves who would be at the same time the workers of the cooperative. The members' income would be directly dependent on the enterprise's performance. But unlike the case of existing industrial cooperatives where the "investment contribution" of the members was an act that took place only once at an early date (namely, when the cooperative was formed and the members contributed their equipment, tools and perhaps materials) here, for promising investments, it could be put on the agenda all over again. The due share society should receive in the form of taxes paid would be guaranteed by efficient running and easier checking than in the case of private workshops. The working out of the concept of this type of cooperatives naturally needs to be further studied.

*Franchising is in capitalist countries an approximative counterpart of the lessee system. Gas stations and car dealers have been run under this system for a long time. See: K. Szabó [8].

**For details of the situation of the private and lessee sector and its principal aspects see I. R. *Gábor*'s treatise on the so-called second economy. [9].

***A. *Hegèdüs* and M. *Márkus* raise in their article the need of agile and adaptive small enterprises run in the form of joint enterprise but do not specify the type of the joint enterprise [10]

Development of household plots and auxiliary farms. Significant interests of the national economy are attached to the promotion of production in agricultural household plots and auxiliary farms. This naturally requires steady modernization of farms. Experiences indicate that if appropriate financial incentives are maintained the owners of the household plots and auxiliary farms will be willing to make more investments into their farms. This way a part of the high incomes and funds accumulating with these strata can be engaged, too. Of course the necessary physical coverage (machines, equipment, materials sold freely) must be also made available.

The idea suggests itself whether the peasantry might not contribute with their individual funds to the development of the common cooperative farm? It seems reasonable to have this contribution not as a one–time act when the cooperative is associated but as a standing and renewing element of copartnership. Such recommendations have already been made, mostly to the effect that the cooperative farmers should grant credit to the cooperative against fair rates of interest.* This could at the same time help overcoming the not at all rare paradox of "poor cooperative – rich membership". But the raising of loans from members has been very narrowly used. The main reason is that its centrally specified order (the rate of interest etc.) is strictly adjusted to the terms of the National Savings Bank. But this formal equality covers a substantial unequality. The secrecy and security of repayment of the Savings Bank cannot be assured by any cooperative however strong and well organized it may be. The cooperative statutes do not permit at all the issuing of share vouchers that would entitle the holder to regular income. This can be traced back to caution against any socio-political tension. Ways should be nevertheless found for utilizing a part of the well-to-do cooperative members' personal incomes so as to accelerate at the same time the development of the cooperative and without adding to socio-political tensions. (E.g. it has been raised to pay back the credits extended by members voluntarily to the cooperative mostly in their old age as pension supplement.)

State stock share and bonds. It has been a recurring idea that state enterprises could issue shares to their workers with the purpose of thus increasing their financial resources. This seems to be unfeasible. The share manifests shareholder's rights and is therefore incompatible with the nature of state ownership. It would not be right if individuals could become co-proprietors of certain state enterprises.** Otherwise, as only a negligibly small number of employees of state enterprises have high incomes, this isn't of any substantial importance from the viewpoint of the subject of this study.

*"The development requirements of cooperative farms their different kinds of financial difficulties, as well as the limited state resources and the increasing prices of investment goods have highlighted the money savings of cooperative farm members as potential sources of credits (and loans)." [11]

**"It follows that the introduction of shares that manifest co-parthership rights is incompatible with the principles concerning the ownership of the means of production, and with the principle of distribution according to work." [12]

The bond type of security, which only manifests the creditor's right and is not issued by a company but usually by the state, is a different thing. In this country most unfavourable experiences of the past are associated with the notion of state bonds: strong pressure to subscribe, no redemption before maturity etc. But these symptoms need not accompany it. On the contrary, voluntary subscription and redeemability before the date of maturity are necessary criteria of securities which in such cases are very near to savings deposits engaged for the long term and so the relation to the work done or to the place of work is missing.

*

The accumulation-type uses of high incomes as outlined above may help in replacing the unreasonable or unlawful ways of uses by more sensible and legal solutions which should also improve the efficiency of the national economy. But most of these ways are also laden with inconsistencies and imply that the wealthy become still wealthier and that also unearned incomes may result. The resulting wealth, once justified by the acute need to check conspicuous and wasteful cunsumption, can be translated at any moment into still more extravagant and lavish consumption. The already discussed and known ways of restrictions, the fostering of competition, adequate regulation and taxation may considerably mitigate this danger. It is especially important to repress the impact of financial differences upon young generations, upon the offsprings. But at the same time other ways of using incomes which are free from these inconsistencies and which are moreover suitable for partly compensating them must be also resorted to. Such a way is the spending of incomes on altruistic purposes.

Altruistic uses

The public-purpose and altruistic use of high personal incomes or accumulated amounts of money is a rare thing in this society as yet. Under capitalist conditions it is not unknown at all. Systems of various charity and public endowments and funds widely exist in capitalist countries. In the first decade of our socialist development there was a halt in this field. In part, very few people could afford it, and in part, the old way of charity discredited itself and no positive and new type of approach evolved. Mutual distrust and lack of understanding prevailed. In the last decade some slight progress has been shown. Today the different private endowments for social and cultural purposes, scholarships and cultural and material assets donated for public purposes amount in Hungary to several thousands. Still this does not play an appreciable role in engaging the high incomes and in the accumulation of money. The grants are from artists, scientists and devoted people filled with local patriotism, most of them modest rather than well-to-do people. The endowments are in the range of 100,000 to 200,000 forints, bigger amounts are rare, although this way of use would perfectly suit the purpose. It may fortunately

link community interests with certain individual ambitions, with the statisfaction of understandable and laudable human aspirations. Most people wish to support a noble cause while gaining acknowledgement for themselves too, or making themselves or their beloved ones remembered. Both the sphere of endowers and the types of endowments should be extended and this institution should be popularized in the genuine meaning of the term. Instead of "fancy fences" of wrough iron or marble vaults why should not a marble plate carrying the endower's name on the wall of a university, school, nursery or hospital become a status symbol?

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The objective of this paper has been only to raise some ideas. I find it the most important conclusion that solution is not a one-way street but one has to go along more than one parting or sometimes apparently crossing streets. None of these can stand for another one.

References

1. VENYIGE, J. Mrs. MOLNÁR: *Adalékok az egy főre eső jövedelmet meghatározó tényezők vizsgálatához* (Contributions to identifying the factors determining per capita incomes.) Munkaügyi Kutatási Közlemények, 1978. No. 1. p. 178
2. HOÓS, J.: *Az életszínvonal és az elosztási viszonyok fejlesztése* (Development of the standard of living and the distribution relations.) Társadalmi Szemle, 1978. No. 10
3. RADNÓTI, É.: *A jövedelmek differenciáltsága és a belkereskedelem feladatai* (Differentiated incomes and the tasks of home trade.) Kereskedelmi Szemle, 1978. No. 4, p. 2
4. FRICKE, D.: *Das Sparen in Spannungsfeld der Bedürfnisse. Eine Kritik der Sparfunktion.* Wirtschaftstheorie als Verhaltenstheorie. Berlin, 1969. Duncker und Humblot. p. 51
5. SZABÓ, I.: *A biztosítás feladata a szocialista társadalom szociálpolitikai céljainak megvalósításában* (The task of insurance in the accomplishement of a socialist society's socio-political objectives.) (Dissertation.) Budapest. 1978. p. 39. Mimeo
6. OROLIN, Zs.: *Nyugdíjrendszerünk továbbfejlesztésének lehetséges iránya* (A possible line of development of the pension scheme.) Közgadasági Szemle, 1978. Nos. 7–8. pp. 825–830
7. HORTOBÁNYI, G.: *Az értéktárgyak lakossági felhalmozásáról* (On the accumulation of objects of value by the population.) Kereskedelmi Szemle, 1977. No. 10
8. SZABÓ, K.: *A bolygóvállalatok – a kiscégek beépülése a tőkés nagyvállalati rendszerekbe.* (Satellite enterprises – the fitting of small companies into capitalist systems of big enterprises.) Közgazdasági Szemle, 1974. No. 9
9. GÁBOR, I. R.: *The second (secondary) economy.* Acta Oeconomica Vol. 22. Nos. 3–4 (1979), pp. 291–312
10. HEGEDÜS, A.–MÁRKUS, M.: *The small entrepreneur and socialism.* Acta Oeconomica Vol. 22. Nos. 3–4 (1979), pp. 267–290
11. FEKETE, F.–KŐVÁRI, M.: *Új vonások a szövetkezeti tagok és a közös gazdaságok pénzkapcsolataiban.* (New features in the financial relations between cooperative members and common farms.) Közgazdasági Szemle, 1973. Nos. 7–8. p. 896
12. RIESZ, M.: *Pénzforgalom és hitel* (Money circulation and credit.) Tankönyvkiadó, Budapest 1969. p. 322

О ВЫСОКИХ ЛИЧНЫХ ДОХОДАХ

К. СИКРА—ФАЛУШ

Смягчение проблем, связанных с высокими личными доходами, автор ищет в двух направлениях. С одной стороны — посредством ограничения экономически и социально необоснованно высоких доходов, а, с другой стороны, — путем расширения возможностей использования считающихся обоснованными доходов. Более подробно автор останавливается на последней проблеме, в первую очередь на вопросе использования, носящего характер накопления.

Из форм накопления, независимых от осуществляемой индивидуумом деятельности, она рассматривает проблематику сберегательных вкладов, индивидуального страхования, тезаврации ценностей и строительства дач. Из числа возможных форм накопления, связанного с осуществляемым им занятием, автор останавливается на проблеме капитальных вложений в кустарную промышленность и торговлю, системы аренды хозяйственных заведений, создания кооперативов нового типа в области промышленности и услуг, развития приусадебных и вспомогательных хозяйств, предоставления членами производственных кооперативов кредита коллективному хозяйству, а также государственных акций и облигаций в социалистическом хозяйстве. В заключение она останавливается и на возможности использования высоких личных доходов для альтруистических целей. Автор приходит к выводу, что решения проблемы высоких личных доходов следует искать не в одном, а одновременно в нескольких, причем, возможно перекрещивающихся направлениях.

Acta Oeconomica, Vol. 24 (1–2), pp. 95–109 (1980)

T. LAKY

THE HIDDEN MECHANISMS OF RECENTRALIZATION IN HUNGARY

In 1968 Hungary wished to break away from the practice of controlling enterprise activities by direct instructions. However, in recent years – in spite of declared principles and intentions – a continuously intensifying recentralization process has been observable in economic control activities. The article presents a multitude of examples to demonstrate the mechanisms hidden in the internal system of the economy leading to recentralization. Forces arising from the interaction of ideological, political, economic and organizational factors influence economic control increasingly, thus it chooses, from the alternatives of instructions and incentives, ever more often the former.

The 1968 reform of the system of economic control and management, following the warning sign of constantly reproduced economic difficulties, was based primarily upon the realization that in a country with such an open economy as Hungary, a strongly centralized control acts as a brake on the flexible and efficient functioning of the economy, for a complicated system, as the economy of a country, is impossible to control in all details by means of central instructions. A more successful functioning of the economy was expected from changes of the principles and practice of control, and primarily from a considerably increased enterprise independence. Therefore, efforts were made that in economic control direct instructions should be increasingly replaced by automatisms created through economic regulations and affecting enterprise interests – mainly that in profit –, and the latter should prompt enterprises to an economic behaviour desirable for the national economy.

And yet, surveys drawn up on the occasion of the 10th anniversary of the reform almost unanimously referred – beyond the appreciation of results – to the insufficiency of theoretical and practical changes in control, what is more, to an intensification of centralized methods of economic control, i.e. to the existence of a recentralization process.* They pointed out what we have been finding in recent years to a growing extent, instead of the desired enterprise independence ever more questions are decided by central organs; and direct intervention into the functioning of the economy and of enterprises has become a general practice.

This situation is characterized first of all by innumerable orders, instructions, prescriptions and guidelines issued primarily by sectoral ministries which prescribe in detail the various tasks of enterprises as well as the methods of execution; by direct intervention into enterprise planning in order that the expected success indicators should

*See e.g. [1, 2, 3].

be "produced" (at least on paper); by the proliferation of allocations, quotas and licencing proceedings often suppressing or even neutralizing the automatisms of economic regulations; by the general occurrence of exceptions and individual judgements crossing regulations at various points and based upon bargains about supports and levies.

Recentralization has been strengthening continuously for years in Hungary, certainly influenced also by the international economic situation, despite the fact that it is an expressed effort of the party and government organs to maintain and perfect the reformed system of control. It is strengthening even though today several undesirable consequences of centralization are already felt. Beyond the failure to start any definitive changes in economic processes in order to ward off the numerous foreign economic difficulties, the natural phenomena accompanying the dependence of enterprises on central organs have necessarily grown in number. Looking at it only from the side of enterprises: to the extent as resources are growing scarcer with enterprises and are accumulating with the centre, and as "quotas" (import materials, export restrictions, etc) and prescriptions are growing in number, enterprises will turn their attention rather to the control organs and less to market tendencies. Considerable energies are consumed at enterprises by supplying data for the centralizing control, as well as by administration of various affairs and making contacts with the higher authorities. At the same time, enterprises rely on control organs, expect initiative from them, and shift responsibilities unto them for the situations arising.

I cannot prove my assertion numerically (and I am afraid it cannot be proved with figures at all, since it is first of all the suppression of the *qualitative* factors of economic control that ought to be presented), but I do think that *the overall spreading of interventions having the nature of direct instructions does not help to achieve socio-economic aims – contrary to its assumed effects – but rather hinders it.* (One example: import restrictions on the one side, and the obligation of enterprises to the domestic market supply on the other side narrow down the possibility of changing production activities, conserve the given product pattern, prolong the standstills of production and the shortages of supply to consumers.) And, if the centralization process cannot be stopped and reversed, we can expect an intensification of already obvious disadvantageous effects, and even the appearance of new ones, to the extent of further centralization and its necessary concomitant. That is what makes it necessary to try to reveal, what factors lie behind the intensification of centralized management methods, i.e. the undesirable process of recentralization.

In the following I shall try to outline a few such factors and analyse their effects. Since the interrelations involved are much too complicated, the analysis can be but strongly simplified. Besides, I shall deal only, one-sidedly, with a few aspects of control and management, and even with those exclusively from the point of view of the given socio-economic environment and of organization sociology inferring the jointly determined functioning of economic organizations.

Factors to be considered as determinant can be divided practically into two large groups: external and internal ones.

External factors will be referred to only for the sake of completeness and without attempt at analysis, even though they often get the greater emphasis in discussions and evaluations. The reason is that those who refer to them usually do not distinguish exactly the role of external factors in the *economic problems* of Hungary or in the development of *economic control.*

In the *economic* problems of Hungary a determinant role is played undoubtedly by the inevitable and inexorable *external* process which is called, in a simplified manner, the beginning of a new era in world economy. This expectably long-lasting process, full of unforeseeable conflicts, demands continuous adjustment from national economies. Particularly the medium- or less developed countries poor in primary energies and raw materials have to face hard conditions. Yet I do not consider the pressure of the need for adjustment – i.e. the struggle to overcome the difficulties owing to world market depression, the rise in prices and deteriorating terms of trade – as a factor necessarily strengthening the recentralization of Hungarian economic control. I think, namely, that it is *exactly the need for adjustment that might encourage to take the other way: a greater independence of economic units,* mobilization of economic reserves, and the development of management methods promoting initiatives for economic actions that would improve results.

Of course, the spreading of control based upon direct instructions is affected by external factors, for example, the differences between the economic control system of Hungary and that of other socialist countries. Since most of our *economic* relations are established in the form of *interstate* contracts, agreements and conventions, this involves inevitably *central* instructions and acts toward strengthening central control. This effect is, however, presumably much smaller than it is often presented in explanations for recentralization.

And, though external factors are not negligible, I shall now analyse but *internal ones.* In my opinion, these operate as "hidden mechanisms" *always driving toward centralization, independently of the economic situation or of the intention of those in control.* By hidden mechanisms I mean the interaction of such ideological, political, practical, economic and organizational factors, *whose ensemble has a strong influence on the choice between the two means of control: instructions and incentives.** I shall underline only two of the intricate and in fact inseparable interrelations: 1. the limited extent to which economic objectives and instruments can be planned; 2. the system of economic organization. I shall use their example to present the functioning of the hidden mechanisms of recentralization. Several of its elements have been described by others as well as by myself. Therefore, even if at a few points I shall have to repeat myself, I shall make an effort to lay emphasis on the less known interrelations.

*Of course, the fulfilment of instructions may also become an interest; this is what Max *Weber* calls "interest tied to obedience". Yet the main point of instruction is that it releases action through dependence, while interest replaces mere obedience by economic or other incentives or constraints.

Economic objectives

The basic function of economic control can be formulated in the following: its task is to *indicate* the *concrete,* short and long-term *economic* objectives and tasks corresponding to the socio-political efforts formulated primarily in the ideological-political sphere, and to provide for their fulfilment. We shall point out two characteristics of the objectives that are essential from the aspect of our subject:

a) One characteristic of the *concrete objectives* existing parallel with each other and belonging to a wide range of socio-political efforts is that they are *hierarchically arranged:* to the objective considered as the most important and most comprehensive one a multitude of partial objectives are subordinated. (I agree with Róbert Hoch [4] who explains in detail that one of the most important and permanent socio-political efforts is the raising of the living standards; which is itself only a means and condition of creating the socialist way of life.) The most important efforts are expressed as actual objectives in the targets of the five-year and annual plans, and innumerable sub-objectives are subordinated to each objective, from changing the economic structure to the amount of investments and from housing to personal incomes.

In this way we have to do in fact with a complexity of interwined *chains of ends and means;* the ends of a lower level serve at the same time *as means* to achieve ends of a higher level.

b) The concrete social objectives (e.g. the yearly growth rate of the economy providing the foundation for the living standards) appear for economic units partly in the form of actual tasks laid down in their own plans (profit plan, sales plan, etc.), and partly in that of general requirements, i.e. expected ways of actions (e.g. the permanent improvement of quality, labour-saving developments, more efficient management, etc.).

Inconsistency of ends

Harmony of the ends and means, on all levels are a basic conditions of the fulfilment of the ends as well as of the expected efforts. Yet an ideal harmony exists only in abstract theories. *In reality, consistency can be but relative in every actual functioning socio-economic system.*

Of course, what is desirable from the point of view of a harmonic development of the economy is that the ends, i.e. the chains of ends and means, should involve the least possible number of contradictions and the least possible sharp ones; sharp contradictions question the feasibility of the objectives. *A certain extent of inconsistency exists, however, necessarily in every functioning economic system.* Therefore, the ensemble of the existing ends can be consistent but in a declared form – as efforts which are in various stages –, but not in reality.

In Hungarian economic practice there exist also several more or less contradictory ends, neutralizing each other, together with short or long-term inconsistencies.* There is a conradiction, for example, between the requirement of greater enterprise independence and the increased extent of central allocation of resources; between the efforts at an abundant domestic supply of goods and the desired improvement of the balance of payments; betwen extension of training of skilled workers and the efforts at applying more up-to-date technologies requiring first of all semi-skilled labour etc.

Contradictions exist for many reasons. They are often caused by external and unforeseeable circumstances as are for example the international processes. The necessity of adjustment to them may lead to various changes and contradictions between ends and in the chains of ends and means. The situation is similar in case of unexpected internal troubles in the economy (e.g. the warding off of the various consequences of a long-lasting drought may cause contradictions in the original export-import objectives, high fruit and vegetable prices again in the planned wage measures, etc.). Contradictions may arise also from the wrong conceptions and inaccurate assessment of the situation by the economic control agencies. And unforeseen conditions (i.e. the necessity of adjustment to them) as well as an inaccurate assessment of the situation will only strengthen the several inconsistencies existing organically within the system of objectives.

The essential internal inconsistency of ends and of the chains of ends and means arises in fact from the contradiction between the various co-existing demands of society and economy, of individuals and communities, and from the relative scarcity of available means. This cannot be bridged over even with the best planning techniques (at the most on paper). We have already recognized the technical limits *of how far something can be planned.* One of the most important factors stimulating the introduction of the new system of economic control and management was exactly the recognition that in an infinitely intricate system, functioning according to many kinds of and not sufficiently known mechanisms, as the economy, the complexity of the chains of ends and means, the degree of fulfilment of oner or another element, and the consequences of their changes slower or faster than expected can be planned but approximately, with more or less inexactness, even with the aid of models and computers. Therefore, planning can undertake – particularly in a few years' perspective – to indicate only the main directions, neglecting minute details. It is, however, even a more important fact than obvious technical constraints that, as we know already today, behind the technical process of planning there are conflicts and reconciliations of interests. That is, "planning" is not simply the process of clearly and rationally arranged algorithms, but that of the assertion of various interests (in everyday usage: the "plan-bargain"). Thus, which of the widely different possible strivings will become declared or real objectives depends itself on the development of interests and power relations, more exactly, on the ability to assert these interests.**

*Internal contradictions are treated e.g. by R. *Nyers* and M. *Tardos* [5]

**L. *Antal* presents in his study [6] realistically the accelerating and widening series of direct interventions in the 1970s.

Because of the limited possibilities of planning lasting or transitory contradictions necessarily exist both "horizontally": between objectives of the same level, and "vertically": within the chains of ends and means. If, however, the chains of ends and means can be planned but to a limited extent, instructions for their implementation should also be used only to a limited extent. Namely, instructions, while trying to resolve the currently felt contradictions, usually produce new ones, and sometimes worse ones than were those they were intended to eliminate. (The already "classical" example: prescription of the wage level may help to control the growth of income, but it is *the same* that hinders the release of superfluous labour from enterprises, and a reasonable labour economy excluding the formation of surplus labour. Or, import restrictions may help to reduce indebtedness, while the same causes troubles in production and, consequently, in exports, etc.)

A direct intervention at one or other point of the chain of ends and means – in itself promising to be even useful – will usually necessitate other interventions and corrections at other points, as has been proved in practice; in this way it leads inevitably to further inconsistency, and to an accelerating rotation of new interventions aimed at resolving them.

When the increasingly obvious contradictions begin to be felt, the political management is usually expected to state its preferences, i.e. to decide, which of the contradictory objectives should be implemented, and at the expense of which other ones. (E.g. the temporary curbing of living standards and investments with a view to improving the balance of payments, etc.). It is then in accordance with current preferences that new measures are brought, and ever more often in the form of instructions.

But why do always instructions come to the foreground and why are exactly these chosen for an instrument? Why do they permeate the system of regulators to such extent that in the end we arrive at a system of "breaking down" the regulations"?

Interest orientation: constraints on bringing about an agreement of interests

From the widely different and declared (occasionally preferred) objectives of the national economy those will be fulfilled which are made obligatory for the communities affected (and where sanctions are applied in case of non-fulfilment), or, which coincide with the group-interests of the communities.*

*In everyday economic usage in Hungary *obligatory* prescriptions are usually identified with direct instructions, and *interest orientation with indirect control asserted through the system of* regulators. I use the expressions in this sense myself, though it is obviously a simplification, since what is obligatory is not necessarily direct, and a number of elements of the system of regulators contain obligatory prescriptions (e.g. the obligations to pay taxes and to build up reserves). In this context, however, I think that the less precise everyday usage is permissible, for what matters is only the distinction between the direct and indirect ways of control and management.

Although an economy can be operated for some time even merely by means of instructions (e.g. war economies, plan directive system), it has become quite obvious that the rigid restrictions act in reality as brakes on efficient functioning. The efficient mode of economic control consists first of all in influencing and orientating interests, and, in this way, in bringing about of automatisms based upon agreed interests.

Everyday experience proves that the objectives expressive of the interests of society as a whole are fulfilled even without instructions, if the partial interests of the smaller or larger groups of those affected agree with them (partial in comparison with society as a whole); such may be: industrial location in the country, the continuous raising of enterprise profit, the achievement of full employment, etc. On the other side: typically those objectives are not fulfilled, in which there are no or not fully enough agreed interests between those setting the objectives and those affected. (E.g., in spite of a multitude of measures and orders, no positive result has been achieved with enterprises in eliminating "unemployment on the shop-floor", or in manufacturing cheap products, etc., since in the given situation these are contrary to enterprise interests, and to the already constrained profit incentive.) Such conflicts cannot be eliminated with other methods (persuasions, etc.).

Instruction-like elements come to the foreground in control when and where reconciliation of interests is impossible (e.g.taxation; taxes must be prescribed always and everywhere), or, where the orientation of interests is complicated and difficult. It is generally and characteristically the latter that causes problems.

In a number of fields the possibility of creating interest is rather limited. First of all because intervention into the factors determining the existing interest relations can be but limited; essential factors cannot be changed but at the cost of grave functional disturbances of the economy. (E.g., to make enterprises interested in reducing their staff, one possible way is to change the whole wage-system: to render labour so expensive that it should be worth applying up-to-date technological equipments, etc. All that would have, however, much too far-reaching effects: from changing the price and wage proportions to changing the system of vocational training.)

The conditions for changing the interest relations can be established as a rule but gradually, through continually shaping several factors. Besides, the two different – but only simultaneously utilizable – systems of instruments: the desirable and complex systems of incentives and brakes (in other words: of rewards and sanctions) is also very difficult to establish and co-ordinate. (I use the words "incentive" and "brake" in a very wide sense. I mean thereby, as regards their substance, economic regulators, but I put under the term "incentive" all the advantages and rewards which stimulate those affected for the desirable actions, from granting preferences to the various forms of financial, moral and social recognition; and under the term "brake" I put all the restrictive and coercive measures which hinder actions deviating for or contrary to what is desirable, from loss of favours to financial and moral "penalties" and to legal actions.)

There are two characteristic problems in the practical establishment of the theoretically possible complex interest orientation system: a) selection of the possible instruments and b) the use of these instruments.

a) The *eligible instruments* of interest orientation represent, as a matter of fact, one of the greatest problems in our social system: the method and extent of individual financial incentive in the framework of planned economy.

The increasing of enterprise independence is desirable first of all in order that *initiative* should gain ground, i.e. the search for new possibilities (new markets, new products, new techniques) and the taking of reasonable risks in their interest. Yet initiative and the risks involved need some *incentive.* Professional ambition may act generally as incentive for a few persons, yet in the wide sphere of those taking part in economic actions it has been *throughout personal financial success* that proved to be an effective incentive.

At this point, however, we have arrived at the questions *of social values.* As we know, personal financial success is one of the determining elements in the system of values of capitalist societies. This is the accepted indicator of success, the socially sanctioned measure of *individual* and as such, it is the primary basis of social recognition and prestige, of adherence to a certain social group and of the way of life expressive of this adherence. Therefore, the effort at financial success functions as *a general individual interest-orientating incentive,* and is *in itself* a sufficient motive power of enterprising, efforts at efficiency, and risk-taking, all counting as virtues in the sphere of economy. That is why, among other reasons, the capitalist state can content itself with interventions into the main processes instead of into details; it has to create "only" the financial incentive for the preferred objectives, (i.e. *the same* incentive which constantly functions in the whole economy.) But *the same* incentive involves also other things: permanent social tensions arising from economic inequality, the distressing accompanying phenomena which are borne with such great difficulty by every society recognized for its advanced economic results.

In the Hungarian economy it has been also undoubtedly material incentive that has proved to be so far the most efficient (as is shown by the general demand for higher wages and incomes, the profit motive, the bonus system, etc.). Other incentives, such as the various forms of moral recognition (decorations, titles); and social recognition (making an example of somebody) have much less incentive power.

The question is, whether we should dare go on, and how far, in material incentives. Don't we have already groups of people with extremely high incomes offending to the public opinion, while the permanently difficult situation of some other social groups – pensioners, and those with low incomes – is still a concern for society.* Does the economic result achievable through greater material incentives not endanger *social values,* further intensifying social inequalities and tensions arising therefrom? The question is fully justified, and raises far-reaching further problems: the socialist model of the

*It is remarkable what *K. Szikra, Mrs. Falus* has to say on the subject. [7]

way of life, etc., the contents of which have by far not yet been clarified. In our opinion, the dilemma behind a decision for or against the interest-orientating incentives is that in Hungary, quite understandably, no such intensive and general incentive – similar to efforts at financial success – can be asserted as in a capitalist economy, but we have not yet found the desirable extent of material incentive, or, instead of its exclusiveness, methods of other incentives of similar efficiency, such as the modes of moral incentive or job statisfaction.

In the Hungarian economy individual financial incentive cannot be separated from the collective methods of incentives. The problems of collective (enterprise) incentives are known (conflicts between enterprise objectives, and those of the national economy, the limited profit incentive of enterprises, the constraints in utilizing enterprise profit, etc.). The desirable solution has not yet been found. Since the methods of either the individual or the collective material incentive do not thus adequately orientate interests towards a more efficient functioning of the economy, the lack of agreement of interests leads inevitably toward the "simpler" solution and results, instead of looking for incentives, in decisions on instructions. Yet, while fear from the incentive of the capitalist economy (and, together with it, from the strengthening of market elements in the economy) is justified, awareness of the danger of control through instructions is much less related to the effects, though we know from our own experience that it leads to disturbances of the economy, to smaller results and, finally, to the frustration of social objectives.

b) The further problems of the incentive instruments and of brakes so far used are concerned with the mode of application. The majority of the general problems are well known.

Part of the interest-orientating instruments used in Hungary today do not orientate enough (not even the financial incentives), because in the regulators burdened with too many compromises even at the start, and with a view to improving their real or assumed deficiencies, corrections are too frequent, and so are amendments of earlier incentives (e.g. in export-import activities), and even contrary interventions are made before they could exert their effect at all. (The practice of the past ten years offers ample illustration. One typical example may be the curbing of investment activities, then their encouragement. Investment activities were curbed when, under the effect of an earlier regulation, the progress already reached a stage of slowing down. Owing to the new effect, it was braked to such extent that stimulation became necessary, which was again followed by the need to slow down. Similar examples are provided in agriculture: by the fast changing incentives of sugar beet production and livestock-breeding.) And, though interventions are made – or postponed e.g. the "letting in" of the multiplier effects of the world market price explosion of 1973–74 – with the best of intentions, the apparent illogicality and meticulousness of the changes hinder enterprises in formulating a consistent enterprise policy.

The judgement of *enterprise activities* represents a special problem. In qualifying enterprises and managers, i.e. in their rewards and penalties depending thereupon there is too much of the accidental. It was typical of earlier times that "expectations" towards

enterprises changed too frequently. Now it was employment, then export activities and then again the plan fulfilment of the volume of output that superior authorities considered to be of "primary importance" and demanded of enterprises; today a dozen of equally important expectations exist from stocks to the schedule of deliveries. Of course, expectations cannot be given once and for all and their changes do not depend on the calendar year. The change – though dependent upon the tasks following from the economic processes – is based primarily on the opinion of those on the control level: what is judged to be the "most important" thing at the moment. Besides, in judging enterprise activities, numerically measurable expectations and subjective judgements mix in a particular way. This is to a certain extent inevitable, for it is difficult to judge the fulfilment of the many kinds of simultaneously existing expectations and to appreciate the satisfaction of the various requirements, even in themselves, while it is almost impossible to do that in their complexity (e.g., by how much efficiency has grown). Therefore, judgement is usually narrowed down to one or another expectation considered to be the "most timely", or, reducing the sphere even more, to those numerically measurable. This method – very similar to the practice of the plan directive system – allows free scope to subjectivity, i.e. to judgements depending on the bargaining position and motivated by personal sympathy or antipathy. While enterprises formally receive recognition or penalty according to the monetary satisfaction of the frequently changing "important" expectations, rewards and penalties depend, in fact, usually on the bargaining position of the enterprise (its ability to assert its interests).*

However, the existence of expectations towards enterprises, the judgement of fulfilments, and the possibilities of rewarding and penalising are only *symptoms* of the situation in which it is *not* the *expectations of the economy* that enterprises perceive and it is not *the economy* that qualifies their activities, but there is an "intermediary" superior authority coming in between the economy and the enterprise: the sectoral ministry which is to know *"ex officio"* everything better about economic process than do enterprises. This leads us, however, over to the problems of the organizational system, which will be treated in the next section.

Finally, on the subject of interest-orientation, we must add that the selection and application of instruments stimulating or braking the various social actions want a special care in socialist economy, owing to the particular features of its social organization and economic system. For it is exactly the weight of the task and in case of lacking agreement of interests *the difficulties of reconciling interests* that involve one of the hidden mechanisms of recentralizations: the taking of administrative measures guaranteeing the desired actions, and efforts at control through instructions. Yet the means selected have their consequences. All of them entail also non-desirable effects.

*My earlier article discussed the matter in greater detail. [8]

The organizational system of economic control

The factors deriving from the given organizational system of economic control and leading to centralization will be analyzed from two aspects: first those originating in the sub- and superordination relations of the organizational system and then those attributable to partial interests.

Relations of sub- and superordination

Since I have explained my position concerning the organizational system in several papers [8, 9], here I shall sum up only the main elements necessary for understanding.

Today's hierarchical organizational system of the Hungarian economy was established at the time in a manner exaggerating the necessary and possible extent of planned economy; in accordance with the requirements of a strictly centralized management, conceived as most rationally functioning and comprising all economic processes. Theoretically, it was meant to achieve that instructions determining the operation of the economy should be conveyed through clearly defined channels from central organs to enterprises and possible feedbacks should go upwards along the same lines.

The basic scheme of the organizational system has remained practically unchanged to this day, though it underwent several formal changes of more or less importance during past decades.

The organizational system of hierarchical structure can be considered – in an over-simplified scheme – as having three levels.* The upper level is that of the highest party- and state organs (Central Committee, the Council of Ministers) and their specialized *executive apparatuses* functioning in the form of corporations and committees. At the second level there are – though not "equal in rank" – the National Planning Office, the functional and sectoral ministries, as well as other national organs and supreme authorities. At the third and lowest level of the organizational hierarchy are the enterprises. (The scheme could be improved in many different ways, yet our subject wants only a rough sketch of the hierarchy.)

For us the most important characteristic of the hierarchy is that *it expresses dependence, i.e. relations of sub- and superordination.*** Since those on the lower level are obliged to carry out the instructions of the superiors, centralization, i.e. an arbitrary extent of centralized control is inherent in the organizational system. This is not changed by the circumstance that – exactly with a view to the efficient management conceived – enterprises at the lowest level are concentrated into fewer units now, and in this way,

*In this form the scheme has been taken from the article [10] by M. *Tardos*.

**The essential features of the organizational system as a "model" of Hungarian economic mechanism in which enterprise activity is determined by sub- and superordination were described in detail by J. *Kornai* [11] almost twenty-five years ago.

getting into a monopolistic position, they have grown increasingly capable of asserting their own interests, forcing control organs into bargains.

The 1968 reform of economic control and management in Hungary brought a fundamental change in the functioning of the organizational system: with the elimination of plan directives direct instruction-like relationships ceased to exist between sub- and superordinated units. Yet the organizational system was left intact, even though the necessity of its changing did arise at the time. In the end, for various reasons, and hoping that the reform can be successful even without changing the organizational system, no important changes were made in it. This is one of the reasons, why – though in a changed form – dependence appeared again between sectoral ministries and the enterprises belonging to them.

The revival of the formally changed but practically old control practice is proved daily by innumerable phenomena. In the old system of directives enterprises had to draw up reports on the progress of plans, the size of stocks, supply data on wages and staff, etc, at regular intervals. *The same* indicators are today asked for by most of the ministries, though not with the old regularity but by letter, telephone or telex, according to the "urgency" of the information. Sectoral ministries implementing instructions and meeting expectations themselves take an active part in preparing the enterprise plan: they state their expectations as regards exports, stocks, and profit, etc: they allocate "quotas"; they permit and prohibit; they issue instructions as well as "guiding principles" (e.g. for the development of enterprise organizational work, information on the future need for various machines, proportion of the non-manual staff), and, as supreme authorities in the owner's right, they reserve for themselves the right of decision in a number of questions (e.g. in investment activities). The ministries intervene in the distribution of most of the resources to be allotted to enterprises, and their opinion is decisive – unless the enterprise has good connexions at levels superior to the ministry. All that – together with the other spheres of action of the ministry, such as the right of appointment and dismissal of managers and other higher enterprise executives – puts the enterprises into such a position of dependence which, together with other factors, hampers the development of the desirable enterprise independence.

Partial interests of the organizational system

As every organization, the organizations at the different levels of the control and management hierarchy have a wide range of deviating and agreeing interests. At this point I shall concern myself only with the partial interest of the organizational system i.e. its interests *in maintaining* the given management system.

The *phenomenon* shown by everyday experience is e.g. that the sphere of intervention of sectoral ministries in Hungary is today at least as wide as it was under the plan directive system. One of their strongest supporting pillars is, however, the fact that – beside their own interests – their wide-scope and intensive functioning is today also in

the interest of the higher control level and of the enterprises. For the higher level their existence facilitates to a certain extent – just as earlier – control, survey, implementation of economic actions started at the top, and assessment of the effects of interventions. And there we are again at the accelerating "spiral": the greater the number of interventions, the more the higher level control agency wants survey and information for corrections which are again interventions. And the sectoral ministries having direct contact with enterpires are suited for promptly collecting data to offer a comprehensive view and for promptly transmitting requirements. And though it is in the fundamental interest of enterprises to become independent of the ministries, in the given situation the enterprises themselves need the existence of the sectoral ministry – to the extent the centrally controlled allotments and resources available only through the ministry are proliferating. (Import quotas, export credits, investment funds, wage corrections, etc.). While enterprise interests are in sharp contrast with the interests of ministries in many respects, as for the acquisition of resources, their interests are perfectly identical. And enterprises are sure that ministries do their best in order that the enterprises of the sector receive the maximum available amount from the central resources.

Beyond that, organizations consist of people, and the interests of the members of the organization. (Of course, the interests of the organization express primarily those of the ruling group i.e. of the executives.) As in every organization, it is in the interest also of the people working in the organizations of economic control that the organization (as their basis of existence) shall survive; and it is also in their interest that the weight, role, social importance, power and decision sphere of the organization shall increase. This is at the same time a condition of their growing financial and social recognition. It is in their interest that the organization should have a smoothly running administration, stable systems in relations of internal activities and information, more exactly, their change in one direction: to expand the spheres of authority. Therefore, the interests of *every* unit at the control levels of the organization – thus integrated into a *common* interest – are working against breaking up the organizational structure. With a change as could be brought about e.g. by cutting out the sectoral ministries the established systems of activities and relations would disintegrate. In the remaining organizations a number of activities would have to be carried on in a different way, which might perhaps necessitate other kinds of abilities and knowledge, etc. Such change would personally affect the members of the given organizations; therefore, maintenance of the *status quo* is among the basic group interests in every unit of the control levels. (The existence of the common interest is not changed by the fact that every organization has, at the same time, its own particular interests, different from and sometimes clashing with those of other organizations. It is the particular interest of a sectoral ministry – clashing with that of other ministries – that the weight of its own sector in the economy should be increased and, with this in view, the production capacity of the sector should be expanded and modernized, and the necessary central resources acquired. The possibility of asserting such endeavour – which is related primarily to the problems of the interest asserting ability of those at the highest control level, not discussed at this place – decides to a great

extent the formulation of economic objectives, the proportionate or disproportionate development of sectors; but it does not weaken the interests shared in maintaining the control system.)

All that means that the organizational system cannot be expected to propose its own reform or break-up: this would be opposed to its own interests. A change can be initiated and decided only by an external force i.e. the superior political power.

What can we do in the given situation? Can the well-established processes be stopped, and is further centralization preventible? In the given conditions, is it possible to assert the original objectives of the reform of economic control and management based on enterprise interests and independence? Even a rough description of the complicated interrelations shows that measures based upon a very resolute and uniform principled conception are needed to stop and reverse the already intensified processes and to eliminate or only to neutralize the factors affecting recentralization. As a matter of fact, the delicate balance of the combination of planned economy and market elements (which has not even been brought about yet) is always likely to swing back more easily toward control through instructions. The well-founded worry about the market elements – or rather about the intensification of their undesirable social effects – take us into the same direction. Besides, centralization and control through instructions will always be the easier way to take and the control apparatus will always have enough arguments to justify the necessity of direct intervention.

But, in order that we can have a chance at all to assert the original conceptions of the reform serving a more efficient management, and to avoid the well-known dangers of both centralization and of the undesirable socio-economic consequences of market economy, the situation necessitates well-considered and resolute changes, at least where action is possible.

Today we know to what extent the spheres of action are delimited, and possible steps jointly determined. For example, the opinion is widely spread – I share it myself – that the transformation of the organizational structure of economic control is one of the necessary conditions of a fundamental change in control *methods,* of the elimination of instructions resulting from dependence and thereby of the transformation of the interpretation, functions, and spheres of actions of both the "lower" and the "upper" levels. The loosening up of the hierarchical sub- and super-ordination of sectoral ministries and enterprises would at the same time eliminate one of the permanent threats of centralization, and the lack of the "direct superior" could be a pledge for enterprise independence.

However, lest the transformation of the organizational system should lead to grave troubles in the economy, elimination of the affected organizations is not enough – even if implemented with the greatest care and only gradually. A number of other conditions must change at the same time, from the role of economy-wide plans to price and profitability relations affecting enterprise intentions, and from marking out the spheres of economic regulators to accepting their effects.

All this renders timely again the clarification of a number of old and much discussed social problems of the Hungarian economy: e.g. the questions of enterprise,

income proportions, the protection of interests of the workers, and the representation of interests of the workers, and the representation of interest of communities – all full of contradictions and affecting the basic values of society. Certainly, we cannot answer them from one day to the next, yet, instead of circumventing them we must try to assess the conditions of changes together with the desirable and undesirable effects. This is a common task of practical experts and scientists. A methodical creation of conditions depends, naturally, now and in the future on decisions jointly shaping economic and social relations.

References

1. FRISS, I.: *Ten years of economic reform in Hungary.* Acta Oeconomica Vol. 20. Nos 1–2. (1978) pp. 1–19/ BEREND, T. I.: *Ten years after – Instead of a balance sheet. Ibid.* pp. 45–62
2. NYERS, R.–TARDOS, M.: *Enterprises in Hungary before and after the economic reform.* Acta Oeconomica Vol. 20. Nos 1–2. (1978) pp. 21–44
3. HOCH, R.: *On long-term planning in Hungary.* See in this issue.
4. NYERS, R.–TARDOS, M.: *What economic development policy should we adopt?* Acta Oeconomica. Vol. 22. Nos 1–2. (1978) pp. 11–31
5. HÉTHY, L.–MAKÓ, Cs.: *Munkások érdekek, érdekegyeztetés* (Workers, interests, reconciling of interests.) Budapest, 1978. Gondolat Könyvkiadó. pp. 160–168
6. ANTAL, L.: *Development with some digression.* Acta Oeconomica. Vol. 23. (1979) Nos 3–4
7. SZIKRA, K., MRS. FALUS: *On high personal incomes in Hungary.* See in this issue.
8. LAKY, T.: *Enterprises in a bargaining position.* Acta Oeconomica Vol. 22 (1979) Nos. 3–4 pp. 227–246
9. LAKY, T.: *Attachment to the enterprise in Hungary. Societal determination of enterprise interest in development.* Acta Oeconomica, Vol. 17. Nos 3–4. (1976) pp. 269–284. – LAKY, T.: *Érdekviszonyok a fejlesztési akciók vállalati döntési eljárásában* (Interest relations in the decision process on development actions in enterprises.) Gazdaság, 1976. No. 4. – LAKY, T.: Érdekviszonyok a vállalati döntésekben. (Interest relations in enterprises decisions.) Budapest, 1978. Candidate's thesis. Manuscript. – LAKY, T.: see [9].
10. TARDOS, M.: *A gazdasági verseny problémái hazánkban* (Problems of economic competition in Hungary.) Közgazdasági Szemle, 1972. No. 7–8
11. KORNAI, J.: *Overcentralization of economic administration.* Oxford, 1959. Oxford University Press. 236 p.

СКРЫТЫЕ МЕХАНИЗМЫ РЕЦЕНТРАЛИЗАЦИИ В ВЕНГРИИ

Т. ЛАКИ

Как известно, в Венгрии в 1968 г. была изменена прежняя практика управления экономикой, основанная на непосредственно определяющих деятельность предприятий директивах. Однако за прошедшие годы — несмотря на декларируемые принципы и намерения — в управлении экономикой все более усиливается тенденция к рецентрализации.

В статье на множестве взятых из хозяйственной практики примеров показываются скрытые во внутренней системе экономики и ведущие к рецентрализации механизмы. Порождаемые взаимодейст-

вием идеологических, политических, экономических и организационных факторов силы вынуждают руководство экономикой из двух видов средств управления — директив и заинтересованности предприятий — все чаще выбирать директивы.

Одна из главных причин выдвижения на первый план директивных методов управления состоит в том, что до сих пор не удалось найти соответствующих способов стимулирования, заинтересованности предприятий и правильно пользоваться такими стимулами. Поэтому, когда нужно разрешить неизбежно возникающие большие или меньшие противоречия между различными общественно-экономическими целями, то руководящие органы за отсутсвием нужных стимулов прибегают к приказным методам управления. Проводить такие предписания в жизнь позволяет сохранившаяся организационная структура, созданная для задач директивного управления, включая отраслевые министерства, интересы которых связаны с сохранением прежней практики управления.

Большинство факторов, вызывающих рецентрализацию, нельзя упразднить по желанию. Остановка и проворот этого процесса требуют постепенных, целенаправленных изменений.

Acta Oeconomica, Vol. 24 (1–2), pp. 111–124 (1980)

K. LÁNYI

ENTERPRISES, MARKETS, COMPETITIVE SITUATION

An attempt to describe the environment of enterprises

The article discusses the enterprise environment of enterprises, phenomena that are peculiar precisely to this environment – the sphere of enterprises. The article is of theoretical character: it tries to define such notions that enable us to describe the environment of enterprises.

In recent years the attention of Hungarian economists interested in enterprise researches has again been concentrated on interrelations between enterprises and the state.

For example, Márton *Tardos* [1] enumerates all those state agencies pursuing various specific objectives with which a good enterprise management has to establish harmonious contacts in order to be able to carry out their everyday work without hitches. Mihály *Laki* [2] analyzes in detail, through several examples, the frequency and forms of bargaining between the state and enterprises, the various tools available for both parties for convincing each other about the necessity of introducing a new product or technology, promoting the realization of some goal or compensating for eventual losses. The author attributes an important part also to the flow of information as well as to mutual interest and readiness which may help the state to select the adequate partner-enterprise, or, conversely, the enterprise to choose the action or state initiative interesting for it.

In one of her recently published articles Teréz *Laky* [3] calls the bargaining between enterprises and agencies of economic control and management an irrational product of the management system and the related system of organizations. She notes, however, that the bargaining position of enterprises examined by her was characterized by quite different tools, than those mentioned by János *Kornai* [4] twenty years ago when he had defined the notion of plan bargain and these tools were used by the enterprises for other goals in the second half of the 1970s.

What happened in the meantime? Is there any sphere of the economy where the forms of reconciliation and enforcement of interests attached to bargaining, obtaining information and continuous readiness directed towards the other party are most authentic and from where they can be derived? We think there exists such a sphere and it is precisely the sphere of enterprises itself that makes inter-enterprise relations appear in these forms. If the same ones can be observed also in relations between enterprises and their controlling agencies, this phenomenon can be regarded sometimes as the result of borrowing, but mostly as that of substitutive operations.

We are in the particular situation that we have witnessed in Hungary a relatively rapid and spectacular rearrangement of relations among enterprises for some years since 1968. This process offered a lot of precious things to be observed also for researchers. A comprehensive sphere of phenomena has developed and taken definite shape so to say before their very eyes whose comprehensive and interrelated character is generally left out of consideration by economic theories, while its individual elements are discussed either in isolation or attached to other phenomena.

The economic environment in which contemporary Hungarian enterprises are working is made up of several elements. It seems to be correct to distinguish out of these elements especially the environment of enterprises made up of other enterprises. It may be assumed that the examination of this environment independently of the others may provide new knowledge concerning the functioning of the entire economy apart from being interesting in itself.

Some questions of approach

Production and distribution may take place in the enterprise organization also in such a way that the enterprise is nothing else but a unit recognized as legal entity subject to directives and obliged to report, the lowest grade in the hierarchy of plan-addressees and responsible for plan fulfilment, while it has no kind of informative or interest relations with the other enterprises. On the other hand, if we consider the enterprise only as an organizational framework of material transformation taking place in the economy, and acknowledge none of its roles except that it is bearer of partial tasks connected with material transformation which can be and by themselves are separated from each other then mutual informative and interest relations of enterprises may be interpreted as if they met only the specific needs of organizational form. However, most of the enterprises always try to develop these relations so as to designate, enforce and, if possible, even improve in the meantime their position against the other enterprises.

Enterprises themselves more or less take notice of this as an economic fact produced by their environment and their own activity that has to be reckoned with; but those in control of the economy do so much less. They are much more often surprised if it turns out that the success or failure of control and management measures depends not only on the cooperation intention or refusal of an enterprise medium, but also on the interrelations among enterprises within this medium – and therefore these often disturb them.

The economic environment of enterprises consists, of course, not only of enterprises. Consumers, employees (the labour market), the state power, state administration, economic control and management organs are all very important individual elements of this economic environment. It should be noticed, however, that this wider environment affects a given enterprise more or less through the enterprise environment, in the form of gestures of enterprises and information obtained from or on enterprises, so to say filtered through the enterprise medium and often modified accordingly.

An enterprise has to enforce its own decisions, just as those made on the basis of some external initiative, in an enterprise environment: among its buyers, sellers, suppliers, cooperating partners, real or potential competitors. Each important or unimportant technological development has to make its way through enterprise strategies, conquering of positions or withdrawals; enterprises have to carry out and also endure innumerable small market actions, have to attack and to compromise until a central development project is realized or any small change takes place in the sectoral structure or enterprise size.

This approach may be good only for an economy where at least the following three conditions are ensured: 1. The level and kinds of activity of enterprises are not prescribed by plan directives of obligatory validity; the enterprise may change its sphere of activity within certain limits. 2. Relations between enterprises are not prescribed by obligatory directives; the enterprise may select the sphere of its buyers and sellers within rather loose limits. 3. There are no frequent or arbitrary reorganizations; an enterprise that is qualified viable, in the sense of criteria of economical functioning known and accepted by the enterprises, may itself decide on fusion, amalgamation, etc. within the legal frameworks.

If these conditions are fulfilled, then the enterprise environment of enterprises is determined by the character, quality and kinds of inter-enterprise relations. We shall thus speak in the following about relations among enterprises, and that from the aspect how they appear in elementary economic actions of which, after all, economic processes are made up. As it will turn out, our investigations concern rather the subject of market theory than that of the theory of the firm, more precisely the marginal area of these two disciplines. We are not likely to make too serious a mistake by neglecting this time a discussion of such central notions of both theories as ownership, economic control and management by the state, efficiency of management, prices. Their role exceeds the effect exercised on relations among enterprises and, on the other hand, the latter cannot be fully explained by means of these notions alone, either. From our viewpoint it seems to be the most important that the "exchange of human activities" obtained its present form mostly in enterprise organizations and thus the enterprise system has become one of the major bearers of social relations of production in the contemporary economy. Therefore, it embodies (makes obvious) and, at the same time, also develops these relations both by its general character and by its specific aspect. Among other things even inter-enterprise relations appear as primary social production relations determining elementary economic actions to the same extent as other, better recorded kinds of production relations.

Enterprise relations

The various and complicated relations to be found among enterprises in Hungary at present do not lend themselves easily to systematization or generalization. Already at the very beginning some simple notions in congruence with practice are needed which can be used to describe as exactly as possible economic processes directly traceable back to the

existence and activity of enterprises. It is not absolutely necessary to accept a notion as an exact one only if it can be directly quantified. It is a justified wish, however, that by means of our notions such phenomena should be defined which can at least be observed. A further requirement is that these notions should be possibly usable for the description of market forms of any kind, or, in case of necessity, also for a comparison of market forms to be found under the circumstances of socialist and capitalist economies, respectively.

Because of the requirement of observability the most proper method seems to be if the reasons of enterprise actions, i.e. enterprise motivations, are left out of the argumentation. This will also entail that the entire issue of profit motivation can be left out of our investigations. Profits will thus appear not as an objective, but as an elementary vital condition of the enterprise. From this viewpoint the ways and measure of earning profits have to depend not only on the own efforts of the enterprise but may be dependant also on the economic environment and institutional system that regulate the working conditions of enterprises and to some extent even ensure them.

For the sake of simplicity, and because this will probably cause the least misunderstanding, we shall consider in the following that legal entity as an enterprise which has an enterprise status according to the legal rules in force. The totality of enterprises is called *enterprise environment.* In this environment the following relations of enterprises may be mentioned: 1. information and publicity relations (uni- or bilateral ones); 2. bargaining relations (realized or possible or failed contracts): 3. readiness (stand-by) or observation relations (competitive relations, follow-up reactions).

By information relations the parts of business promotion and advertising utilizable from the viewpoint of obtaining and giving information, i.e., usual business information, collection or supply of data are meant.

By contract bi- or multilateral contracts or agreements are meant if they are (or may be) concluded between enterprises. A contract is always the result of bargaining and may be subject to various conflicts, no matter whether concluded or not.

By readiness (stand-by), or observation relation it is meant that all or only certain actions of one of those being in such relationship involve the necessity of decisionmaking for the other (or others). (The pressure for decisionmaking may be also one-sided in the relations: leader-led, ideal-follower.)

From the above three types of relations the ensemble of information (1) and bargaining (2) relations gives the usual relations between buyers and sellers; that of information (1) and readiness (3) relations gives the relations between competitors, furthermore between those on the market or wishing to enter into it, between leading enterprises and those led and, in certain respects the relationship between ideal and followers. The ensemble of bargaining (2) and readiness (observation) relations (3) shows the existence of cartels and similar structures, horizontal and vertical integrations.

Market as a system of relations

The ensemble of all those enterprises with which an enterprise realizes at least two of the above types of relations constitutes one or more markets of the given enterprise. (In some cases also some consumer or small-scale producer layers of the population and certain institutions have to be ranked here.) We consider, therefore, the ensemble of enterprises as a concrete system of reference constituting a market in their quality that they may establish and maintain such relations with each other.

The notion of market is usually not defined, but regarded as an intuitive notion, despite the fact that in their descriptions from various viewpoints authors use it in different senses. The validity of the definition given here will extend obviously to nothing else but to processes to be observed in an enterprise environment, that is, by market we mean here precisely this. Our definiton makes sense since it comprises markets of monopolistic, monopsonic and oligpolistic organization as special case, furthermore those which are usually described in the literature in cross-sectional and "market transparence" investigations and process descriptions, i.e. markets observed in reality until now and examined also with empirical methods. The difference between usual descriptions and ours lies in the circumstance that when we define the market by means of the existence of a system of relations, then the presence of market forms mentioned before, what is more, even that of enterprises displaying most varied activities, including also conglomerates, may be discussed in the framework of a uniform system of notions. Namely, it was assumed that the market, of which our enterprise is a part, could be examined from various aspects and thus was made up of various markets. On these markets, which can be distinguished from each other according to various viewpoints of investigations (product, sector, independence of enterprise decisions, organization, institutions, habits, etc.) very great differences can be observed precisely with regard to the viewpoints of these investigations, but the types of the systems of relations are presumed to be the same on all markets.

If we pick out from this system of relations the enterprise and some of its markets, then the density, existence or lack of relations, the way of their maintenance, the fact what gains or losses will result from them for the enterprise examined, and whether the relations themselves can be changed by the enterprise or not, will all largely determine the *position* of the enterprise on the given market. Most enterprises are participants on several markets simultaneously and have some position on each of them. These positions may strengthen or weaken each other depending on whether these partial markets – formed either according to some technological order (producer-contractor-investor, producer-purchaser-processor-seller, producer-seller-maintainer, etc.), or to some administrative, economic control and management point of view – are linked or not in some really existing larger market, and if they are linked, at which step it is found of the weakest or strongest position of the enterprise. In this way the enterprise will acquire some position for itself on a smaller or bigger market. In the widest sense it may have a position in the environment where it may still be reckoned with as subject of comparison or following: this may be an entire national economy, perhaps the world market or a part of it.

Forms of market relations and the position of enterprises

The position of an enterprise on the market as interpreted in the foregoing is called *competitive.* The ensemble of interrelated and expedient actions and behaviours through which the enterprise tries to improve or at least maintain its competitive position are called *forms of competition.*

Historically the origin of competitive positions can be traced back to the development of inter-enterprise relations and, accordingly, of markets determined by the systems of relations.

It seems to be proper to remind readers that from among the three main types of relations it was the information relations that were most defective in Hungary in 1968 when the new system of economic control and management was introduced. Several enterprises published their lists of products and prices for the first time only thereafter, started to make a survey of their real and potential buyers and sellers and to gather data at least on what they produce, what services they render and at what prices. Advertising and publicity activity became more vivid as well, mainly in technical literature with strongly informative contents. Temporary commodity exchanges, sales offices functioning for a shorter or longer time, bulletins serving mainly advertising purposes were created and functioned with the aim to bring together buyers and sellers or at least make them acquainted with each other. Many blank spots had to be eliminated by the enterprises despite the fact that beside institutions for market research even ministries, research institutes and social organizations participated in this activity.

If an enterprise does not obtain, nor gives information (on one or more markets) then, obviously, it cannot establish any of the two other forms of relationships alone either, or at least is not able to change them deliberately. In this case the competitive position of the given enterprise is undetermined – in the sense of our definition – and its position cannot be regarded a competitive one. It has to be recalled that in the definition of the market it was enough to require the existence of at least two of the three forms of relationships. In order to identify the competitive position of an enterprise, however, the existence of information relations is an indispensable requirement, independently of the types of relations that determine the given market.

All the material and intellectual goods or services an enterprise needs or is able to offer may be subjects to bargaining and agreements – within existing legal and institutional limits – or bring about conflicts. Most of these are connected with the elementary acts of realization, with buying and selling. Up to recently economic theories have considered mainly only the selling part of the elementary acts of realization as worthy of attention, as if the other side – buying and procurement – were no market activity at all. But on the basis of experience it seems necessary to examine the market situation – competitive position – of enterprises with such tools which include all elementary market actions, thus also procurement and buying.

In principle, bargaining relations postulate also the existence of the first (information) or third (readiness) form of relationship, naturally mainly and most frequently that

of the first one. The lack of information relations in both directions may occur only in the case of forced contracts without bargaining. Sometimes there exists only a one-sided information relationship, for example, between a seller or buyer being in subordinate position or acting only routinelike, and a much stronger enterprise (this situation is similar to that of a small-scale producer, retail dealer or of households). Their position cannot be regarded as competitive position either.

In a contemporary economy, from among the forms of relations determining market structure the readiness (stand-by) relations of enterprises are becoming ever denser. The greater the independence in decisionmaking of an enterprise and the greater independence it wishes to attain, the greater the role of permanent observation and readiness in its behaviour will be. This readiness is aimed mostly at increasing its share on the market (on one or more markets) or at keeping it. Observation and readiness relations have an important part also in enabling the enterprises to choose the subjects of imitation and following, or the actions of which they should not stay out. As a consequence, the readiness of an enterprise may be directed not only at a direct rival, but at any other participant of the market, too, carrying on another type of activity. Obtaining information is an indispensable requirement in these situations. Open conflicts are relatively rare between those in observation and readiness relationship, while negotiation and agreements are much more frequent. Their cooperation is the result of bargaining and contract which may be reached also through more or less silent agreements.

In this regard it should be noted that Hungarian law prohibits cartel agreement between rivalling enterprises, but ministers concerned have the right to prescribe it and sometimes they even do so. It is much more frequent, however, that the sphere of activity of various enterprises (including also that of sales) is separated by order.

We have another type of the joint appearance of readiness and bargaining relations when an enterprise excludes from the contract its potential rival openly or in a hidden way, or induces another enterprise to do so. Or it makes just the contrary by creating a competitor for one of its unliked buyers or sellers by concluding an advantageous contract with another one or by promoting the establishment of such contracts.

Finally, integration relations existing among enterprises (horizontal or vertical chains) can be ranked into the ensemble of bargaining and readiness relationships on the basis of the following features: 1. obtaining and supplying of information are more or less centralized and mutual information is partly replaced by an obligatory supply of data, that is – using our terminology – (information) relations of the first type are transformed into those of the second type (subject of bargaining and contract); 2. by means of preliminary agreements participants reduce the number of situations where a one-sided action of one of them will result in pressure for decisionmaking for the others; 3. the possibility of bargaining and conflicts is not excluded among participants, they realize a part of their transactions on the basis of the same contracts with each other as with outsiders.

The position of an enterprise determined by the given system of relations was called a competitive situation. On the basis of the foregoing we may say that this is the normal

situation of an enterprise, what is more, the only natural situation where it can work. Namely, in the new Hungarian system of economic control and management the lack or deficiency of interenterprise relations already causes obvious and tangible losses to the enterprises. Recognition of the system of enterprise relations, sometimes its active building up was a difficult adaptation task for a great part of enterprises. Some of them got used to the idea only with difficulty that they had to make recognize the usefulness of their activity not only by their control agencies. Largely simplifying the question we might even say that an enterprise is in competitive position if it has to prove its viability not merely toward its supervising authority any more.

As can be seen we tried to determine the competitive position of enterprises and not the notion of competition in general. We cannot accept the definition of competition among enterprises starting exclusively from the situation of commodity markets, especially not the statement according to which speaking about competition makes sense only in case of excess supply, while with a shortage of goods there is nothing to compete for. In connection with contemporary economy we cannot accept the concept either that demands continually active, what is more, agressive action from the enterprises under the title of competition. We consider the policy of wait and see, withdrawal, taking no action, the unostentatious utilization of a good situation previously achieved at least as much as forms of competition as their contrary.

Enterprise equilibrium

When we proposed altogether three forms of relatonships as elementary notions serving to characterize the competitive position of enterprises we did so by starting from the requirement of observability. Beside their relatively general character they seem to be suited also for characterizing those diversified formations of special nature of which the markets of a given enterprise or group enterprises or even of the totality of enterprises are made up. The existence or lack of the three forms of relations enumerated in the foregoing, their one-sided or mutual character, real or only possible existence allow for a lot of various combinations concerning each partial market of each enterprise. Traditional methods of economic analysis can also be applied to them, thus for example, certain money values can be rather naturally assigned to the forms of enterprise relations: for example, to information relations costs and returns, savings and losses, to bargaining relations the value of the cancellation of contract (of discrimination of the enterprise), to readiness relations the current costs and risks value, respectively, of averting unexpected actions of the partner, respectively.

By starting from enterprise relations also a specific equilibrium situation can be deduced, namely that of *enterprise equilibrium* which can be defined as the equilibrium of relations. Making use of our previous notions, it is rather selfevident that an enterprise is in the state of equilibrium if: 1. it can organize information relations necessary for its activity; 2. it has no empty contracts (its bargaining relations are not deficient and it will

not enter into conflicts that would impede the establishment of necessary conracts); 3. it can assume the risk of its readiness relations (it has enough means and assets to avert risks).

Let us call *contract equilibrium* the situation emerging if an enterprise was able to conclude all contracts necessary for maintaining its complete system of relations for going on with its activities, independently of how advantageous these contracts are according to the opinion of enterprise leaders or on the basis of some efficiency criterion. If in a new system of relations contract equilibrium has been achieved, then the enterprise may be in a state of equilibrium again, even if its new position is worse than the previous one. The upsetting of equilibrium may be brought about by a conscious action of the enterprise in question or by those of other enterprises, or by changes in the environment (e.g. in the institutional system) or by chance.

As to the first case it has to be mentioned that if the enterprise transforms the system of its relations of its own free will, for example it stops some kind of advertising activity or starts new ones, changes the sphere of its sellers or buyers, breaks into the market of another enterprise or withdraws from a market, etc. then its attaining or non-attaining of contract equilibrium will indicate whether it has succeeded in getting into a state of new equilibrium or not.

The requirement of contract equilibrium results, as a matter of fact, from the basically discrete (noncontinuous) character of real processes and decisionmaking processes taking place in the enterprise sphere. The enterprise cannot continuously change any production, purchasing or sales structure. Decisionmaking as well as the conclusion of contracts are attached to discrete dates, too. Each enterprise plan or partial plan is practically a package plan that can be covered by a generally finite number of (perhaps only one) combinations of contracts. The same refers to possible variants of enterprise programmes, too. Readers of enterprise reports know that contract equilibrium causes satisfaction to the leaders of the enterprise, but the same leaders are often complaining that if they fail to cover even a single detail of some of their plans by contracts it involves high costs and a lot of trouble until they succeed in realizing another variant.

The possibility of extending contract equilibrium

In our opinion only the notion of contract equilibrium can be extended to a partial market of the economy formed according to some criterion or to the entire enterprise sphere. Namely, this state of equilibrium does not require either the balance between demand and supply or the existence of so-called equilibrium prices.

Contract equilibrium can be attained also with an obviously distorted price system, bottlenecks, shortage situations and sales difficulties, if all participants of the market have succeeded in selecting the combination of activities allowed by circumstances. States of equilibrium of the enterprise sphere interpreted this way can, of course, not be characterized directly by equilibrium indicators recorded in statistics (on the budget, finances,

foreign trade, etc.) and may be attained also when these indicators are definitely deteriorating.

Conditions of the upsetting of contract equilibrium are given in themselves: the validity of each agreement expires namely sooner or later. If we consider only the individual enterprise, there is no obstacle in principle to repeating its agreements of the previous period – and together with this also its activities – in a practically unchanged form while maintaining also its other relations in an unchanged way. This statement no longer holds for groups of enterprises – markets – and especially for the entire enterprise sphere. The ensemble of agreements in force on a given market (meaning in reality an ensemble of series of interrelated agreements referring to overlapping periods) cannot be repeated however many times. Firstly, because of completely trivial external factors: because of changes in demands, requirements or circumstances considered as external from the viewpoint of the market examined, where chance has a part not to be underestimated either. The second reason is that a part of contracts expires – by virtue of their contents – for ever and thus evokes the need for agreements of another type, for example, completion of a stage of an investment project requires an agreement on the next one, the completion of the whole investment one on sales, the completion of a research work one on realization. Furthermore, it should be assumed that information relations transmit also news that may induce new action. Readiness relations were so defined that decisions of those being in such relationship will entail mutual or one-sided pressure for decisionmaking by others. These two forms of relations exist even among markets strictly closed from the viewpoint of contracts (for example, those with monopolistic organization) and make impossible to maintain bargaining relations on one of them in unchanged form for an arbitrary long time or to repeat the same contracts however often.

Taking all this into consideration, our notion of equilibrium seems to be suitable for satisfying, on the one hand, the traditional requirement of any market theory to have an equilibrium concept and, on the other hand, it conforms with the experience that equilibrium is not a characteristic state of any sphere of the economy.

Enterprise tools of change-over to the new situation

It is assumed that there is always some possibility to change the situation of enterprises. Any enterprise may change over to another situation through modification and rearrangement of existing forms of relations. All possible new situations of an enterprise with all of their components could hardly be reviewed and it would be even more difficult to characterize these situations with some uniform "advantage measure". But, the enterprise relations belonging to the individual situations may be defined together with the rearrangement of relations that would be required or brought about by the new situation. On the basis of the definition of competitive position it may be assumed that the enterprise knows the possible new situations (this does not mean of

course that it considers all of them separately). Let us call for the time being the forms of relations belonging to possible new situations (their related ensembles) *advantages.* (Some of them may of course determine also a more disadvantageous situation than the one from which the enterprise started.) There are certain *tools* available for the enterprise to attain advantages. By tools we mean those expedient activities by means of which some of the selectable situations (forms of relations and their ensembles) may be attained.

The position of an enterprise may be interpreted, in general, only in an (enterprise) institutional system. In this institutional system also tacit agreement and behavioural rules referring to the establishment, maintenance and elimination of enterprise relations are included beside legal, official prescriptions and those of the control agencies. Behavioural rules or rules of the game may contain certain distinctions concerning individual enterprises or types of enterprises. If we disregard this, the tools mentioned are usually available for the enterprise depending on how fully it can cover the costs of their application and endure the risk of their application (of response reactions). Namely, the tools of the enterprise may be traced back to such series of measures that entail material inputs and risks, while the series of measures themselves are inventions of the human mind.

The material strength and intellectual capacity of the enterprise often allow a great number of expedient combinations of tools by means of which some of the designated situations (advantages) can be attained. Among these there may be admissible and unlawful tools. Though legal rules, the institutional system and common consent determine the frameworks of enterprise behaviour, sometimes even certain rules of the game are obligatorily prescribed or certain actions are explicitly prohibited. However, enterprises cannot be and usually are not deprived of the tools which they can utilize either according to the rules of the game or by breaking them.

On the other hand, enterprises do not and cannot keep all those possible tools in view which could be applied in a given situation. There are three limiting factors to this. The first one is obviously material consideration that has already been referred to. This consideration has a special role in practice only in exceptional situations, in connection with tools applied rarely or for the first time. The second one is that all imaginable combinations of tools cannot be surveyed nor can be always systematized, furthermore, from among combinations of tools contradicting each other, though expedient separately, generally only one can be kept. The third one obtains when the enterprise voluntarily renounces the use of certain kinds of tools. This renouncement can be one-sided or by groups, perhaps many-sided and included in mutual agreement. This latter is usually called voluntary restriction of competition.

The effects of these three limiting factors can be momentary or temporary, but sometimes also rather lasting. If some connection, tendency or style can be found in the way the enterprise selects its tools then in common parlance some *form of behaviour* is mentioned (it is said, for example, that an enterprise is passive, cautious or perhaps aggressive).

Enterprise behaviour and the relative stability of relations

Should they be brought about by any ideological, sociological or other inner factor, or made in the interest of a deliberately selected enterprise image, the types of actions and regularly applied tools of the enterprise appear as habits and overall behaviour. The environment attributes a character to the enterprise that is often described in terms borrowed from psychology. The variety of and slow changes in the character of the enterprise make, to some extent, the individual partial markets and their own situation there easy to survey for all of them. This has an important practical part in that the individual enterprise may properly learn how to apply the not too numerous tools as a routine. But it also promotes the stabilization of forms of relations, especially by enabling the development of permanent good and hostile relations among enterprises. Thus smaller equilibrium disturbances are usually not accompanied by a collapse of relations spreading like a chain-reaction, that is, market reactions should not be faster than normal, usual human ones. An economy that would consist exclusively of enterprises without any specific character and game for anything, or capable of using all their tools, is not likely to survive ever for the shortest time.

The application of a given set of tools modifies the position of the enterprise and thus also the enterprise itself in the sense that its capital and profits will increase or decrease: the structure of its activities will change. Namely, all easily quantifiable data will change by which statistics characterizes the enterprise as a separate unit of the economy. If the relation of a unit characterized with such a series of data (or with some function of them) to the entirety of the economy or to some relevant external environment of enterprises is assumed as known or liable to description, – if it is also assumed that characteristics of the given external environment depend on those of the individual enterprises – some modification has to occur also in this external environment. Thus, for example, the comparison of corresponding enterprise characteristics may provide new information on the state of the entire economy or of the enterprise sphere. This information may start such – social, political or organizational – processes or induce such decisions which bring about a modification or deliberate transformation of the institutional system of enterprises. It may occur that this change modifies the competitive position of certain (perhaps all) enterprises, furthermore also the costs and risks of possible situations (advantages) and of the tools suitable to attain them. In the meantime, the armory of tools and their admissible part may even remain unchanged. The relatively most slowly changing elements of the entire process are undoubtedly the forms of behaviour of enterprises and the parts of the system of relations which were stabilized through these behavioural forms.

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The concept of equilibrium introduced by us does not comprise the assumption according to which enterprises would strive for some macro-economic equilibrium either separately or in their totality, furthermore, either consciously or unconsciously. Namely,

this assumption has been a source of several difficulties up to recently in all those market theories which try to include also the activity of really existing enterprises in the examination of states and structure of the market.

Finally, what we try to describe is the contemporary enterprise that is though supposed to bear necessarily also the marks of entrepreneurship but in its system of goals many things can be included beside earning profits or mere survival. For example: it may strive after making the utility of its activity recognized, aim at the well-being of the working collective, or may have various prestige goals, too. Since a much greater part of its everyday business decisions refer to other enterprises than either to employees, consumers or the state, it has to enforce its goals, or what it does to attain them, first of all in its own enterprise environment.

This is why, if enterprise relations are upset or ruined, should this happen either through the liquidation of market institutions or through their imitation, the ability of enterprises to recognize situations begins to deteriorate rapidly together with their ability to be useful to the society and to sooth the conscience of their leaders.

References

1. TARDOS, M.: *A vállalatok helyzete gazdálkodásunkban* (The situation of enterprises in our economy.) Vezetéstudomány, 1977. No. 5
2. LAKY, M.: *The function of the Hungarian state in the introduction of new products and new technologies.* Economics of Planning. Vol. 14. No. 3 pp. 141–160
3. LAKY, T.: *Enterprises in bargaining position.* Acta Oeconomica, Vol. 22. Nos. 3–4 (1979), pp. 227–246
4. KORNAI, J.: *Overcentralization in economic administration.* Oxford. Oxford University Press, 1959.

ПРЕДПРИЯТИЯ, РЫНКИ, КОНКУРЕНЦИЯ

Опыт анализа среды хозяйственной деятельности предприятий, состоящей из предприятий

К. ЛАНИ

Экономическая среда, в которой действуют венгерские предприятия после реформы 1968 г., состоит из многих элементов. Из них представляется правильным различать среду предприятий, составляемую другими предприятиями. Опыт показывает, что когда органы управления экономикой определяют условия хозяйственной деятельности предприятий, они имеют дело не с одинокими, независимыми друг от друга предприятиями. Все виды хозяйственной деятельности предприятий достигают цели или остаются безрезультатными в определенном хозяйственном окружении. Между предприятиями при этом иногда случаются коллизии, иногда они сотрудничают друг с другом, но всегда следят за тем, что предпринимают остальные предприятия.

Если мы попытаемся описать среду предприятий, состоящую из других предприятий, то следует выдвинуть, по крайней мере, следующие требования ко взятым за основу понятиям: они должны быть эмпирически наблюдаемы с помощью известных и находящихся в распоряжении

исследователей средств массового анализа; из понятий, описывающих среду предприятия, можно вывести действительное для современной экономики понятие рынка; на основе понятий, описывающих среду предприятий, можно определить конкурентное положение предприятий.

Автор считает, что системой понятий, соответствующей названным условиям, являются связи предприятий. Она анализирует три основных типа этих связей, а именно: 1. информационные связи, 2. сделки, или контрактные связи, 3. так называемые связи готовности. Статья анализирует и характеризует эти связи на основе фактического материала, относящегося к венгерским предприятиям, собранного с 1968 г. Показывается, в какой степени дефинированные понятия соответствуют перечисленным требованиям, а также каким образом комплексный анализ системы связей предприятия и имеющихся в его распоряжении средств может привести к динамической характеристике положения отдельных предприятий и выделению различных типов поведения предприятий. В заключение автор касается того, как можно, исходя из системы связей предприятия, попытаться дать описание более сложных, чем описываемые в прежних рыночных моделях, и ближе стоящих к современной действительности рыночных структур.

Acta Oeconomica, Vol. 24 (1–2), pp. 125–137 (1980)

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SOME GENERAL PROBLEMS OF TRUST ORGANIZATION IN HUNGARY

The author points out that over-centralization of the industry and the Hungarian economy as a whole is further increased by the 23 trusts existing at present, whose establishment was based first of all not on economic factors, but on those of management techniques, mostly independently of profitability. In trust organizations functioning at present a management system often neglecting economic viewpoints can be well observed. Market effects are only limitedly perceived by trust-subordinated enterprises. Trust centres strive for maintaining the inner equilibrium among enterprises, levelling of results and interestedness relations are fundamental viewpoints of trust management. As a consequence, most important economic policy objectives – to improve efficiency, to transform the economic structure, to mobilize inner reserves – are impaired.

The functioning of economic organizations cannot be idependent of the socio-economic environment, the system of economic conditions in which the organizations are working and which determine the direction of operation and the degree of its "goodness". This is necessary to note, because in Hungary attempts can be met in scientific discussions and publications that identify the management conditions of economic organizations – i.e. economic control and management – with the regulatory system. The contents of economic control and management, however, cover more than that, since also the systems of planning and organization have to be regarded as its basic elements.

Before the economic reform of 1968 "connections" in terms of physical units of measurement based on the mobilization of extensive growth factors could be best enforced in such a way that macro- and microinstitutional frameworks conforming to these "connections" had been established. The institutional system of economic control and management "had to be" organized so that it should extensively provide organizational frameworks for the breaking down of estimates formulated in plans in physical terms and for their financial accounting – that is why control and management were organized along sectoral lines. The breaking down of plans and their subsequent accounting did not stop at sectoral level, but the trend outlined was realized also within the individual sectors, since physical targets and also technical ones can be most easily attained if their organizational frameworks are brought about also within the given sector. This explains the amalgamation of enterprises as well as the development of trusts and big enterprises.*

*Until 1968 three types of enterprises were known in the state sphere of Hungarian economy: enterprise, association and trust. The association differs from the trust practically in that the former

Under the effect of the beginning of a new world economic era in the 1970s, inner structural movements have begun also in Hungary and a pressure for a considerably higher elasticity of the economy and for the re-establishment of the conditions of equilibrium has been felt. The question is, however, whether the organizational background for this "revaluation" of economic growth is ensured.

We do not aim at analyzing here the entirety of the organizational system, but wish to examine the most comprehensive problems of trust organization, a specific organizational from of interpenetration of levels of control and management and of enterprise organization.

The organizational system

In the branches of Hungarian industry there are only a few enterprises working really independently (which fact is well indicated by Table 1), though international experience shows trends deviating from this.*

The data of Table 1 referring to 1977 show a 87.5 per cent proportion of big organizations in the state industry. If we take into consideration the slow but permanent centralization trends going on ever since 1975, furthermore the fact that in the table trust-subordinated enterprises are considered as independent one – though their independence is limited – then even a much higher proportion, exceeding 90 per cent, could be arrived at.

Over-centralization of the Hungarian industry is further increased by the 23 trusts** existing at present, including nearly 350 enterprises. In 1977 every fifth enterprise of the Hungarian economy was run in the framework of a trust. (The 23 trusts employed nearly

cannot regroup resources of member-enterprises and has only a coordinating function as regards development projects and sales. In 1977 and 1978 enterprise forms were rearranged, as a result of which associations ceased to exist. Instead of it enterprises have the possibility to establish *independent* enterprise unions either temporarily or for a longer run (this latter corresponds to the "association" with the difference that it is created from below and not from above, furthermore the union is of *voluntary* and not obligatory character).

*The organizational system of Western countries shows a completely different picture. In the early 1970s the proportion of industrial enterprises with more than 500 employees amounted only to 31 per cent in France, to 43.6 per cent in the United States, to 30 in Japan, to nearly 40 in Italy and to 31 per cent in Sweden and Finland. While in Hungary the proportion of enterprises with 50–100 employees was 5.3 per cent, the corresponding data for Japan and Belgium are 13.5 and 12.0 per cent, for Finland and Sweden nearly 13 per cent, and for the United States 10.2 per cent. In Hungary the proportion of enterprises with not more than 50 employees hardly exceeds 5 per cent, while it is nearly 10 per cent in the FRG and Great Britain, 14.1 per cent in the United States, nearly 23 per cent in Italy, Belgium and France and even more than 30 per cent in Japan.

**The 24th trust is the General Film Board, but considering its special situation we do not deal with it here.

Table 1

Percentage distribution of Hungarian enterprises by employment in the state industry by industries in 1977

Branch	Ratio of workers in enterprises employing			
	at most 500	501–1000	1000 and more	Total
	persons			
Mining	2.4	0.6	97.0	100.0
Electric energy	0.6	11.7	87.7	100.0
Metallurgy	2.7	2.6	94.7	100.0
Manufacturing of machines and equipments (excl. electrical)	1.1	4.7	94.2	100.0
Manufacturing of trasport vehicles	1.1	5.1	93.8	100.0
Manufacturing of electrical machinery	1.9	5.1	93.0	100.0
Telecommunication equipment and vacuum engineering industry	0.9	0.0	99.1	100.0
Precision engineering	0.7	9.2	90.1	100.0
Metal mass products industry	5.3	4.2	90.5	100.0
Building materials industry	4.7	2.9	92.4	100.0
Chemical industry	3.6	6.8	89.6	100.0
Wood-working industry	17.6	20.2	62.2	100.0
Paper industry	–	–	100.0	100.0
Printing industry	31.1	35.6	32.3	100.0
Textile industry	1.1	3.0	95.9	100.0
Leather, fur and shoe industries	1.6	12.1	86.3	100.0
Textile clothing industry	5.1	15.1	79.8	100.0
Handicrafts and domestic (cottage) industries	1.1	8.8	90.1	100.0
Miscellaneous industries	28.4	27.5	44.1	100.0
Food industry	8.1	21.9	70.0	100.0
State industry altogether	4.2	8.3	87.5	100.0

Source: Central Statistical Office and Z. Román, A magyar ipar szervezeti rendszere (Organizational System of the Hungarian industry). Ipargazdasági Szemle, No. 3/1978. p. 40.

600 thousand people in 1977. The yearly average growth of their staff amounted to 5.4 per cent between 1970 and 1977 and if this dynamic growth of employment continues, their proportion may reach 30 per cent within industrial employment.)

Motives for the establishment of trusts

The establishment of the overwhelming majority of trust organizations had basically no economic or profitability motives, but was related to control and management techniques. Behind viewpoints of control and management the lack of harmony between basic elements of the Hungarian economic mechanism is hidden. The planning system operating mostly with technical objectives determined in physical terms "justifies" the "viability" of control and management organized along the lines of the sectoral principle. This character of planning breeded sectoral interests which – emphasizing the necessity of big organizations – are "objectivized" and realized in permanent amalgamations or at least in attempts at centralization. No doubt, mammoth organizations or trusts meet these "requirements", since on the one hand they are units "easy to handle" from the viewpoint of planning, and on the other hand they correspond to the requirement of "easier manageability", from the sectoral viewpoint, too. It is interesting to examine what the *declared motives* are – mainly after 1968 – on which the "justification" of trustification is based.

Mainly with trusts established after the introduction of the reform the following motives were most frequently emphasized:

– the trust will considerably contribute to the harmonization of conflicting national economic and enterprise interests;

– in a trust coordinated, planned production management and supply can be realized;

– by the regrouping of means and assets they can most efficiently be utilized;

– there is a possibility to draw away incomes of rent character and to establish an "objective system for the levelling of results";

– decisions can be made where the information required is available.

Behind the above outlined motives first of all viewpoints of control and management techniques are lying, while efficiency and profitability objectives are pushed into the background. However, these motives do not generally prove the necessity of the "existence of trusts", because it may be queried whether conflicts of interests should or even can be dissolved at all. Practical experience indicates that conflicting interests do appear even within trust organizations, though in other forms of motion. The essence of the reform process started in 1968 is precisely to reveal interests and make them clash so that "economic harmony" developing through the conflicts of interests shall become the promoter of development.

Planned production management is not a trust function, but that of an enterprise. Behind the motives of programming production rather the logic of plan directives and not the requirements of a planned economy are lying. The proclaiming of planned supply, in other words of the so-called "responsibility for supply" (i.e. responsibility to satisfy demands of the domestic market) is contrary to the Hungarian law on enterprises. Namely, in the sense of the latter – while distinction is made between three types of enterprises:

enterprise, trust and public utility enterprise – only public utility enterprises of service character are obliged to fulfil supply tasks.

The unsolved allocation of capital is undoubtedly a real concern in Hungary. Practice unambiguously proves that the regrouping of investment resources within trusts cannot be considered as an adequate method, because it is based on drawing away incomes from more efficient economic units, thus decreasing their interest in raising efficiency and in revealing reserves. The distribution of limited resources within the framework of a trust has the only short-run advantage that survey is made easier. This short-run advantage entails, however, that in most cases resources are not allocated to the most efficient fields and precisely the development of the most dynamic enterprises is restrained. It is only deplorable that the "objective system for the levelling of results" is considered – contrary to the above – as a positive feature of trust frameworks, though practice shows that regrouping means and assets within the trust is strongly influenced by subjective factors. In consequence of administrative resource regrouping enterprises are made interested rather in strengthening their bargaining positions than in improving their profitability.

If we agree with the principle that the levels of decisionmaking and information should be in harmony, then this precisely does not prove the necessity of trust frameworks. Decisionmaking and information pyramids are in inverse relationship with each other. On the top of the pyramid decisions are made on a series of concrete matters belonging to the framework of enterprise managemenent concerning which very little information is available.

The solution of specialization and cooperation problems belongs in many cases to the goals declared with general validity, expected from the establishment of trusts and other big organizations, mainly big enterprises.

It should be noted that one might think trusts are organized in vertical frameworks.

In practice the situation is quite different. Out of the 23 trusts existing at present 21 are of horizontal character. This is a fact though trusts try to "prove" their verticality, which, however, is not verified by the scattered territorial and establishment structure characteristic of the trust organizations (nearly 3000 establishments).

The role of trusts in the realization of central objectives

Trusts have, therefore, an important part in the Hungarian national economy, their economic activity mostly covers a whole branch of industry and they are in a monopolistic situation in several respects.

Trusts provide safety for control and management, since they are – not necessarily passive – subjects of the realization of central development projects, major reconstructions, physical development and production policy goals raised to macrolevel or of international CMEA-agreements and thus allow the survival of elements of breaking down the plans. This appears basically in the survival of "plan bargain" both upwards and

downwards. Upwards means not only the branch, but even the central control and management. A trust is an organization mostly "destined" for the fulfilment of certain tasks defined in physical terms for which in many cases production factors (capital, labour, materials) and occasionally also sales conditions are centrally ensured. The position and development of the given unit do not, or only to a limited extent, depend on the results and profitability of management. (See Table 2). Bargaining appears also downwards, towards enterprises within the trust, here even inner "rules of the game" can only rarely be found as we shall refer to it in the next section. In 1977 industrial trusts (including also food industry) produced 36.2 per cent of the gross output of the industry while they disposed of 43.7 per cent of the employees of the industry. Industrial trusts contribute a considerable part of industrial exports (43.7 per cent of industrial exports settled in convertible currencies and 21.1 per cent of exports settled in roubles.)

The majority of trusts participate in central development projects and the realization of various conceptions.

Coal mining is determined by the prevailing energy policy conception. The National Trust for Oil and Gas Industry participates in two projects, as basic supplier in the olefine programme and as "project gestor" in the natural gas programme based on

Table 2

Efficiency indicators (1977)
(forints)

	National economy*	23 trusts
Profit per 100 Ft of fixed assets*	13.04	9.74
Profit per 100 Ft of gross output	13.84	8.55
Subsidy per 100 Ft of fixed assets	10.69	15.25
Subsidy per 100 Ft of gross output	11.35	13.38
Subsidy per 100 Ft of profit	82.05	156.57
Taxes per 100 Ft of fixed assets	24.89	21.04
Taxes per 100 Ft of gross output	26.41	18.47

*National economic data without agricultural cooperatives.

Source: on the basis of data supplied by the General Directorate of Revenues of the Ministry of Finance.

estimates in physical terms. The Hungarian Electric Works Trust participates in important international CMEA-agreements and projects for the construction of atomic power stations. The Hungarian Aluminium Industry Trust is gestor of the development programme of the aluminium industry.

MEZŐGÉPTÖSZT (the trust manufacturing agricultural machines) also belongs to the fields enjoying priority in development. The Csepel Trust, the Trust of Bricks and Tiles Industry, the Road Construction Trust and the Trust of Hydraulic Engineering Industry are subjects to development projects of reconstruction character.

AFIT (Industrial Trust for Car Maintenance) promotes the activity of several big enterprises (IKARUS, the Rába Works of Győr, etc.) in the framework of the national motorization programme. *The ten trusts of the food industry* participate in the realization of objectives often formulated in physical terms through a series of central projects. Let us only refer here to the pig, cattle, meat, milk and poultry projects, or to the priority enjoyed by the beer industry.

As a consequence of these projects trusts obtain higher than average shares from the scarce investment resources of the national economy. For example, relative to 1976 in 1977 the Hungarian Aluminium Industry Trust exceeded the average growth rate of investments of the entire indusry (27.7 per cent) by 34, the National Trust for Oil and Gas Industry by 11, the Hungarian Electric Works Trust by 11.9, the Trust of Enterprises of the Milk Industry by more than 50 and the trust organization of the meat industry by 9.6 per cent (on the basis of balance-sheet data).

The various central programmes are accompanied by problems already known from the mechanism based on plan directives: programmes are often overdimensioned, quantitative goals are stressed instead of those aimed at widening assortment, improving quality and increasing export capacity.

In structural transformation trusts have a specific role. Because of various central development actions and projects trusts do not have a too great direct part in structural changes, since they are subjects of "addressed" central decisions. Central decisions determine main production estimates in physical terms for a five-year plan-period together with the development resources available for their realization.

But the question can be raised whether central development objectives attract the trusts or the other way round? The two sides cannot be stiffly separated. It is a fact that also the trusts are active participants in the elaboration of large-scale development programmes. Yet these conceptions are accepted by controlling agencies only because they are basically in harmony with the interests of the sectoral ministry, furthermore, because our present planning system allows, what is more, even "requires" actions of such character.

With the dominant role of big enterprises the rather general way of "structural transformation" is not a mere chance when transformation of the micro-structure is "solved" by "cleaning the production line" of enterprises through organizational amalgamations, since their growth possibilities depend mostly on central decisions. Thus amalgamations are used as "loopholes" enabling expansion. The stock of fixed assets of

those amalgamated is usually of low technical level, outdated and thus trusts may find an "explanation" again for demanding central reconstruction funds. They can do that so much the more since they are superior to other enterprises as regards participation in state investments and in the administrative competition for credits.

In the interest of their specific – capital expansive – growth objectives it is the trusts, beside the big enterprises, which undertake the fulfilment of tasks eventually resulting in a disadvantageous development of profitability. Central decisions try to make their activity profitable and the *demand for a manifold differentiation of the regulatory system as well as the phenomenon of overallocation of investment resources are partly due also to this circumstance.*

The internal system of interestedness in trusts

Under the above circumstances the inner methods of control and management of trusts are characterized by directives.

Trust-subordinated enterprises feel market effects generally only to a strongly limited extent and through trust-"transformation", thus they regulate and develop their production first of all on the basis of central decisions.

The planning system of trusts is characterized by a multiple-stage, iterative bargaining mechanism. Trust plans are determined through the confrontation of enterprise plans made on the basis of trust estimates – mainly in the case of targets belonging to the framework of national economic central product management – which then are of obligatory character. When breaking down trust plans to enterprises the distribution of production tasks and resources is mostly a function of power relations. At the same time in the plan bargain also a "building" upwards from below is enforced. With a certain part of trusts the output of member-enterprises serves the satisfaction of local demands (procurement of local agricultural products, enterprises of service character as petrol stations of the enterprise fo Trade in Mineral Oil ÁFOR, the car service network of AFIT). Thus, since the production structure of trust enterprises does not basically depend on profitability, these tasks can be much more directly determined in physical units than in the case of independent small or medium-size market-oriented enterprises on the basis of profitability. Therefore, experience indicates that in the inner mechanism of trusts territorial interests have an important part.

The incentive systems of trusts are based on interest in plan fulfilment. Trust will always strive for maintaining some equilibrium among the enterprises, as a matter of fact in order to stabilize bargaining positions. The trust centre will carefully watch that none of its enterprises shall become unmanageable and try to "break loose" from trust frameworks or eventually query the trust form.

Striving for equilibrium, exaggerated stability of member-enterprises considered as an overall trust interest can be found also in other elements of inner interestedness. This

is served by the internal (accounting) price system and the mechanism for regrouping resources, functioning independently of the former.

Internal price systems are basically of accounting character and are aimed at levelling efficiency differences between trust enterprises.

Profits and thus also development and sharing funds are in most cases formed at trust level and even if some decentralization prevails in their utilization exceptionally, its extent is always such which makes the intervention of the trust centre possible and even "necessary".

Trust endeavours aimed at exaggerated stability and at the reduction to average level of outstanding performances can be observed also with the redistribution of credits, subsidies, preferences, compensation for losses and even of export results. This process is favourable not only for efforts at exaggerated enterprise stability, but creates a situation contradicting the real interests of the economy: it preserves activities of inadequate efficiency and makes structural transformation – even with the freedom left by central decisions – more difficult.

All what has been mentioned in the foregoing indicates that the form of trust organization impedes a more dynamic development – and for this also the existing economic environment is responsible – among others because it *restricts the active role of commodity relations by which it excludes market impulses* and thus means a barrier to endeavours aimed at the creation of normativity. Commodity movements within the trust take place mostly on the basis of trust instructions. Member enterprises may not freely choose the structure of their production according to demand, prices and profitability. The lack of possibility for differentiation between member-enterprises stimulates for mediocre performance and the safety of market situation means a short-term advantage for the enterprises.

Reviewing the most important characteristics of the inner regulation of trusts it can be stated that trust enterprises are similar to plants (factories) of big industrial enterprises, with them enterprise management becomes inner self-accounting. (Even in contractual legal connections extreme centralization is enforced in many cases, the trust centralizes the right of member-enterprises to enter into contract with external partners.)

Functions and spheres of authority

Major economic organizations may have various functions. These may be accompanied by various degrees of enterprise centralization and if some of the functions justify a more centralized organization then the organization need not necessarily undertake also other functions. Considerations of principle and practical experience show that the organizations may – and have to – move within various ranges as regards tasks and concomitant spheres of authority.

In other countries, mainly where economic pressures and mechanisms have stronger effects, a very wide spectrum of organizations can be observed whereas the basic view-

point is always enforced that organizational centralization should take place to an economically optimal extent. In case the advantages resulting from centralization are considerably smaller than the economic disadvantages brought about by fusions and amalgamations, the establishment and maintenance of a big economic organization or trust will not be expedient.

In western countries many other, more centralized organizations deviating from the simple enterpreneurial organization are existing (traditional cartel, syndicate, trust, system of subsidiary companies, conglomerates, holdings, joint bank organizations etc.).

These organizations are usually destined for fulfilling some of the following functions: coordination of research, coordinated technological development, coordination of sales and stockpiling policy, controlling – with indirect tools – development projects, financial coordination, capital allocation.

It should be emphasized that only the most monopolized organizations or trusts are fulfilling all of the above functions. However, in western countries, these organizations cannot have the goal of levelling incomes, since their primary objective is to increase wealth, postulating rapid expansion of the profitable activities and curbing those with inadequate efficiency.

It is generally also characteristic that subsidiary companies of capitalist monopolies have considerable independence, that is, they remain enterprises and do not become plants.

Beside exaggerated centralization*, it is a great shortcoming of our organizational system that it has a rather poor and limited range of organizations.

A direct consequence of the lack of organizational forms moving within a wide range is that if the appearance of any of the functions formulated above requires a form of organization other than the enterprise then only a trust organization can be established which will later on usually take over the majority or the entirety of functions.

In consequence of the uniformity of organizational forms adjusted to economic functions the liquidation of a trust will bring about problems in the fulfilment of some function which then may give ground to renewed attempts at trustification. At present a considerable part of our trusts fulfil also such functions which would not be necessary, but a trust may take up a "defensive position": it cannot choose any other form for the fulfilment of certain tasks.

At present – feeling to some extent the negative effects of large-scale uniformity – not only trust organizations with full sphere of authority, but also trusts with limited sphere of authority are functioning in Hungary. However, even these cannot dissolve the already mentioned anomalies of functions and organization.

15 out of the 23 functioning trusts have full, while 8 of them so-called limited sphere of authority. However, practical experiences indicate that in many cases a limited sphere of authority becomes full in reality**

*This is convincingly proved also by the study of Gábor *Révész* [1]

**László *Zacher* and Imre *Schileischer* also come to this conslusion in their study [2]

In trusts with limited sphere of authority – 8 trusts of the food industry – the board of directors has the power of decision concerning the determination of short, medium and long-term plan conceptions of the trust, the development of the inner incentive system, the taking of development credits and the regrouping of development funds.

The decisionmaking activity of the board of directors is usually formal. On the one hand, plan conceptions are elaborated in the trust centre and in this case the board mostly makes only smaller corrections; on the other hand formal and informal influence exercised by sectoral control and management agencies create accomplished facts; finally, there are many cases when their role is only to accept tasks resulting from central plans.

Types of trusts

The overal picture given on trusts may seem more than unfavourable, but this should not be attributed – I should like to emphasize again – to the trust organization as such, but to its present functioning resulting also from absurdities of the economic environment on the one hand, and can be explained by the uniformity of organizational forms and the lack of differentiation on the other.

The problems outlined in the present study can be considered as generally valid for the entire sphere of trusts, but even despite this circumstance it is not expedient to deal with trusts as a homogeneous group. To give a differentiated evaluation on trusts cannot belong to the tasks of this study – because of its size –, but it cannot be fully excluded either. Therefore, I try to present a possible trust structure in the following.

A part of trusts are characterized by *large-scale determination by the national economic plan.* The formation and utilization of resources are fully controlled by plans; in consequence of the central management of products, central price policy and the centralization of foreign trade activity these trusts are subjects of implementation-plan (Hungarian Electric Works Trust, National Trust for Oil and Gas Industry, Hungarian Coal Mining Trust, Hungarian Aluminium Industry Trust, Cereals Trusts).

Another group of trusts are the *trusts of public utility character* (Road Construction and Hydraulic Engineering trusts). These two trusts are basically characterized by the fact that their "buyers" are administrative agencies for which the trusts carry out infrastructural works; they are organized along regional lines. In this field independent management is justified by the necessity of cheap building to an increased extent.

The third group of trusts is made up of trusts rendering basically *services* (AFIT, Volán-trust for road transport of passengers and goods). In this field, especially with AFIT, the trust organization is not justified. There is a wide range of buyers, there is no monopolistic situation on the demand side, which indicates that competition would be desirable. The large-scale organizational centralization is not properly founded in the case of the Volán Trust, either. When developing the organizational system for the transportation of goods the establishment of regional enterprises is to be considered. For the

organization of local and inter-city bus transport of passangers the establishment of regional public utility enterprises, while in long-distance transport that of a special enterprise seem to be expedient.

The fourth group of trusts is formed by commercial trusts (MÉH – trust for the utilization of by-products and scrap, AGROTRÖSZT – trust for the supply of agriculture.) While the main function of MÉH is the utilization of scrap materials, that of AGROTRÖSZT is the meeting of material and machine demands of agriculture. This extent of organizational centralization of trade – mainly in the former case – cannot be justified.

The fifth group of trusts consists of market-oriented trusts in manufacturing. Csepel Trust, MEZŐGÉPTRÖSZT, the Trust of the Bricks and Tiles Industry and the nine trusts of food industry (those of the meat, poultry, milk, canned food, sugar, distilling, wine, beer and tobacco industries). In these fields the existence of trust organizations cannot be justified and this is the domain where various possibilities of changes have to be considered more intensively *in the future.*

For this group of trusts the statement that their establishment was due first of all to administrative reasons is even more valid. A new phenomenon concerning the "justification" of trust frameworks by sectoral ministries is the demand for an almost full reconstruction. This refers to all market-oriented trusts, but especially to trusts of the food industry. No doubt, a considerable part of the enterprises of trusts working in the manufacturing industry – mainly in the food industry, but also in the bricks industry – are equipped with outdated, obsolete technology. However, reconstructions do not justify the existence of trust frameworks, what is more, in these frameworks reconstructions cannot achieve their goals. I have already indicated that trusts are fundamentally interested in ensuring the stability of enterprises through levelling. Therefore, *trust enterprises working uneconomically cannot even be identified.* Thus, in sharp contradiction with the intentions of the national economy, also their renewal may take place in the course of reconstructions. This will result in permanent greed for investment and the over-allocation of investment resources.

The horizontal character speaks for the necessity of independent, enterprise-like management. The majority of trusts in the manufacturing industry is characterized by fully horizontal connections.

The necessity of improving the elasticity of the economy and its adaptability to world economic changes, a substantial correction of the already unhealthily over-centralized organizational system and the need of rapid accommodation to changes in demand-supply relations all indicate that we have to reconsider the possibilities of essential corrections of the present organizational frameworks of trusts, especially of those mentioned in the last place.

References

1. RÉVÉSZ, G.: *Enterprise and plant size. Structure of the Hungarian industry.* Acta Oeconomica Vol. 22. Nos. 1–2 (1979) pp. 47–68
2. ZACHER, L.–SCHILEISCHER, I.: *A trösztök és vállalatok közötti hatáskörmegoszlás néhány kérdése az élelmiszeriparban* (Some problems of the division of spheres of authority between trusts and enterprises in the food industry.) Budapest, 1978, Élelmiszeripari Gazdaságkutató Intézet

ОБ ОБЩИХ ПРОБЛЕМАХ ОРГАНИЗАЦИИ ТРЕСТОВ В ВЕНГРИИ

Б. КЕВЕВАРИ

В статье ведется поиск ответа на вопрос, обеспечена ли организационная база внутренних структурных сдвигов (повышение гибкости народного хозяйства, восстановление народнохозяйственного равновесия), необходимых из-за коренных изменений в мировой экономике, развернувшихся в 70-е годы. Автор указывает, что чрезмерная централизация венгерской экономики усугубляется функционирующими в настоящее время 23 трестами, при создании которых основную роль играли в первую очередь не экономические соображения, а большей частью не связанные с рентабельностью факторы техники управления. В трестовских организациях в настоящее время действует система управления, часто оставляющая вне внимания экономические аспекты. Предприятия типа трестов ощущают влияние рынка лишь в ограниченной степени. Управления трестов стремятся к поддерживанию внутреннего равновесия между предприятиями, основная точка зрения руководства трестом — выравнивание результатов, нивелирование отношений заинтересованности. Вследствие этого наносится ущерб важнейшим целям экономической политики — усилению эффективности, преобразованию экономической структуры, мобилизации внутренних ресурсов. Наряду с преодолением организационного единообразия необходимо стремиться к тому, чтобы в ближайшем будущем возникли иные варианты функционирования трестов в других организационных рамках, по крайней мере, в обрабатывающей промышленности.

Acta Oeconomica, Vol. 24 (1–2), pp. 139–149 (1980)

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INNOVATION IN THE HUNGARIAN ENGINEERING INDUSTRY

The article is concerned with the lifetime and rate of replacement of the Hungarian engineering products and within it of those turned out by the telecommunication technique, vacuum technique and precision engineering industries. It proves with statistical data series that the age composition and replacement rate of the products are not satisfactory. The neglect of innovation may be decisive for the standards of an economy and standards can be improved also through more intensive research and development activites.

According to a Swedish study [1], the present problems of the Swedish economy are caused mainly by the neglect of innovation. The reason is that in Swedish exports the weight of industrial products developed a long time ago is overwhelming, while, because of their relative oldness, these products are exposed to a sharper competition on the world market, they are less profitable and thus yield smaller margins for new investments, i.e. they start a self-intensifying process. It seems to be the most obvious that low profitability should be improved through reducing costs by all means, and the most simple solution is to keep down development costs. Such solution is however, expressly harmful in the long run – which is the view held also by the present study. Competitiveness can be improved only by new products of better quality, higher technical standards, and manufactured with higher productivity.

It was the example of the Swedish study that prompted us to examine the useful lifetime of products of the Hungarian engineering industry and in particular that of the telecommunication and vacuum technical and precision engineering products, as well as the age distribution of the products the Hungarian foreign trade tries to sell.

Lifetime of products in the engineering industry

The Hungarian Central Statistical Office has been publishing a growing number of data in recent years that force the reader to think about them, analyse them, and draw conclusions from them. Particularly useful data are contained in the latest two publications (3, 2) for the analysis of the lifetime of Hungarian products. For our analysis we shall take data from these two publications and, as a first step, we shall set up a table with certain simplifications. For example, though it will contain products sold as parts (about 12 per cent of the yearly production), this partial set will not be included in the analysis. As for sales, it uses only the categories of domestic and export market; beside data concerning the entire engineering industry, it will pay particular attention to the

data on telecommunication, vacuum engineering and precision engineering products. We are of the opinion that this categorization will show more strongly the facts to be emphasized.

Relying on the data of Table 1 the statement can be made that the types not older than 5 years supplied 46.2; 44.0; and 54.7 per cent of the 1977 output in the whole engineering industry, in the telecommunication and vacuum engineering and the precision engineering industries; the corresponding figures of exports were 48.5; 40.1; and 57.8 per cent. These proportions in themselves seem to be satisfactory. The picture will change, however, if we use the figures of *Table 2* for comparison.

These data support, on the one side, our standpoint that within Hungarian engineering it is the telecommunication, vacuum engineering and precision engineering industries that must be considered as the "pulling" industries in which technological development and obsolescence are the fastest, and, on the other side, they put the reassuring picture offered by Table 1 in a different light. As a matter of fact, the average age of the telecommunication and vacuum engineering articles manufactured for the last time in 1977 was only 3.6 years, that of precision engineering products was 8.1 years, and the average value for the entire engineering industry was 7.7. If we accept that these figures were not accidental values of that particular year (this will be proved later on), we shall not be adding to the gravity of the situation but rather taking away from it if we indicate, uniformly and in first approximation, 8 years for the extent of obsolescence. Let us continue the analysis of the data of Table 1 with this in view. Let us examine, how many per cent of the products manufactured in 1977 are older than 8 years. The result will be 43 per cent in the entire engineering industry, 39.5 per cent in telecommunication and vacuum engineering, and 31.5 per cent in precision engineering. This means that in comparison even with the time of obsolescence, stated with some benevolence, well over one-third of the output of engineering consist of outdated, old products, the replacement of which ought to be much accelerated. It is interesting and even surprising that of the total volume of the engineering production in 1977 3.2 per cent was made up of products first manufactured before 1944. The same figure for telecommunication articles is 3.7 per cent. We would see the same tendency if we examined, for each year between 1970 and 1975, the share in the total production volume of the new products manufactured for the first time, entering at 5-year intervals.

A refreshment process of the whole engineering industry cannot be read from the figures of Table 1. In the total production of 1977 the highest percentage is represented by products manufactured for the first time in 1972 or 1973, but the years following show again a 6–7 per cent, i.e. a not too fast rate of introduction of new products. The data show a more favourable situation in telecommunication articles in which – apart from the fact that the products manufactured in the year in question do not represent a high value – the rate of products manufactured for the first time in the four years before 1977 surpassed 10 per cent in three cases. The indicators of precision engineering products show a much higher fluctuation, yet their average value is to be judged on the whole as favourable.

Table 1

Division of production and sales according to the age of products in the engineering the telecommunication and vacuum engineering, and the precision engineering industries in 1977 (per cent)

Year of introduction of the product	Share in the volume of output			Share in sales			Share in exports		
	All engineering products	Telecommunication and vacuum techn. eng. products	Precision engineering products	All engineering products	Telecommunication and vacuum techn. eng. products	Precision engineering products	All engineering products	Telecommunication and vacuum techn. eng. products	Precision engineering products
before 1944	3.2	3.7	1.1	2.7	0.5	0.8	2.4	4.1	0.2
1945–1949	1.1	0.4	0.2	1.2	0.2	0.1	0.5	0.5	0.0
1950–1954	1.9	0.9	2.2	1.5	0.2	0.2	0.7	0.2	0.7
1955–1959	3.5	3.5	2.2	4.2	2.0	2.3	3.3	3.9	1.6
1960–1964	5.7	5.2	3.3	8.2	6.3	2.6	4.1	4.2	3.0
1965–1969	15.1	15.0	16.1	11.7	6.9	15.7	17.6	16.7	17.2
1970	6.5	12.7	9.5	6.5	2.5	4.5	8.8	16.2	12.1
1971	3.4	4.8	4.3	5.3	7.2	6.5	2.6	4.7	3.6
1972	10.2	3.4	9.9	10.5	4.1	3.6	14.2	3.4	10.4
1973	10.3	10.1	5.9	9.8	14.3	7.7	9.3	11.1	5.2
1974	7.5	6.7	11.5	9.3	9.6	16.0	7.9	6.9	14.8
1975	6.1	10.3	7.0	9.8	18.1	15.7	5.3	8.2	6.4
1976	7.4	10.3	11.8	11.3	19.3	11.9	7.9	8.7	11.3
1977	4.7	3.2	8.6	5.7	5.9	4.2	3.9	1.8	9.1
Spare parts	12.7	9.8	6.4	2.3	2.9	8.2	11.5	9.4	4.4
Total	100	100	100	100	100	100	100	100	100

Source: [2, 3]

Table 2

Data of products manufactured in 1977 for the last time

Sector	Number (items)	Sales (million Ft)	Average age (years)
Machines and equipments	88	728.1	5.9
Vehicles	14	393.1	8.2
Electrical machines and appliances	74	786.5	10.6
Telecommunication and vacuum technical products	50	480.5	3.6
Precision engineering products	71	105.1	8.1
Hardware	27	53.8	11.6
Engineering industry total	324	2547.1	7.7

Let us examine also the age of the exported products. The picture is not more favourable either. We could keep as a basis for comparison 8 years stated so benevolently, but we shall rather choose for standard 5 years which is more in agreement with our experience (and better adjusted to the more rigorous value judgement of the international market). Then the following statement can be made: of the total export volume of engineering, telecommunication, vacuum engineering and precision engineering products in 1977 65.7; 63.3; and 52.2 per cent were made up of products which were first produced more than five years earlier. And such values cannot be considered acceptable at all.

Since export values cannot be divided according to age between the socialist and the capitalist markets, the "reassuring" view may arise that we should try to sell our older products mainly in the socialist countries. It has been proved, however, more than once that our products are judged not much less rigorously on the socialist market than on the non-socialist one. Although we do not believe at all that the deterioration in the market positions of the British economy during recent decades has been caused by a single factor, it is worth recalling at this point the mistaken strategy of British textile machine producers. They had been concentrating their efforts for long years on the Commonwealth countries (first of all India and Pakistan) as their main market. Yet the purchasers of textile machines in the developing countries were not particularly interested in acquiring the technically most up-to-date machines, especially if that involved higher costs. The safe sales possibilities of traditional or even outdated types on these markets did not give impetus to technological development of the British textile industry [4]. Thus it has been gradually pushed out of the European market demanding considerably higher technological standards, since Swiss and West German exporters concentrating

their efforts on this market have gained a considerable edge over their English competitors, who have grown too easy-going, in the development of machines satisfying the highest demands.

Still examining Table 1, the fluctuation reflected in the 1977 share of the products first manufactured in the different years is striking. Fluctuation with products introduced in two consecutive years reaches even a threefold difference in several cases, the actual causes of which are not known to us. We can but presume that there may be a relationship between this fact and the alternating stop and go in investments. We are closing the analysis of the data of Table 1 by repeating the conclusion that the rates at which new products enter and old ones die are not fast enough; their acceleration is by all means desirable.

Further analysis of the replacement of products

Let us revert to Table 2, since we have not proved yet that the data of 1977 are not accidentally bad figures of an accidentally bad year, but the reflection of a tendency manifest for long years. For this we shall use the data summarized in Table 3 which relate, according to the available information, to the new and the eliminated products in the years 1963–1975.

It is to be seen on this Table that the number of "products manufactured for the last time in the year" stagnated in the whole engineering industry at the value of 192 in 1963 up to 1970 and, with a big jump in 1971, it rose to 318 by 1975, or to 324 by 1977 shown in Table 2. The same indicator shows again a high fluctuation in telecommunication products; within the 13 years it occurred as well that in some year 37 or 39 were abandoned; thus, the 50 pieces of 1977 represent an expressly favourable value. In the same way, the 71 products manufactured for the last time in 1977 represent by far the highest value among the figures of the 13 years covered by the examination. This confirms our opinion that the replacement of products is very slow. If we place the number of new products of the year beside the number of products manufactured for the last time in 1977 (see Table 4), it will be seen that it is not only the rate of innovation that wants improvement, but the range of products – judged as too large already – was also further expanded in that year.

One more thing to prove that the year 1977 under examination is to be considered as average or even better from the aspect of development: we drew a comparison between the value of output of the products eliminated in 1977 and the output of finished goods of the sector. The result was 1.61 per cent for telecommunication and vacuum engineering, and 0.84 per cent for precision engineering. If these values are compared with the corresponding figures of Table 3, the following results are obtained: the rate of total engineering is higher than in 1975, the last year of the Table, but it is considerably lower than in 1972–73–74. And there were only two years in the period under examination, in which it was lower even than in 1977, and in two other years it was of about the same

Table 3

New and eliminated products (number)

	Approved prototypes			Products entering into factory production			Products manufactured for the last time in the year		
	Engineering industry total	Telecommunication and vacuum engineering	Precision engineering	Engineering industry total	Telecommunication and vacuum engineering	Precision engineering	Engineering industry total	Telecommunication and vacum engineering	Precision engineering
					industries				
1963	883	109	199	751	44	223	192	18	40
1964	872	105	315	722	69	164	195	32	24
1965	886	102	285	745	77	190	193	18	45
1966	926	118	329	866	68	263	152	4	24
1967	973	148	325	969	129	269	197	39	42
1968	954	93	223	964	107	198	177	30	9
1969	877	101	232	869	94	214	182	35	21
1970	800	70	220	839	128	88	192	37	17
1971	740	69	197	1424	126	228	243	27	21
1972	641	61	167	1475	114	261	214	25	43
1973	622	80	167	1111	82	243	159	10	20
1974	642	77	184	974	89	209	287	37	33
1975	572	75	103	1028	94	228	318	3	43

Source: [2, 3]

Table 4

Expansion of the range of products in 1977
(pieces)

	Products manufactured for the last time	New products
Engineering industry total	324	510
Of which:		
telecommunication and vacuum engineering	50	66
precision engineering	71	75

Source: [2, 3]

value. The same indicator is 1.8 per cent for telecommunication engineering, which is considerably better than in the other year. The indicator of precision engineering is 0.84 per cent, hardly lower than in 1974–75, but somewhat higher in comparison with the other years; therefore, on the whole, the year 1977 is not to be considered worse than the average of the foregoing years, apart from a few years much deviating from the average. Thus, the year 1977 selected for basis in drawing our conclusions was not a wrong choice.

With the preceding discussion we have proved that the age composition and innovation rate of Hungarian products are not satisfactory and that – though this was stated primarily in regard of the Swedish industry, but is true in a general sense – the neglect of innovation may be decisive for the standards of an economy, and that these standards can be improved also by more intensive research and development activities. Though many accept this latter statement, there are also quite a number of people who disagree with it. Therefore, we shall use a few numerical illustrations to support the statement.

R and D in a few Western countries

The Americans attribute the slowing down of the growth rate of productivity partly to the fact that there are fewer inventions coming about as a results of American research and development. And the final reason is found in the diminishing amounts spent on research and development. To prove the interrelations we shall quote one figure each from both US and Japanese practice. In the United Satates 45 per cent of economic growth between 1929 and 1969 came from the introduction of new technological achievements; 47 per cent of the economic growth of Japan between 1955 and 1970 was attributable to technological development and improvements in skills. A direct interrela-

tion can be read also from all such data that contain the turnover, profit and research expenses of the largest enterprises (see the regularly published articles on the subject of the magazine Fortune). In comparing data in retrospect for several years, the statement can be made as well, that those enterprises advance in ranking which – while making many other good decisions – had spent relatively large sums on R and D in an earlier period. Although in 1978 the USA spent on R and D the lowest quota of their national income in twenty years, it can still be observed that in the "pulling industries" (the computer industry, vehicle industry, aeroplane industry, space research and the manufacturing of semi-conductors) ever larger amounts are spent on American research. The R and D expenses of the multinational enterprises also show values high above the average (amounting to about 6–7 per cent of their yearly turnover).

The same phenomenon is found in the electrotechnical industry of West Germany. While the average of research inputs per head of employee in the electrotechnical industry amounted to DM 4300, this was DM 8000 in the "pulling" industry i.e. telecommunication engineering. Enterprises with a staff of less than 1000 spent 2.5–3 per cent of their turnover on R and D, those with a staff of 1000–2000 spent 4.5–5 per cent, and those employing over 2000 spent 7.5–8 per cent.

Why have we quoted these examples? Do we in Hungary perhaps not spend enough on research and development? We do not think this the problem, for, if we look into any statistics, it will turn out that socialist countries, among them Hungary, may take pride in quite good figures. While, for example, among those Western countries that spend most on R and D, in 1975 the U.S. spent 2.4 per cent of their gross domestic product (GDP), the German Federal Republic and Switzerland spent 2.2 per cent each, Holland spent 2.1 per cent, Japan 2 per cent, and France 1.9 per cent (5), the figures of socialist countries show a better picture. In 1975 inputs in R and D expressed in percentage of national income amounted to 3.4 per cent in Hungary, 3.9 per cent in Czechoslovakia, 2.7 per cent in Poland, and 4.8 per cent in the Soviet Union. (6) We should not forget, however, that the values expressed in percentage of the national income automatically give higher values than those expressed in that of GDP because of the different contents of the two indicators. If, however, we examine the same rates in retrospect for several years, we find that the relative indicators of the research inputs of socialist countries were growing considerably faster than those of Western countries. It is another matter that this relatively higher rate represents a smaller value in absolute terms. Therefore, the core of the problem is probably not to be sought in the size and rate of inputs, but in the efficiency of the research work itself, and in the effectiveness of the industrial realization ot the results of research. It belongs to the question that the spendable amounts are too strictly categorized; boundaries are too rigid: it is not allowed to regroup the amounts received for investments, for the purchase of fixed assets or for materials. The success of research activity is constrained from the outset by some cicumstances. We shall mention just one of these constraints. According to statistical data of the last two years available (1977 and 1978) the number of research subjects and development programmes in progress amounted to about 30 thousand in Hungary. And in these 30 thousand subjects

36–38 thousand research workers (plus 50 thousand research aids and administrative workers) were engaged. We think that the comparison of the two figures – 30 thousand subjects, 38 thousand research workers – speaks for itself.

Hungarian inventions and purchase of licences

It has been a long discussed question both in Hungary and abroad, what should serve for a measure of success of research work. The most different and most complicated measuring methods have been invented, yet most of them lasted but for an extremely short time: for as long only as an article or a study was written or a lecture held, and even today the success of research is most often measured in statistics by the number of articles and books published, and of inventions and innovations registered. We do not wish to become engaged in a discussion about the correctness or incorrectness of this method. We shall simply state the fact: in comparing the data of 1977 and 1978 of the Statistical Yearbook, it is found that in Hungary the number of inventions and that of innovations announced by research institutes, university departments and other places of research grew, even if not considerably – from 1809 to 1860 and from 4111 to 4212 respectively. Whether these figures are adequate or not we cannot give an objective answer by looking at these data in themselves. Let us examine the question indirectly – reverting again to the product pattern of 1977 upon basis of Table 5 – according to the place of origin of the new products.

Two data of the Table attract attention. According to one, in 1977 altogether 3 of the 533 prototypes of the engineering industry, and altogether 34 of the 1353 new products came from research institutes. It is obvious that the innovations and inventions submitted in 1977 could not appear among the new products of 1977, as well as that the number of new results born at research institutes has not been rising considerably in the last years (their growth rate was approximately identical with the growth in the number of new products introduced every year). In comparing the number of inventions and innovations with that of prototypes and new products coming from research institutes we feel justified in formulating two assumptions: part of the inventions and innovations born at research institutes must be of such contents that they cannot be used for any new products. But even taking that into account, new results get from the first stage of innovation i.e. research over to the third stage, i.e., production, at an extremely bad rate.

The other awfully bad figure is the low number of prototypes and products introduced as a result of licence purchase. The piece data of Table 2 support the value figure according to which between 1971 and 1975 only about 8 per cent of the R and D costs was spent on licence purchase in the engineering industry as opposed to the 25–30 per cent envisaged. The importance of licence purchases is so obvious that we shall quote again just a single example. Developing countries today often consider Japan as their example, even if the standards of technology, skills, infrastructure and organization of the receiving country do not justify the introduction of the most advanced techniques. The

Table 5

Number of prototypes and new products according to origin
(pieces)

Origin of the new product (prototype)	Prototypes of 1977			New products of 1977		
	engineering industry total	telecommunication and vacuum engineering	precision engineering	engineering industry total	telecommunication and vacuum engineering	precision engineering
Own development	433	65	108	956	116	277
Research institute	3	–	–	34	1	9
Other industrial enterprise	37	–	1	176	1	9
Licence	25	–	4	46	1	6
Adaptation of foreign products	2	2	–	5	1	–
Other	33	6	3	136	18	9
Total	533	73	116	1353	138	310

Source: [3]

Japanese example means for these countries that after the war Japan grounded her economic growth in the first place by her large purchases of licences for the electronic industry. Taking the figure not even from the most dynamical years, her share in the licence imports of the world was the double of her share in the finished goods imports of the world i.e. of 6.2 per cent even in 1970.

The statement has to be made that, as long as the value judgement of the market cannot exert enough pressure, the manager of the production started as a result of innovation will not have totally identical interests with those of the national economy. National economic interest would necessitate that, similarly to tendencies felt on the world market, the lifetime of Hungarian products participating in the world market competition should also be shortened. If, however, because of the imperfection of the domestic regulatory system this world market tendency is not felt enough by the domestic producer, if the market absorbs the obsolete products (maybe at a smaller profit), he will not shorten the period of keeping an article in production on his own account. It is, however, a basic truth that if an error is committed anywhere in the chain of innovation of research → development → production → sales, it may frustrate the purpose and result of the entire innovation.

References

1. Skandinaviska Enskilda Banken Quarterly Review, 1978. No. 3–4
2. *Kohászati és gépipari adattár* (Compendium of metallurgical and engineering data.) Budapest 1979. Központi Statisztikai Hivatal.
3. Iparstatisztikai Évkönyv 1977. (Yearbook of Industrial Statistics.) Budapest 1978. Központi Satisztikai Hivatal.
4. HUNT, H. G.: *Export managament of medium-range enterprises in the machine industries.* Journal of Management Studies. 1969. No. 6
5. KRASZNAI, Z.: *Technológia-transzfer és a fejlődő országok* (Transfer of technology and the developing countries.) Világgazdaság, February 13, 1979.
6. *Tudományos kutatás* 1977. (Scientific research 1977.) Budapest, 1979. Központi Statisztikai Hivatal. 35. p.

ОБНОВЛЕНИЕ ПРОДУКЦИИ В ВЕНГЕРСКОМ МАШИНОСТРОЕНИИ

Л. ХОЛТЦЕР

В статье анализируется возраст изделий венгерского машиностроения, в частности техники связи и вакуумной техники, а также приборостроения.

На первый взгляд, данные за 1977 год рисуют благоприятную картину, ведь доля изделий, находящихся в производстве не более пяти лет, составляет в машиностроении в целом 46,2 процента, в производстве техники связи и вакуумной техники — 44, а в приборостроении — 54,7 процента. Однако на второй ступени анализа выясняется, что если срок морального износа принять за 8 лет, то во всем машиностроении 43 процента продукции, в производстве техники связи и вакуумной техники — 39,5, а в приборостроении — 31,5 процента составляют устаревшие изделия.

Для продукции, идущей на экспорт, автор определяет средний срок морального износа в пять лет, что соответствует международным данным. Если взять за основу этот срок, то в 1977 г. изделия старше пяти лет составляли 65,7 процентов фактического экспорта продукции машиностроения, 63,3 процента экспорта техники связи и вакуумной техники и 52,2 процента экспорта приборостроения. Автор далее констатирует, что темпы обновления продукции машиностроения весьма медленны (в среднем 6—7 процентов в год).

Далее автор показывает на примере некоторых развитых капиталистических стран влияние обновления продукции на экономический рост, а затем констатирует, что поскольку ни доля затрат на НИОКР в Венгрии, ни темпы их роста не отстают от показателей развитых капиталистических стран, то объяснение следует искать в эффективности исследовательской деятельности, а также в неудовлетворительном состоянии освоения ее результатов в производстве. Из анализа всего состава продукции венгерского машиностроения в 1977 г. выясняется, что из 1353 новых изделий машиностроения всего 34, а из 533 протогипов — лишь 3 явились результатами деятельности научно-исследовательских и проектных институтов.

Acta Oeconomica, Vol. 24 (1–2), pp. 151–167 (1980)

L. BALCEROWICZ

ORGANIZATIONAL STRUCTURE OF THE NATIONAL ECONOMY AND TECHNOLOGICAL INNOVATIONS

The Polish author discusses the impact of four selected characteristics of the organizational structure of the national economy: 1. the size of the economic organizations, 2. their complexity measured by the number of management levels, 3. their internal structure and 4. the flexibility of the organizational structure of the national economy, or its innovative capacity. Four element of that capacity are discussed: the innovative capacity of economic organizations, their innovative propensity, the functioning of the interplant supply system and the convergence of resources around innovations. Each of these elements is regarded as a variable determined jointly by the organizational factors interacting with the non-organizational ones.

Introduction

In a theoretical analysis, the national economy can be treated as a huge and complex organization composed of smaller ones. Together with their interdependences they constitute the organizational structure of the national economy.

When we discuss this structure, we ought to start from its basic elements i.e. organizations which have to exist in every economy. *Plants* are such organizations. Leaving aside its internal structure, we can define the plant as a one-level organization, i.e. an organization which has a single management level.

Plants are connected by a network of one or two-way ties – supplies of goods and of services. We shall call this network the interplant supply system. As manifestation of the social character of the production process, it constitutes the interplant cooperation system, understood in its broadest sense.

A distinction ought to be made between the material ties which constitute the interplant supply system and the organizational ties. The latter exist, when a group of plants is subordinated to a common management (other than the Centre, which controls and manages the entire national economy). In other words, it can be said that in such a situation the plants are to some extent *organizationally integrated.* The complex organization created by such integration may be called two-level, as it comprises two management levels: management of the individual plants and management of the entire organization. Accordingly, an organization whose most complex part has no more than two management levels is a three-level one. A four-level organization may be similarly defined.

In the organizational structure actually existing in the majority of the socialist countries, multiplant enterprises are the two-level organizations, associations (unions)

the three-level and economic departments* the four-level ones. The respective management levels corresponding to these organizations are following: the management of a multi-plant enterprise, the association's headquarters and the branch ministry.

The supply system is nowadays an indispensable element of every plant's relations with its environment, as it is rather difficult to conceive autarky at the plant level. This however, cannot be said about the organizational ties. Some plants may not belong to larger organizations.

I have adopted in this paper several properties of the national economy's organizational structure as independent variables. It is necessary to define them more precisely, before commencing our analysis..

The size of the economic organization** is the property that the relevant literature most frequently takes into consideration and expresses it by employment, disposable capital assets or output. This property is taken into account in two ways: either each organization is approached individually – then this property is measured by the absolute level of employment, output or disposable capital assets, or the entire set of organizations is analysed – then distribution indicators informing about concentration are used.

In both cases it has to be clearly specified *what* organizations are being taken into consideration, since this is decisive for the interpretation of the obtained results.

All countries measure the plant size, for it is on this level that it is the easiest to observe the influence of technology, as well as economies and diseconomies of scale.

However, the analysis cannot be confined solely to the plant size. It is necessary to extend it to surveying the size of more complex organizations which are the product of a singular superstructure, created over at least some of the plants, and to *organizational concentration* connected with the latter. Here however, the question arises: What organizations should be taken into consideration in a situation characterized by the existence of two-level organizations being part of the three-level ones and of three-level ones belonging to larger, four-level ones?

The answer to this question is probably to be found in the statement that organizational concentration in the national economy is determined by the size of those organizations which are *directly* subordinated to the Centre (the national economy's top management). Determining the degree of organizational concentration depends, therefore, on how the scope of this management has been delimited or, in other words, on how it has been defined. This is no easy task in socialist countries, because of the vague status of the branch (sectoral) ministries. Nevertheless, the

*By the term economic department I shall here understand the entire organization of an industrial branch, plus its top management, i.e. the ministry.

**By the term economic organization, I shall here understand a plant or an organizational grouping of plants, other than the national economy as a whole.

answer is probably to be found in the statement that the centre is a set of roles (creating various institutions) so cast, that they require those who play them to think in terms of the entire economy. According to this definition, there is no reason for treating the organs making operative decisions addressed to concrete receivers within an organizationally delimited range of the national economy and responsible for the state in that field, as a part of the central management. It is quite natural that they have a narrow, sectoral viewpoint. If so, the branch ministries which correspond to the above description should not be treated as a part of the central management, thus the full image of organizational concentration in the socialist countries can be obtained by taking into consideration the organizations that these ministries control, i.e. the economic departments.

The principles of *constructing complex, multilevel economic organizations,* i.e. the way of grouping smaller organizations into bigger ones also have a significant influence on the economy's innovative capacity. Three such principles may be distinguished: horizontal integration, vertical integration and diversification.

A complex organization built in accordance with the horizontal integration principle encompasses organizations which produce goods serving similar purposes. Vertical integration means grouping organizations which perform successive stages in the products designed for similar purposes.

There exist two kinds of diversification: diversification which has a technological basis and diversification which has none.* The first one means grouping organizations which produce goods intended for different purposes, but akin because of the same raw materials, machinery or technological process used for their produc-

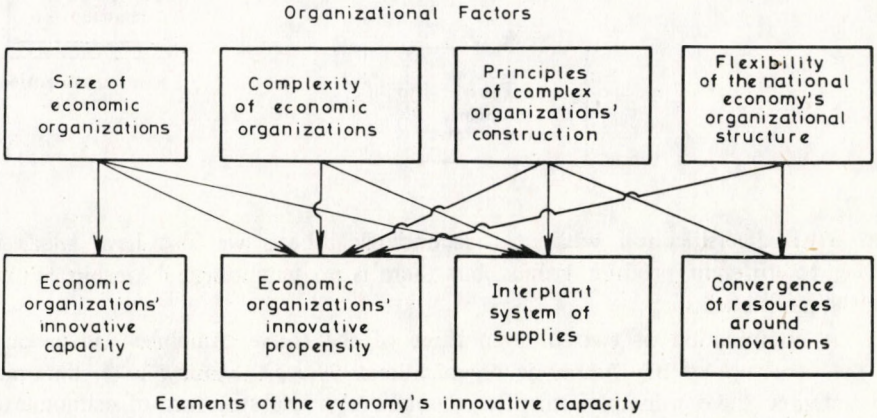
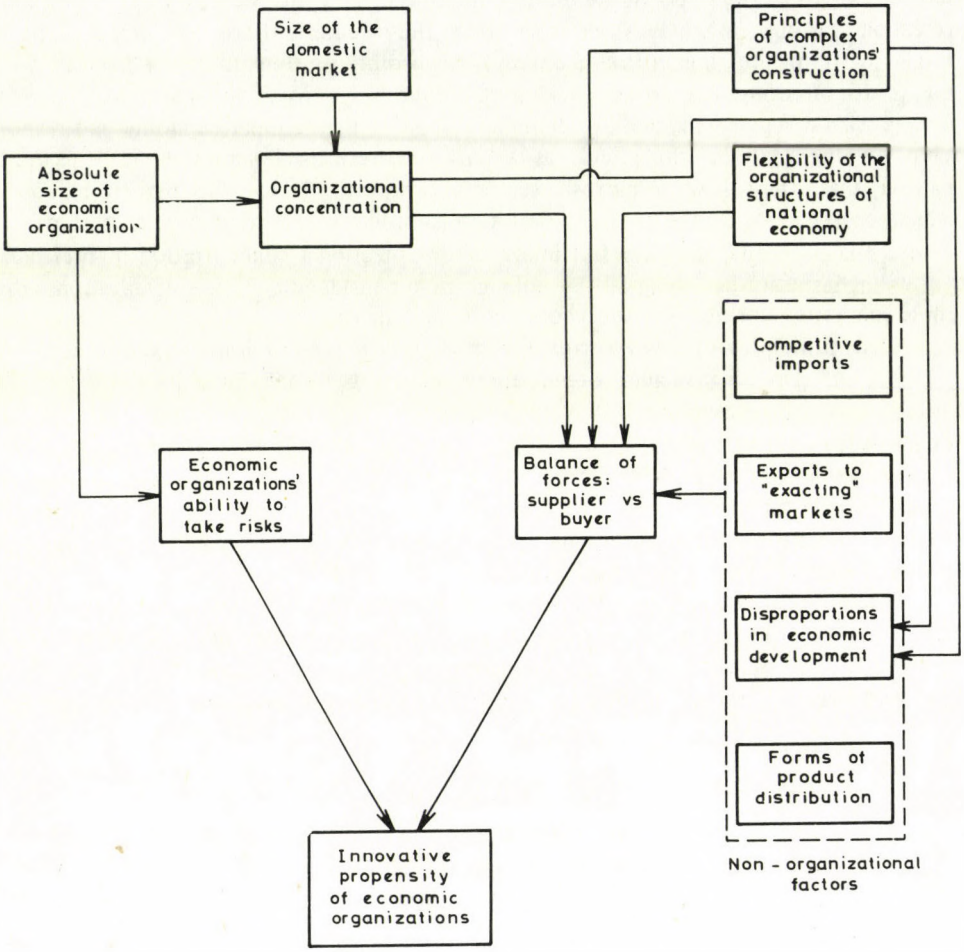


Diagram 1. Organizational Factors

*B. R. *Scott* [1] implicitly distinguishes these two kinds of diversification.



tion. With diversification without a technological basis we also have goods which belong to different product groups, but there is no technological kinship of the previously mentioned sort.

A combination of two or even three of the above principles can be observed in the structure of big economic organizations. Thus, the point is to determine to what degree these principles manifest themselves in the structure of economic organizations and how numerous the organizations based on a single principle are. The problem of structure of economic organizations includes also whether or not the organization disposes of its own R and D facility, and the composition of its management organs.

The size of economic organizations and the related question of their complexity, as well as the principles of constructing complex organizations are presented statically, i.e. neglecting the time factor. They ought to be completed with a very important dynamic property for the innovative processes which could be called the *organizational flexibility of the national economy.* It applies to the speed at which economic organizations converge around new tasks, needs and possibilities or eventually develop themselves on this basis. Three processes determine flexibility in the sense defined: changes in the range of activity of the already existing economic organizations, the nascency of their associations and the creation of new organizations.

The enumerated properties of the national economy's organizational structure, which we shall term organizational factors, exert a joint influence on some elements of the economy's innovative capacity.

Some of these organizational factors influence more than one element of this capacity, and some elements are influenced by more than one factor. Furthermore, these elements are often affected by extra-organizational factors, interacting with the organizational ones. Altogether, we face a complex set of relationships, illustrated by the diagrams on pp. 153–154. We shall later on discuss its respective parts.

Organizational factors and the innovative capacity of economic organizations.

In order to have an innovation-oriented economy, its economic organizations ought to be both able and willing to innovate. In this paragraph I shall discuss the innovative capacity. By an organization capable of innovating, I shall understand an organization which has sufficient resources for this purpose and an internal structure which renders possible an effective conversion of innovative inputs into innovative outputs (new products and new technological process).

The innovative capacity of economic organizations, as understood above, is related to their size:

a) Larger organizations have, *ceteris paribus,* bigger resources than the smaller ones;
b) However, as the size of the organization increases, there is a higher probability of intensification of communication barriers between its department participating in innovations (R + D, marketing and production departments). The efficiency of the innovative process is thus reduced*.

Several factors have to be taken into consideration in order to evaluate the joint influence exerted by these counteracting factors on the innovative capacity of an economic organization:

*The significance of good communication between these parts of the economic organization is strongly underlined by E. *Mansfield* et. al [2]

- whether or not the resources at the disposal of the economic organization are sufficient for innovating is determined by their ratio to the innovation costs. There exists a certain critically low ratio thus, by implication, a certain critically small size of the organization below which the capacity to carry out the innovative programme within the admissible delay (because of competition), is nil.*
- innovation costs are highly varied. Apart from some fields in which they reach hundreds of millions of dollars, there exist much more numerous fields, where they are incomparably lower.
- innovation itself is a complex process, in which the earlier stages (research) are, generally speaking, less expensive than the final ones (development, commercialization).

There are a few conclusions to be drawn from these statements:

1. The minimal size of an organization in respect of innovative capacity is highly varied, depending on its field of activity – as the innovation costs are also very differentiated according to the individual branch.
2. Even in the case of very costly innovations, smaller organizations can successfully perform the earlier stages. The more so in the case of the less expensive innovations.
3. One may doubt whether the expansion of an economic organization beyond the critical size characteristic for the given field of activity can bring along any increase in innovative capacity. For as the organization expands, problems presented by the previously mentioned communication barriers tend to become more serious, reducing thereby the efficiency of realization of the innovative process. In other words, in respect of innovative capacity, the minimal size of an economic organization may also be the optimal one.

All this leads to the conclusion that organizations of various sizes should function in the national economy. Apart from the relatively few fields in which, because of high innovative "cost thresholds", large enterprises are necessary, small and medium-sized enterprises should numerically dominate. Furthermore, these smaller organizations should have freedom of action, otherwise one may get small enterprises without elasticity of action which is their principal advantage, elasticity that was lost because the enterprise had been fitted into the framework of a formalized, multilevel organization. Freedom of action and thus innovative capacity (although not necessarily also innovative propensity) can be fully displayed by small and medium-sized organizations only when there is no other organizational superstructure above them than the Centre (the country's top economic management) which uses mainly economic instruments. This can also be applied to big organizations. All this means that, depending on the field, the degree of organizational concentration and there-

* It is worth noting, that this barrier can be overcome to some extent by the use of government subsidies and interplant cooperation.

fore the number of management levels subordinated directly to the Centre *should vary.*

To have innovation-oriented small and medium-sized organizations, it is also necessary that they be granted equal access with the big organizations to the material and financial means.

These conditions are not fully met in most socialist countries. Their organizational structure is dominated by big economic organizations, regardless of the field of activity and there are relatively few small organizations which are independent, in a sense of not being crammed into bigger ones, thus losing a great part of their potential flexibility.

The *structure of the managing organs,* their mutual relationships and the degree of centralization also affect the innovative capacity of economic organizations, because the desirable solutions in this field are a function of the environment's variability in which they operate. Technology constitutes an important element of this environment. Organizations which perform their activity in a variable environment should have a more flexible, less formalized structure of managing organs than those in a stable one.* Uniformization of the structures of economic organizations exerts therefore a harmful influence on their innovative capacity.

Organizational factors and the innovative propensity of economic organizations

Organizations capable of innovating need not necessarily be willing to innovate. It is, therefore, necessary to give some thought to the determinants of the economic organizations' innovative propensity. I do not mean here any kind of innovations, only those which are effective from the social viewpoint and which require some special effort and ingenuity.

The innovative propensity of the economic organizations so understood can be treated as a variable determined by a whole set of factors, as illustrated by Diagram 2. For the time being, we shall focus our attention on the organizational factors, treating the remaining ones as fixed.

Two intermediate determinants of the discussed propensity are shown in the diagram: the ability of economic organizations to take the risk of innovative activity and the balance of forces between supplier and buyer.

With regard to this first factor we can say that the greater the financial resources of an organization in relation to innovation costs, the greater is this ability. And the financial resources are positively correlated with the organization's size. This is the basis for the statement frequently encountered in the literature that, since bigger organiza-

*T. *Burns* and G. M. *Stalker,* in their classical book [3] have pointed out the relationship between the internal structure of an organization and the environment.

tions have a greater ability to incur risks connected with innovations, they can also be more willing to innovate.

Yet it cannot be said that innovative propensity is a monotonically growing function of the size of economic organizations. For as they expand under the conditions of a given domestic market, the supplier's position versus the buyer tends to become stronger. And this position has a vital importance for the economic organizations' willingness to innovate. We could discuss here different variants of this balance of forces, but for our purposes it is enough to say that if the seller has much bigger bargaining power than the buyer, it is highly probable that economic organizations will show little willingness for socially effective innovations, even if their size would indicate a high innovative capacity.*

It has to be noted, as it is shown in the diagram, that organizational concentration does not completely determine the balance of forces between seller and buyer. There are two other important organizational factors.

With a given degree of organizational concentration, this balance may still shift in either direction, depending on the structure of the complex economic organizations. To be more precise: the wider the use of the horizontal integration principle, the stronger the position of the seller, because the buyer has a limited choice. The more widely other principles of constructing complex economic organizations (vertical integration, diversification) are employed, the bigger are the possibilities of choice of the supplier, with the same number and structure of plants. Domination of the horizontal integration principle is an important factor on its own, independently from organizational concentration, from the degree of monopolization of the national economy. Therefore, a widespread application of this principle in the socialist countries is a negative phenomenon, in respect to the innovative propensity of economic organizations.**

There exists another factor which may affect the balance of forces between seller and buyer: the extent to which the established and new organizations may make an inroad into another organizations' field of activity. The higher the probability of such an inroad, in any organization's opinion, the more considerately will the supplier treat his buyer, And the higher the previously defined *organizational flexibility* of the national economy, the more probable such an inroad is. A high flexibility of the economy's organizational structure prevents the static monopolistic position from transformation into a monopolistic behaviour of economic organizations.

In order to properly estimate the influence exerted by the organizational factors on the balance of forces between supplier and buyer, it is also necessary to mention the non-organizational ones (see Diagram 2). Depending on their nature, the latter can either reinforce or to some extent neutralize the influence of the former. Thus, the constant

*J. *Kornai* amplifies this subject in [4]

**Domination of the horizontal integration and its negative consequences are discussed by, among other authors *Mirela* [5] and *Sobczak* [6]

availability of competitive imports, i.e. the possibility of choice between imported and domestic supplies, prevents the producer from achieving a monopolistic position.

A similar positive influence is exerted on the behaviour of economic organizations by exports to "exacting" markets. And on the contrary: low availability of imported goods on the domestic market and a low level of exports to such exacting markets reinforce the harmful influence of monopolistic organizational structures.

Disharmonic development of various branches of the national economy, lack of balance in the economy exerts a similar influence. By leading to multiple deficits, it permits the sellers to behave like monopolists, even when they do not have a monopolistic position (if they do have one, their positions vs. the buyers is still stronger).* However, it has to be said that organizational factors and the methods used for managing the national economy are jointly responsible for this disharmonic development. What I mean here is that domination of the horizontal integration principle requires a perfect harmonization of the rates and directions of development of individual complex organizations, a hard thing to do when the central directives are very detailed and the distribution of means for development is done through a sort of a bargain, which powerful (though not all equally powerful) multi-level organizations try to influence the Centre by different methods.

There is another factor which in a way veils the influence exerted on the balance of forces between the supplier and buyer, by the organizational factors. This method is still widely applied in the majority of the socialist countries. In such a situation the buyer is "assigned" to his supplier so the supplier has a monopoly, even if he is not the only producer of a given good. Thus, rationing creates an administrative monopoly there where for organizational reasons the monopoly already existed and also there where there was no monopoly. Only after the administrative monopoly had been away with, the independent influence of the organizational factors can manifest itself.

Organizational determinants of the functioning of the interplant supply system and its effects on innovation

The majority of innovations requires some cooperation between plants. It is therefore very important how the material ties between them are shaped. If the quality of these ties is low: slow pace and difficulties in establishing them, their unreliability, non-conformity of deliveries (in quality or quantity) with the buyers's expectations etc., they quite naturally hamper or even render impossible the realization of innovations. They also limit, in an indirect way, the innovative propensity of economic organizations. For it is clear that most innovations require some changes in the supply system. There usually arises demand for new kinds of raw materials, semi-finished products or machinery. Thus, new suppliers have to be found and the previously established contacts partly

*Furthermore, disturbances caused by the lack of balance in the interplant supply system impose additional restraints on the economic organizations' willingness to innovate.

abandoned. All this requires additional effort and time. [7] If for some reason (e.g. pressures of the higher authorities, perspective of material gain, professional ambitions of management) the innovation is being introduced, supply problems may retard its realization. Such things may happen even during the R + D stage, because of the lack of some petty element. This may render the innovation economically obsolete already at the stage of its creation.

And this is not yet the whole story. Disturbances in the interplant supply system not only withhold actions which would be effective from the social viewpoint: they lead to actions which are ineffective from this aspect, although effective the individual organization's point of view. Problems in the supply system often give way to the economic organizations' tendency to take up the production of the necessary means of production on their own. [8] This is often small-scale production, where it is impossible to use specialized machinery; high unit costs are the result. This tendency results in a widely dispersed production of parts which, in turn, in a low degree of their standardization. [9].

Disturbances in the supply systems also lead to the realization of what could be called "forced" innovations. Very serious problems connected with obtaining certain semi-manifactured articles may lead to attempts at substituting them with more easily obtainable products. This is the source of technological changes which influence production costs and product quality. We cannot exclude the possibility that some of these changes may be advantageous from the social point of view, but it does not apply to their majority, as they are usually emergencies.

Finally, disturbances in the supply system also cause a tendency to preferring, independently from other factors, foreign rather than domestic technology.*

The image of consequences of disturbances in the supply system should induce some reflexion about their causes. Taking up this matter, I shall concentrate mainly on the organizational factors, without neglecting nonetheless other factors connected with them.

Let us first notice, that if cooperating plants belong to different organizational structures, the more complex these structures are, the greater the number of inter-organizational boundaries the material ties connecting these plants have to "pierce". In the case of two plants belonging to different enterprises but to the same industrial association, there are two inter-organizational boundaries: the interplant and the inter-enterprise ones. If they belong to two different associations but within the same economic department, there is one more: the inter-association boundary. And if they belong to two different departments, there appears the fourth boundary – the one between the departments.

Crossing the inter-organizational boundaries – because of the necessity of some inter-level adjustments – is always a hindrance of some sort to the establishment of

*It might be worth-while to quote here the statement made by the minister of Science, Higher Education and Technology, professor J. *Górski* ("Zycie Gospodarcze" No 45, 1978, p. 2) ". . . . so big are sometimes the difficulties of coordinating the work of a few score plants, which would participate in equipping (. . .) a technological line (factory or department of the latter), that the investor prefers, if possible, to pay in hard currency, to get a turnkey plant and have this problem solved."

material ties between plants. The more complex the organizations subordinated directly to the Centre, the more serious the disturbances to be expected in the sphere of material ties.

There is another problem, aptly presented by the Hungarian economist J. Wilcsek, which refers to the matter in question: "As a result of the diversity of demand, there are many products needed, which large-scale industry can produce only uneconomically, either because the quantities asked for are too small, or because the large-scale plant – since it is less flexible – cannot adjust to market demands sufficiently rapidly or production may also be uneconomic because of the high overhead costs of the large-scale plant. Elimination of the small and medium-sized plants caused a shortage of products justified neither by labour force, nor material, nor by capacity problems. An economic elimination of these shortages can only take place through the establishment of modern small and medium-sized plants." [10]

The existence of such plants, i.e. avoiding an excessive production concentration, anyhow unfounded in view of the actual technological tendencies, is therefore a necessary condition which has to be fulfilled in order to eliminate the severe gap in the sphere of material ties. Yet it is not a sufficient condition, for, as it has been previously said, it is possible to have such plants without the flexibility which constitutes their principal advantage, because flexibility has been lost in the formalized, multilevel structures that these plants had been crammed into. Small and medium-sized plants can perform their function in the sphere of the supply system only when they have freedom of action. This freedom can be most fully achieved by granting them the status of enterprises subordinated directly to the Centre, which would use mainly economic instruments. It implies of course, differentation by size and complexity of the organizations subordinated directly to the Centre.

The existence of multi-level organizational structures, connected with the lack of flexible small and medium-sized plants, still does not explain everything. There are countries in which no widespread and permanent disturbances in the interplant system of supplies can be noticed, though they also have huge and complex economic organizations (though it has to be stressed that these organizations are not so big as the economic departments in the socialist countries and that they are not the only organizational form existing in these countries). This would prove that inter-organizational boundaries may differ in permeability and must not necessarily constitute barriers for the interplant material ties. What then determines the "permeability" of the inter-organizational boundaries? What converts them into barriers?

In an attempt to answer this question, I should like to quote a characteristic statement: ... "the production management system is to a too small extent oriented towards the direct, horizontal connections. To settle a problem, superior authorities have to be addressed; they should issue directives to the neighbours, whereas the latter had by that time got their plan long ago." [11]

This statement and the observation of reality point to one fact: the extensive and direct regulation of interplant material ties is the basic cause of inter-organizational

barriers. This regulation is expressed in the way the central plan is decomposed into more and more detailed tasks and limits of funds and means on the consecutive levels of the multi-level economic hierarchy, created for this purpose (it is here that the organizational factors interwine with management methods).

Detailed central planning, performed through the allotment of tasks and means for their implementation is certainly not the only possible and not the most effective form. This thesis has already found acknowledgement in the Polish literature and Hungary provides us with examples of more aggregated central plans, whose realization is assured mainly by economic instruments.

Thus, it is the intensity of centralization determined by the behaviour of different managerial levels that decides how permeable the inter-organizational boundaries will be. Speaking more precisely, the more centralized the regulation of the material ties, i.e. the more detailed the directives concerning the production programme, supply sources and buyers, the higher the probability that these boundaries will turn into barriers for the material ties. For the greater the centralization in the material ties, the more distant is the person who issues the directive for its addressee; information passing through the consecutive levels gets more distorted and the time it needs to reach the addressee is longer.

Not only the intensity of centralization is important, but also its character: whether it is defined or not. By defined centralization I mean such a state in which the competence of different levels is precisely delimited and these levels act within their competences. In the case of undefined centralization these conditions are not fulfilled, i.e. superior authorities may interfere with *any* affair (not defined beforehand) of the lower-level organization. This can easily produce a situation in which these lower levels get contradictory directives (especially if they are subordinated in the same questions to different managements). This inevitably leads to disturbances in the interplant supply system.

In quest for the causes of the permanent disturbances of the interplant supply system, one cannot neglect the previously mentioned joint influence of several intertwined factors: domination of the horizontal integration principle, high organizational concentration and they way of allocation of means and funds for development.

Where horizontal integration dominates, plants belonging to the same, larger organization have little chance of maintaining material ties with each other, as they produce identical or similar products. Thus, they are forced to maintain ties mainly with plants which belong to other complex economic organizations and therefore must cross the inter-organization boundaries. So, when horizontal integration prevails, we obtain a particular distribution of material ties, due to a peculiar distribution of the plants themselves: few ties within the complex organizations and a lot between them. In other words, when horizontal integration is dominant, various plants representing different stages of the same economic process (i.e. ending up with a given product) belong to *different* complex organizations. Thus, individual organizations are made up of "links" (stages) of different economic processes. This naturally requires an exceptionally good harmonization of the growth rates and directions of development of these organizations.

Yet *harmonization* is extremely hard to achieve in a situation in which there exist huge (but not equally powerful) organizations, whose demand for means – which are obtained under the conditions of centralized, detailed management by exerting all sorts of pressures on the Centre – is almost unlimited.

It is now clear that at the base of the disturbances, in the interplant supply system lies a whole set of factors: high organizational concentration connected with a high complexity of organizations subordinated directly to the Centre, dominance of the horizontal integration principle and detailed, centralized management of the economy.

These factors are *intertwined* and reinforce each other's negative influence on the interplant supply system, and therefore also on all innovative activity.

Organizational factors and the convergence of resources around innovations

Innovations inevitably lead to changes in the structure of resource utilization. It is therefore of utmost importance for the national economy that this structure be susceptible to flexible changes. The properties of the national economy's organizational structure decide about the feasibility of such changes. What is especially important is the flexibility of this structure, understood as the speed at which economic organizations converge on different goals, needs and possibilities or eventually expand on their basis. Modern technology has some specific requirements:

- New technologies or new sets of productive machinery appear, characterized by the ability to turn out simultaneously a whole group of goods (often serving completely different purposes) and/or comprising whole groups of operations previously performed within the traditional "branches";
- Inventions, in a modified form, pass from one industrial field to another (e.g. the laser used in telecommunications, in medicine and in the clothing industry);
- Research and development efforts sometimes end up with unexpected but useful results.

These tendencies require that economic organizations be given *the freedom to shape their field of activity*. Its lack leads to easily foreseeable consequences: obstruction of some types of innovations (especially the inter-branch type) or their ineffective utilization. Therefore, if their field of activity is stiffly delimited, economic organizations either will not be able to introduce new machinery complexes or new complicated processes capable of turning out many various products or will be able to utilize them only within the narrow range of the "branch". The field in which technology can pass from branch to branch will be limited because – since the economic organizations will be unable to expand their field of activity – they will not be willing to modify appropriately the inventions known to them. Adaptations which have for some reason been made may find no application if there are strong inter-organizational barriers. The useful, although unexpected, results of R + D effort incur the same danger, if they happen to be applicable only outside the field of activity of the organization which had made them.

The postulate to let economic organizations shape freely their field of activity (in other words, to give them the freedom of entering any field they choose), implies the lack of formal restrictions which would frame the "branch" that a given enterprise is supposed to conduct its activity within. The organizational division of the national economy shouldn't be coupled with the branch division which is static by its nature. An attempt of such coupling must hinder technological progress, as the branch boundaries become blurred. Neither should detailed, addressed production tasks be used as a common solution, as even when there are no administrative delimitations of the field of activity, they tend to assign economic organizations to given branches.

The possibility of certaing *voluntary associations* of economic organizations for the realization of determined undertakings of long-range cooperation is an indispensable element because of the dynamical development of technology which – along with the freedom to shape the organization's field of activity – determines the flexibility of the national economy's organizational structure. It favours the amalgamation of resources and experience for the purpose of introducing complex innovations.

The third element which influences the flexibility of the national economy's organizational structure is the *creation of new plants.* This process is in an obvious manner connected with investments. It has a potentially big importance for innovations because many innovations require investments and, on the other hand, when new plants are built there exists the opportunity to introduce new technological processes and products. However, the strength of the connexion of this process with innovations may differ. As reality indicates, there may be a strong drive to invest in new plants and, simultaneously, a lack of means for introducing important inventions. The contrary is also possible; to have a low investment rate and nevertheless to make important innovations. Therefore, the point is not so much the total sum of investment means, but their distribution between various purposes. What then, decides about the extent to which the creation of new plants serves innovations? (I do not mean here any innovations, only those which are socially effective). What decides about the distribution of investment means between different purposes? The general answer is probably the following: the distribution of means and powers between various organizations and the conditions in which they conduct their activity. This statement raises a natural question: what should the distribution of means and powers and the conditions of economic activity among economic organizations be like, so as to assure an optimal distribution of investments between different purposes, and also that investments which lead to the creation of new plants should as effectively as possible serve the socially useful innovations. It is difficult to answer this question more precisely. It is yet worth-while to note that. generally speaking, there are three kinds of decision makers in respect of decisions on the creation of new plants: the already existing economic organizations, the central level and individual members of the society.*

*I omit the fourth kind, which can also act as the creator of new plants: the local authorities, as they have little significance for the analysed problem.

As far as the economic organizations are concerned, the extent to which the new plants created by them will serve the socially effective innovations depends on their general propensity to such innovations. The latter is determined by a whole set of intertwined organizational and extraorganizational factors, which have been already discussed. If these factors are inappropriately shaped, then it is hard to expect the new plants created by the economic organizations' decisions to be closely linked with the socially effective innovations.

In the majority of the socialist countries the central level played and continues to play the decisive role in the creation of new plants. Investments of the central level laid the foundations of modern industry in these countries. It is however, necessary to realize that there are certain factors which limit the closeness of central investments' ties with the socially effective innovations. Firstly, the central level quite naturally focuses its attention on big investments. It is therefore difficult to expect it to notice lesser investment projects. As a matter of fact, it is these projects which in their mass are probably no less important for economic development than the big investments, whose realization the smaller ones anyway assume. Secondly, a factor linked with the first one, concentration on big undertakings also means incurring the risks of big errors. They are especially probable when the central level is under the influence of powerful organizations which, because of their size and other factors determining the balance of forces between supplier and buyer, are not constrained to make economic efficiency computations. Thirdly, new plants created by central investments are later on operated, and the existing conditions, including and dominated by the factors which determine the balance of forces between supplier and buyers, decide about how they will be operated. If these factors are inappropriately shaped, one may install the most up-to-date machinery, and yet utilize them ineffectively. (This applies also to new plants created by the economic organizations.)

The burden of conducting investment activity and creating new plants, is carried in a socialist economy usually by the economic organizations and the Centre. This should not, however, lead to neglecting the role which individual members of the society can play in this field. According to innovation-minded individuals possibilities of creating small plants having the status of independent enterprises, might increase the ranks of those who create, investigate and try to apply innovative ideas, thus increasing the society's general innovative capacity.

Under the conditions of socialist economy, the calling into being of cooperative enterprises can be the main, although not the only way of creating such enterprises.

Final remarks

The analysis carried out in this paper suggests some conclusions as to what the structure of the national economy should look like, from the viewpoint of technological progress (and more broadly – from the viewpoint of economic effectiveness).

In a static approach, this structure should be differentiated in several respects. Firstly, according to the size of the economic organizations which constitute this structure and the connected question of their complexity (the number of management levels). It is possible to have a wide dispersion at plant level and huge multi-level organizational groupings of plants. I mean independent organizations in the sense of being subordinated directly to the Centre, understood in its narrowest sense. In the set of such organizations, the place for small, medium and big; for the one, two and in some cases three-level organizations should be found.

The organization's size should be adapted to the principal fields of their activity, including also adaptation to the scale of innovative outlays, characterized, as it has been previously said, by high differentiation.

Secondly, the differentiation of the economy's organizational structure should mean the end of the domination of branch integration in the construction of complex organizations. Its domination has an unfavourable influence on innovations, because it limits or even deprives the buyer of the right to choose his supplier, thus weakening the innovative propensity of economic organizations. Another of its harmful effects is the fact that it contributes to the disturbances within the interplant supply system, by placing cooperating plants within different complex organizations. The other principles of the construction of complex organizations: vertical integration and differentiation with a technical basis are free from these defects. Organizations built according to these principles can attain big dimension (which does not mean that they always should) without being monopolists. However, one should not draw the conclusions that only these two principles ought to be used, for it is not purposeful to create everywhere durable organizational groupings connected with material ties. Many products are characterized by multiple possibilities of their application and, besides that, a large part of material ties changes along with changing technology. Furthermore, in some situations horizontal integration may prove to be best solutions (e.g. because of the possibility of concentrating R + D efforts and because of economies of scale in the use of their results).

Thirdly, economic organizations should be differentiated as far as the construction of their management organs, their relations and the degree of centralization etc. are concerned. Organizations conducting their activity in a more variable environment e.g. under the conditions of a rapidly changing technology, should have a more flexible, less formalized structure than organizations operating in a more stable environment. The larger the extent to which economic organizations decide themselves about their internal structure, the higher the probability of achieving such a differentiation.

In a dynamic approach, the organizational structure of the national economy should be characterized by high flexibility, because by their very nature the innovations introduce changes in the product range turned out by the national economy and in the interplant supply system connected with this range. This is why it is so important, especially facing the tendencies of modern technology, that economic organizations be given the freedom of shaping the field of their activity on their own. The creation of voluntary associations aimed at the realization of complex innovative undertakings or at

long-range cooperation is also of importance. Finally, the potentially big significance of the process of creating new plants for the economy's innovative capacity, has to be underlined.

References

1. SCOTT B. R.: *The industrial state: old myths and new realities.* Harvard Business Review, March; April 1973, p. 133
2. MANSFIELD, E. et.al.: *Research and innovation in the modern corporation.* New York, Norton 1971.
3. BURNS, T. and STALKER, G. M.: *The management of innovations.* London, 1961. Tavistock Publications, pp. 5–11 and 110–122
4. KORNAI, J.: *Anti-equilirium – Theory of economic systems.* Amsterdam 1971, North-Holland Publishing Company
5. MRELA, H.: *Organizational integration of the industry.* Warsaw, 1978 PWE, pp. 88–90 and 200–202. In Polish.
6. *SOBCZAK, K.: Management of the national economy under the conditions of the Concentration of Production,* Katowice. Slask Publishers 1974, pp. 20–27. In Polish.
7. BERLINER, J.: *Innovation decision in Soviet industry.* The MIT Press, Cambridge Massachussets and London 1976, pp. 61–62
8. MRELA, H.: op. cit. pp. 170–171
9. SAMBORSKY, G. J.: *Specialization under the conditions of the scientific and technical revolution.* Moscow. 1973, pp. 200–205 In Russian.
10. WILCSEK, J.: *Modern small and medium-sized factories in the Hungarian industry.* Acta Oeconomica, Vol. 6, No. 4 (1971) p. 325.
11. POPOV, G. H.: *Interbranch problems of managing social production. In: problems of the complex improvement of the management, planning, financing and economoci stimulation in the industry.* Moscow 1978, p. 39 In Russian.

ОРГАНИЗАЦИОННАЯ СТРУКТУРА НАРОДНОГО ХОЗЯЙСТВА И ВНЕДРЕНИЕ НОВОЙ ТЕХНИКИ

Л. БАЛЦЕРОВИЧ

В статье рассматривается влияние четырех основных черт организационной структуры народного хозяйства (организационных факторов): 1. величины действующих в нем хозяйственных организаций; 2. степени их сложности (измеряемой числом уровней управления); 3. их внутренней структуры; 4. гибкости организационной структуры народного хозяйства. Автор обращает внимание на четыре основных элемента способности народного хозяйства внедрять технические новшества. Такими элементами являются: способность хозяйственных организаций к новшествам, их склонность к новшествам, функционирование межзаводских вещественных связей и способность сосредоточивать производственные резурсы на новшествах. Автор рассматривает каждый из вышеназванных элементов как переменную, определяемую взаимодействием организационных факторов с внеорганизационными факторами.

Исходя из проведенного анализа, автор статьи приходит к выводу, что для того, чтобы народное хозяйство проявило способность к новшествам, необходимо, чтобы его организационная структура характеризовалась — в статическом подходе — сильной дифференциацией величины, сложности внутренней структуры хозяйственных организаций, а в динамическом подходе — значительной гибкостью, в смысле способности сосредоточиваться на новых задачах, потребностях и возможностях.

Acta Oeconomica, Vol. 24 (1–2), pp. 169–185 (1980)

REVIEWS

Z. TATAI

INDUSTRIALIZATION IN THE VILLAGES

As part of Hungary's socio-economic transformation in the last 35 years, such previously agricultural regions as the Great Hungarian Plain and South-Transdanubia experienced radical changes in the structure of their economy and in their employment conditions. The role of industry has grown considerably also in the villages.

The industrialization of villages is a complex of several separate though closely linked processes. They are the following:

a) Agricultural production is assuming an industrial character. Increased mechanization and the growing use of chemicals, the emergence of closed-cycle production systems, etc., have increased labour productivity. An increasingly large part of agricultural production takes place indoors, there is now much more demand for trained manpower. Agricultural production – the character of the work involved – now resembles industrial activity.

b) Industrial work has gained in importance in the activities of the state and cooperative farms. Industry now accounts for an important and increasing proportion of their employment, returns from sales and profits.

c) In villages industrial plants and enterprises have expanded their activities. Today more than one fifth of the country's industrial output comes from the industrial plants of villages.

d) Many people from among previously agricultural regions are now working as commuters in near-by or even more distant towns, first of all in the industrial plants of the capital.

Industrialization of the villages is not a new phenomenon. It did not begin with socialist industrialization or the re-organization of agriculture in the fifties. There was some industry in the villages already before 1945. Production in the most advanced large estates showed a number of industrial features; the large estates often processed their own products. There were in the villages also independent industrial enterprises such as mines, some building materials industry and food processing plants, and, of course, handicraft and cottage industry. Regular or temporary work in the cities has also been a long-standing practice.

Although industrialization itself is not entirely new to the village – the rhythm of the process has greatly accelerated in the last decade, under the impact of the socialist reorganization of agriculture.

Accumulation of quantitative changes in every element of the industrialization process has led to a qualitatively new situation manifesting itself in the following:

– Industrialization of agricultural production which had been slow and extended only to a few capitalist large estates in the past, has greatly accelerated and became prevalent throughout Hungarian agriculture.

– Agricultural employment decreased considerably, precisely owing to modernization and now represents a smaller proportion of the economically active population. Nearly half of all village inhabitants are now working in industrial plants located in their own village or elsewhere.

– A rather strong migration has taken place in the course of which many people have moved from the villages and market-towns to industrial areas, first of all to the capital of the country.

– The working class is today more evenly distributed throughout the country than in the pre-war Hungary. About half of them live in villages.

– Most of those who live in villages – whether they work in agriculture or other sectors – carry on also agricultural acivity of an auxiliary character.

I intend to give here more detailed treatment to the two types of industrialization in the villages: industries at state and cooperative farms, and the activities of the enterprises expressly classified as industrial. Even a sketchy report on how agricultural production is becoming industrial in itself, or on the changes in the demographic conditions in the villages would each require separate discussion beyond the scope of this paper.

Non-agricultural activities of large farms

The scope of not strictly agricultural activities in the cooperative and state farms has been steadily growing. Table 1 shows the importance of these activities in the whole of agriculture and particularly in the cooperative farms.

No assessment of agriculture in Hungary is possible without an analysis of the activities which are not strictly agricultural in character, that is, the auxiliary work done in the fields of industry, building industry, trade, and services, etc.

Apart from crop cultivation, animal husbandry and forestry, which constitute the main branches of agriculture, other activities were also pursued within the framework of agriculture already prior to 1945. Food processing and other industrial activities were part of the work of a good many capitalist large estates, and such auxiliary activities had not been alien to the activities of smaller farms either. It was a frequent practice for peasants to have a double occupation; they often worked as artisans, or were employed in mines or factories, to supplement their incomes from agriculture.

There are many reasons for the development of non-agricultural activities in large farms. Not negligible among them are the gradual development of up-to-date technical

bases and the growing specialization and division of labour among the different farms and plants.

Processing a farm's own produce and of those nearby is directly linked to agricultural production. In consequence of increased mechanization, workshops for the repair and maintenance of machines have also assumed increasing importance.

The production of fodder mixtures and improved seds, and large-scale artificial hatching are also among the industrial activities becoming increasingly important.

Some of the industrial pursuits of agricultural enterprises are not related to agriculture, but aim at creating employment and supplementary income opportunities for the local population. There are cooperatives which undertake work for the textile industry or other industries, usually in close cooperation with large factories and with machines leased or lent by them, in order to provide employment for women.

Gross output in agriculture was 250 billion Forints in 1978. Out of this sum, 183 billion Forints came from agricultural production. As much as 45 per cent of the remaining 67 billion accrued from other activities. In the state farms 42.6 per cent, and in the cooperative farms 33.1 per cent of the gross output derived from not strictly agricultural activities.

Table 1

Changes in the proportion of non-agricultural activities within the gross production value of agriculture

Year	Agriculture as a whole	State farms	Co-operative farms
1960	3.3	7.9	5.9
1965	6.3	12.7	9.0
1969	11.7	13.5	18.0
1975	16.4	18.1	23.6
1977	25.4	38.6	31.8
1978	26.7	42.6	33.1

The above figures indicate that non-agricultural work in agriculture represents a significant contribution to the national output. In 1978 the industrial activity of farms accounted for about 30 billion Forints, nearly 4 per cent of the total industrial gross output.

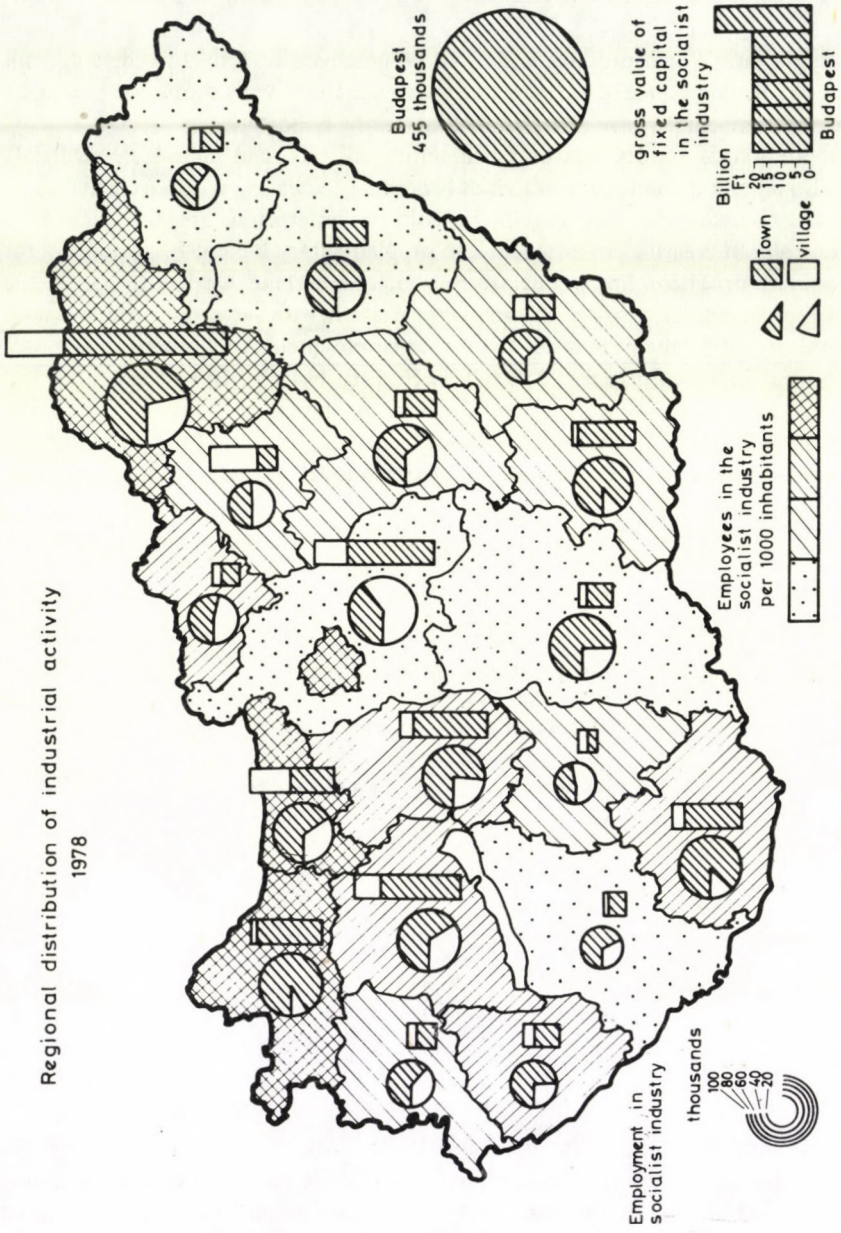

Regional distribution of industrial activity
1978
Budapest
455 thousands
gross value of
fixed capital
in the socialist
industry
Billion
Ft
20
15
10
5
0
Town
village
Budapest
Employees in the
socialist industry
per 1000 inhabitants
Employment in
socialist industry
thousands
100
80
60
40
20
Source: Területi Statisztikai Évkönyv 1979.
Budapest 1980. Központi Statisztikai Hivatal. 387 p.

Fig. 1

In districts influenced by the proximity of Budapest and other industrial centres, generally a larger proportion of the rural output derives from nonagricultural activities than in the industrially less developed countries of Hungary. In the vicinity of the capital 56 per cent of farm production came from not strictly agricultural activities. For other industrial districts, outside of the orbit of Budapest, the figure was over 30 per cent in 1978.

Unfavourable production resources or conditions in a given farm do not seem to favour directly the trends in non-agricultural activities. According to a 1977 report of the National Council of Cooperative Farms, the returns from sales of poorer farms from non-agricultural activities were in 1975 only 13.3 per cent of the total returns, whereas the average figure for all cooperatives was 18.7 per cent (services not included).

Employment problems appeared in the last few decades only in regions with lesser industrial development. It was from these areas that a larger percentage of the population left to take jobs in other parts of the country. In earlier years serious employment problems had to be overcome in several counties where non-agricultural activities represented only about 15–16 per cent in 1977.

Although there were various statutory provisions which encouraged cooperatives to develop their industrial activities in conjunction with large-scale industry, the lack of skilled workers, supervisors, managers in areas with unfavourable agricultural production resources in counties up against employment problems restrained the possibilities of such a development. On the contrary, in the industrially more advanced districts, especially in the neighbourhood of Budapest in recent years not even the extra taxation on the industrial activities of large farms reduced this type of activity. At the same time, in areas with poor resources not even the subsidies that can be offered for industrial development are able to advance industrial activity to the desired extent.

The economic assessment of non-agricultural activities of agricultural plants is not quite unequivocal. It is recognised that their industries came into being and are able to survive because they satisfy actual demand, but it is known that they generally operate with lower technological standards and with a lower productivity than large-scale industries. The manpower tied down in industry within agriculture could be more efficiently used by the big factories in Budapest and other industrial centres. The problems involved are suggested by the fact that such activities as the making of casts – certainly more suitable for foundries than cooperatives – receive support even from the competent ministries because there is a shortage of production capacity in the foundries and the output of casts under unfavourable technical conditions is to be preferred to increasing imports from capitalist countries. Besides, many argue for the industrial activity by pointing out the relatively low overhead costs, low capital intensity, and an ability to adapt quickly to changes in demand in this type of industrial organizations.

As shown by the national economic plans which stipulate an annual growth of 8 per cent in the non-agricultural activities of farms, dynamic development in this field obviously fills a need. It is necessary, however, that this multifarious activity should be performed under more up-to-date conditions and with greater efficiency. Similarly, there

is a need for a better industrial and regional coordination of the non-agricultural work done by the various state farms and cooperatives with due regard to the nationally accepted principles of intensive and selective industrial development.

The principles relating to the intensive and selective development of industry should be particularly observed in industrial-type activities within agriculture in the vicinity of Budapest but also in other areas of Hungary. At the same time, in areas infavourable for agriculture, in districts or farms where there is no local employment opportunity for all those who would be willing to work, it is expedient to set up and develop additional complementary activities corresponding to the local resources. Apart from the desire for employment, the wish for ensuring and adequate level of income may also justify such a measure in some settlements.

The transformation of rural industry

The village industries in mining, handicrafts, and food processing, traditional before World War II, have largely lost their earlier significance. Closing down the no longer profitable pits reduced mining in the villages. On the other hand, several surface buildings were converted to accommodate smaller manufacturing plants in former mining villages in order to maintain employment. Modernization in agriculture at the same time made some of the earlier trades redundant (smiths and cartmarkers), creating, however, new ones (fitters, mechanics). The services required in the villages also altered, with a growing need for plumbers, electricians and repairmen. The discriminatory taxation policy of the 1950's ousted from economic activity a great many of the artisans seeing to such services. In the last few decades government has tried to stimulate growth in the number of tradesmen working in repair, maintenance and other services in the villages and has put into effect various tax reductions and other provisions to this end. Even so, there is a shortage of services in the smaller villages, whereas in some of the larger villages servicing has assumed a metropolitan character.

In the 1950s and 1960s there was a marked concentration of food processing which affected many small village mills, dairy plants and bakeries. Large-scale food processing was more economical, but at the same time the transportation cost of milk and bread increased significantly. Concentration of local food industries based on consumers proved to be excessive and, consequently, in the last few decades agricultural producer cooperatives have put into operation a number of small local bakeries, dairy and meatpacking plants.

Folk art and crafts, which almost became extinct before the war, are experiencing a renaissance. City people are ready consumers of the works of folk art, which are made partly in home-craft centres, but in a larger part by masters working at home.

In this way, there has been a fundamental change in the nature of small industries, and at the same time a number of modern factories have been located in village areas. Manufacturing industry in the villages has, of course, altered life in most village communities.

Table 2

Gross output in agriculture according to type of activity in 1978
1970 = 100.0

Type of activity	Total agriculture	State farms	Cooperative farms
Agricultural production	177.8	170.2	194.2
Industrial activity	434.7	536.6	400.6
Building and construction activity	136.9	156.0	134.2
Commercial activity	263.9	135.0	318.8
Other activites	435.9	985.6	297.0
Total	201.4	236.8	214.1

Source: Statisztikai Évkönyv 1978 (Statistical Yearbook 1978), Központi Statisztikai Hivatal. Budapest, 1979, p. 240.

The need for rural industrial development

There were two basic inducements for industrial development in the villages. The first, which was more significant particularly in the initial phases of socialist industrialization, lay in the production requirements of the national economy. Basic national economic interests called for the development of mining, the chemical, the building and building-materials industries. In these cases national economic interests determined the choice of location, and such capital projects and the required infrastructural investments were effected from central resources. In the geographical location of such projects surplus or shortage of local manpower was not of fundamental influence, for the inflow of manpower, where needed, was centrally ensured through the encourangement of resettlement or commuting.

The second line of inducements for industrialization was generated by the employment conditions of the local population and the desire to ensure better living conditions for them. Although in this case, too, only industrial development profitable for the national economy as a whole was considered, the industrial activities involved were not attached to any given settlement or type of settlement but could be pursued wherever the infrastructural facilities and the manpower necessary were available.

The socialist reorganization of agriculture and the consolidation of the big collective farms released much manpower in the villages. New jobs were needed for the people no longer engaged in agriculture and for village women who wanted to go to work.

Socialist industrialization and the development of the tertiary sector both needed more manpower, but in both cases demand appeared largely in the cities, above all in

Budapest. Employment opportunities could be increased faster and with smaller inputs in towns than in villages. More and more village people accepted jobs at industrial settlements, with a resulting separation of workplace from the place of living. As the fast increasing need for manpower could only partially be satisfied with the establishment of workers' hostels in the cities and better mass trasnportation to encourage commuting from a bigger radius, it became necessary to locate the new jobs closer to manpower resources. This was done at first through industrialization of until then less developed towns. Soon, however, the manpower resources of provincial cities became exhausted too, and location policies had to consider smaller and smaller settlements. This was not necessarily a subsequent process; industrial development took place largely simultaneously in the cities and larger villages – though with care not to scatter industry excessively.

The result of these developments can be seen in the figures of Table 2.

Rural industry and infrastructure

With the relatively low level of economic development in Hungary, only the bigger towns, chiefly the capital city, had an infrastructure suitable for industrialization. Manufacturing that was unattached to raw-material resources or other natural resources developed largely in bigger settlements which were easily accessible through transport and well provided with public utilities and other facilities. Extractive industry was the most likely to develop to an up-to-date level in the villages, together with the manufacture of the basic materials directly attached to it. Even this occurred only if conditions were favourable enough for industry itself to invest in roads and still earn adequate profits. For this reason, there was a gap in the past between large-scale village industries which largely relied on infrastructures built at their own cost, and handicrafts and homecrafts in the villages, which did not require such facilities.

Accelerated economic growth went together with more advanced infrastructure. The extension of the road network, a general access to electricity (all Hungarian villages were electrified by 1965) and public water supplies throughout the country have created conditions which encouraged the operation of medium-sized industrial plants even in villages. On the other hand, in the localities where it seemed desirable to locate industry for employment or other reasons, the required conditions had to be ensured, and in some cases this was what led to the development of the infrastructure. In other cases this type of development was also called for by the demand of consumers and agricultural production. Although in the allocation of limited financial resources a priority has been often given to industrial demand, its satisfaction with the subsequent growth of industry increased local purchasing power and led to better environmental and living conditions, too.

Rural industrial plants and the settlements

Consideration should be given to the fact that the relationship betwen the growth of industry and the development of settlements where they are located varies according to the different types of settlements. In the cities, depending on their size, usually several plants of different sizes and belonging to different industries operate. Each of them can draw on a larger labour force, and the inhabitants can have their choice among a number of jobs. There is more to the relationship between industrial plant and community in the cities than the simple relationship between dwelling and workplace. Local industrial plants assume and workplace. Local industrial plants assume an increasing part of urban development especially with regard to such projects of common interest as the building of kindergartens or the expansion or improvement of public utilities. Even more intensive is this type of relationship in villages where the choice of inhabitants for a workplace is limited to the one or two local plants unless they are willing to commute to some place distant from their place of living. The local plants are likewise more dependent on local manpower. Here the plants usually are more eager to maintain certain institutions which are of benefit both to their employees and to the local population in general. Village plants often contribute more generously to the establishment and maintenance of institutions for children's care, cultural facilities and sports grounds than companies in the big cities; they frequently even supply heating to local housing projects, and sometimes build and maintain flats in the community.

Partly for historical reasons, relations are perhaps still closer between a mining community and the local mining enterprise. In recent years, however, the councils have been assuming increasing responsibility for the care and maintenance of mining settlements.

There are some small or medium-sized industrial cities where the population are better cared and provided for than in most big cities because enterprise management and the workers hold a direct stake in local development. If some of the company resources are made available to the community, employees benefit also. Managers often hold responsible posts in the community administration, too.

Villages growing into towns

It is an important result of the industrial growth of villages that it often leads to the villages' growing into cities. Since the liberation of Hungary in 1945, city status has been granted to 37 settlements after fullfilling certain requirements of urban development. Out of these, ten owen their municipal existence exclusively to rapid and concentrated industrial growth and are therefore often called socialist towns. They are: Dunaújváros, Tatabánya, Oroszlány, Komló, Ózd, Ajka, Várpalota, Kazincbarcika, Leninváros and Százhalombatta. All these are sites of big mining, metallurgical, chemical and energy-generating enterprises. Industry played a major role in the urbanization of a number of

other settlements as well. There are only three new cities in Hungary – Siófok, Keszthely and Balatonfüred – which owe their development into cities to tourism, although the part played in their growth by industry is not negligible either.

Industrial development in different types of settlements

According to a Government resolution passed in 1959 about the location of industries, their geographical location varies not only according to the different counties and districts of the country, but also according to different types of settlements.

The number of employees in socialist industry* increased by about 50 per cent from 1958 to 1978. Within the total, there was a decrease of 10 per cent in the employment figure in Budapest, and an increase of 127 per cent in provincial towns and 55 per cent in villages. Between 1958 and 1978 – largely as a result of industrial development in villages – 25 new cities came into existence. If we include data on industrial development in urbanized settlements into that of rural industry, we get an industrial development index for these settlements that is almost of the same level as for towns. Of all industrial employees 45 per cent worked in the capital. 33 per cent in provincial towns, and 22 per cent in rural industries in 1958. By 1977 the proportion of industrial employment in Budapest dropped to 27.8 per cent, of those holding jobs in rural industry increased to 22 per cent. (Should we take the industries of settlements which became towns in the meantime as rural industries, the last proportion would be 27 per cent.)

Since 1958 the number of industrial employees in the present-day villages increased by 140,000 people. While villages gave rise to cities, they retained their earlier share in socialist industry. If we consider, however, the fact that there was some industry even in the villages which were attached to cities, and chiefly that in large cooperative farms – most of them located in villages – a significant volume of industrial activity developed without being registered in industrial statistics, we may risk the statement that in the last fifteen years industrial development took place at a similar rate, or perhaps even faster, in villages than in towns.

The location at present of more than one-fifth of the nation's industry, and about one third of provincial industry in villages will suffice to show the national economic importance of industries existing in this type of settlement.

Some constraint in rural industrializations

Although in consequence of rural industrialization industrial production is today less concentrated to Budapest and the traditional industrial regions as before, *industrial organization* is even now characterized by a high concentration. In the socialist sector which accounts for 99 per cent of all industrial production in the country, there were 1385 state and cooperative enterprises in 1978. The average enterprise consisted of seven productive plants (establishments), often located in different districts, with the result that

*State-owned enterprises and industrial cooperatives (Translator's note).

Table 3

Number of employees in socialist industry in the various types of settlements from 1958 to 1978

Year	Total		in Budapest			in villages			in cities		
	Number in 1000s	Index (1958 = 100)	Number in 1000s	Index (1958 = 100)	Per cent of national figures	Number in 1000s	Index (1958 = 100)	Per cent of national figures	Number in 1000s	Index (1958 = 100)	Per cent of national figures
1958[1]	1124.9	100.0	510.1	100.0	45.4	247.8	100.0	22.0	367.0	100.0	32.6
1965[2]	1504.0	133.7	602.5	118.1	40.1	312.0	125.9	20.7	589.5	160.6	39.2
1970[2]	1729.0	153.7	592.8	116.2	34.3	374.7	151.2	21.7	761.5	207.5	44.0
1973[3]	1738.7	154.6	538.5	105.6	31.0	378.7	152.8	21.8	821.5	223.8	47.2
1977[4]	1688.5	150.1	470.1	92.2	27.8	383.3	154.7	22.7	835.1	227.5	49.5
1978[5]	1687.5	150.0	456.4	89.5	27.0	394.4	159.0	23.4	836.6	227.9	49.6

[1] *A magyar ipar statisztikai adatgyűjteménye* (Compendium of Hungarian industrial statistics) Budapest 1961. Központi Statisztikai Hivatal, p. 243

[2] *Központi szerepkörű települések adatai* (Data for Central Settlements), Budapest 1974. Központi Statisztikai Hivatal, pp. 70 and 83

[3] *Területi Statisztikai Évkönyv* (Regional Statistical Yearbook) 1974, Budapest 1974. Központi Statisztikai Hivatal, pp. 72 and 82

[4] *Statisztikai Évkönyv* (Statistical Yearbook) 1977. Budapest, 1978. Központi Statisztikai Hivatal and *Budapesti Statisztikai Évkönyv* (Budapest Statistical Yearbook) 1977. Budapest, 1978. Központi Statisztikai Hivatal.

[5] *Statisztikai Évkönyv* (Statistical Yearbook) 1978. Budapest 1979. Központi Statisztikai Hivatal.

most of the industrial plants in village areas belong to companies and cooperatives whose headquarters are in towns, above all in Budapest. Consequently, there is but moderate research and managerial activity and not much development in village industry. On the rural sites chiefly simpler, less skilled work is performed. Most of these rural plants were set up in the expectation of there being free local labour because the manpower shortage was becoming acute in the towns.

The taxes enterprises have to pay to communities go in the case of these companies or cooperatives to the settlement where each has its headquarters. Consequently even those villages which have some industry, receive a much smaller portion of the tax income than they should receive according to the economic activity performed *"in situ"*.

Some industrial plants were located in settlements where they lack favourable possibilities for operation today and are likely to lack them in the future too. The plants set up in satellite settlements around large towns are exposed to a heavy drain of manpower by the biggest factories.

Encouraging further growth in the industrial villages by diminishing hindering factors is essential not only for general industrial development but also for the planned improvement of the network of settlements in Hungary.

Bibliography

1. BARTA, Gy.: *A falusi ipar területi problémái* (Regional problems of rural industry.) Területi Statisztika, 1979. No. 4. pp. 337–390
2. BARTKE, I.: *Az iparilag elmaradott területek ipari fejlesztésének főbb közgazdasági kérdései* (Main economic problems of industrial development in less industrialized regions.) Budapest 1971. Akadémiai Kiadó.
3. BETHLENDI, L.: *Iparosodás és hatékonyság a mezőgazdaságban* (Industrialization and efficiency in agriculture.) Budapest 1979. Közgazdasági és Jogi Könykiadó, 228 p.
4. ENYEDI, GY.: *A magyar falu átalakulása* (Transformations of the Hungarian village.) Földrajzi Közlemények, 1975. No 2. pp. 109–124
5. ENYEDI, GY.: *A falusi életkörülmények területi típusai Magyarországon* (Regional types of rural living circumstances in Hungary.) Területi Statisztika 1976. No. 4. pp. 217–225
6. SZABÓ, B.: *A helyi ipar fejlesztéséről, a kis- és középüzemek szükségességéről* (The development of local industry and the need for small and medium-sized industrial plants.) Valóság, 1972. No 2
7. TATAI, Z.: *Az ipar fejlődése falun* (Industrial development in the villages.) Földrajzi Közlemények, 1975. No 3–4. pp. 283–295
8. TATAI, Z.: *Az ipar fejlődése a községekben* (Industrial developments in small countries.) Ipargazdaság, 1975. No 10. pp. 43–48
9. TATAI, Z.: *Az iparilag elmaradott mezőgazdasági jellegű területek iparosítása.* (Industrialization of the less industrialized rural regions) In: *A magyar népgazdaság fejlődésének területi problémái* (Regional problems of the development of the Hungarian economy) Budapest, 1976. Akadémiai Kiadó. pp. 80–111
10. TATAI, Z.: *A mezőgazdasági jellegű területek iparosításának egyes kérdései* (Some problems of the industrialization of agricultural regions.), Területi Statisztika 1980. No 1
11. KULCSÁR, V.–LACKÓ, L. (eds.): *Magyarország megyéi és városai* (Counties and cities of Hungary.) Budapest 1975. Kossuth Könyvkiadó, 660 p.
12. KULCSÁR, V. (ed.): *A változó falu* (The transforming village.) Budapest, 1976. Gondolat 344 p.
13. ENYEDI, GY; (ed.): *Rural transformation in Hungary* Budapest. 1976. Akadémiai Kiadó. 116 p.

T. ANDOR – I. FOGARAS

INTERNATIONAL FORUM OF SAVINGS BANKS IN HUNGARY

The institution of savings bank is 140 years old in Hungary. The first savings bank began to work on the 15 December 1839 in a small room of the Pest county hall. The successor of these traditions is the Hungarian Savings Bank, an essential link in the Hungarian banking system, the bank of the population and the local councils.

The Hungarian Savings Bank is member of the *International Savings Banks Institute* (ISBI), established in 1924. This Institute is an important international organization with 99 members, representing 3.200 savings banks or savings banks associations from 62 countries. The task of the ISBI is to promote international cooperation of savings banks, exchange of experience with working methods on wide fields of the savings bank' activity, for example new services, new credit and savings forms. In addition, the ISBI assists in business organization, marketing and publicity, electronic data processing and automation.

In the framework of international cooperation an International Forum of Savings Banks with the motto "Savings Banks – Partners for Economic and Social Progress" was organized by the ISBI, jointly with the Hungarian Savings Bank, from 11 to 14 September 1979 in Budapest/Székesfehérvár.

Chief financial administrators, central bank governors and savings bank managers from 30 countries met for a 3-day dialogue between savings banks in the OECD, CMEA and Third World countries. The success of this trilateral dialogue was due especially to the presence of high-ranking savings bank officials, among others from the United States, the German Federal Republic, Great Britain, Japan, Spain, Belgium, Holland, Denmark, Austria, Switzerland, Finland as well as from the USSR, Bulgaria, Poland, Czechoslovakia, Romania, Hungary and from developing countries like Thailand, Zaire and Nigeria.*

In his opening statement, L. *Faluvégi* gave information on the development of the Hungarian saving institutions, on the relationship between economic control and thrift, especially from the point of view of financial policy. He pointed out that the Hungarian savings institutions contribute considerably with their broad business activity to the realization of the socialist State's social policy.

*The Forum was attended also by J. P. *Benoit*, Head of the Fiscal and Financial Branch, Department of International Economic and Social Affairs of the United Nations, K. O. *Pöhl*, President of the Deutsche Bundesbank and from the Hungarian side by Finance Minister Lajos *Faluvégi* and János *Fekete*, Vice-President of the Hungarian National Bank of Hungary.

Hungarian credit policy in relation to the population aims at rechanneling savings to the population in a way promoting at the same time the realization of social policy, development and production targets. That is why about two thirds of the population's savings are utilized for credits granted to the population. Preferential credits are granted for housing, the purchase of flats and the bulk of credits serves these objectives. Important sums are devoted – first of all through local savings cooperatives – to assisting agricultural production and the sales of small-scale producers.

The Cabinet minister outlined a few aspects of the Hungarian financial policy as follows:

"In order to meet the double requirement of unbroken economic growth and restoration of equilibrium, the most important points of economic policy are to modernize the economic structure, to increase competitiveness on the world market and a thrifty economy. We are aware of the fact that this involves a slight slowing down of economic growth in comparison with the rate in earlier years. I think, Hungary is not the only country which has to modify its path in this manner, but many other, more developed countries with more powerful economic potential have also been forced by this new economic era to do the same. The mentioned postulates are in close connection with our financial policy too."

Dr. H. *Geiger,* President of the International Savings Banks Institute stressed the important role of savings banks at world level, particularly in view of the economic situation expected in years to come, when savings would have to be regarded not as a way of disposing of earnings left-over after consumer spending but as part and parcel of profit formation. In the banking system as a whole, savings banks could not expect to compete with other types of banks unless organized from the start to provide similar services, with special emphasis on services to the households. The range of services should be as wide as possible, with emphasis on help to households, housing construction for medium-income groups and local authorities. Savings banks should also keep in step with the trend to internationalize operations and their special objective in the eighties should be to help viable savings institutions in developing countries.

J. *Szirmai,* General Manager of the Hungarian Savings Bank, read a lecture, entitled "Savings banks – bankers to the population and local councils – the example of the Savings Bank." Before 1970 the Hungarian Savings Bank accomplished first of all banking operations in connection with the population. In 1971 it took over also the handling of budgetary and development funds of the local councils and their institutions and thus became the bank of the population and the local authorities.

J. Szirmai gave detailed information about the collection of deposits. He stated that collection of the population's savings in deposits is the most important task of the Hungarian Savings Bank in the field of services for private persons. Savings deposits in the Hungarian Savings Bank amounted to 125 billions forints (6.2 billions dollars) on 31 December 1978. In Hungary the interests of the savers are protected by the Savings Deposit Law. Deposits are secret, the interests are free of charged and repayment of the deposits is guaranted by the State.

The credit activity of the Hungarian Savings Bank is well demostrated by the fact that during 1978 more than 1.4 millions credit applications were granted, which totalled 23 billion forints (1.1 billions US $). The most important field of the credit activity is the long-term credit, that is in close relationship with the national housing program.

The state gives a considerable support to the private construction of flats. Housing credits are granted for long term, i.e. 25–35 years at preferential interest rates of 1–3.5%. Very popular credit forms are the medium and short-term credits too. They can be divided into consumer credits, credits for services and production credits.

The tasks of the Hungarian Savings Bank include supplying Hungarian citizens travelling abroad with foreign currency, and the exchange of currency of foreign tourists arriving in Hungary for forints. The scope of its duties includes collecting deposits of Hungarian and foreign citizens in foreign currency and keeping these accounts. Deposits can be placed in any foreign currency, they carry interest, they are secret, free of tax and their repayment is guaranteed by the State. The Hungarian Savings Bank undertakes forwarding of gifts sent from abroad to Hungarian citizes. As a result of recent developments, the Hungarian Savings Bank has become also the foreign currency bank of the population.

Organization of football-pool and lottery games, selling of lottery tickets belong to the tasks of the Hungarian Savings Bank as well. The popularity of these lottery games is proved by the sale of 10–12 millions tickets a week.

In connection with the local authorities, the Hungarian Savings Bank s tasks include managing the finances of these authorities, their subordinated institutions, societies and associations, as well as supporting them with credit.

Other speakers who described their institutions' activities in helping local authorities were, among others: H. *Detremmerie* (Managing Director, Caisse Centrale de Dépots, Brussels), R. *Tompkins* (General Manager, Dry Dock Savings Bank, New York), Z. *Pakula* (Vice President, National Bank of Poland and Manager of Poland's National Savings Bank).

Concern for the individual as saver and borrower is one of the points all savings banks have in common, in market and planned economies alike. In a planned economy, however, the country's banking system virtually has the monopoly of services to the individual.

F. *Pazdera,* General Manager of Czechoslovakia's State Savings Bank described the range of services available in his country for private clients.

A. *Solanet,* First Vice-President, French Association of Savings Banks referred to the competition faced by savings banks in this connexion, and I. *Fogaras,* Adviser, Hungarian Savings Bank provided a comparative analysis of the savings backs services available in the various CMEA countries.

P. V, *Ryndin,* President, Savings Bank Board, USSR spoke of the importance attached to training in his country. Banking staff is trained in university courses and also in financial management training institutions run by savings banks. Evening classes, correspondence and part-time courses are accesible to all. There is also a system whereby

young trainees work under the guidance and supervision of experienced staff members who help them to learn the job.

H. *Ter Beest,* Director of the Netherlands Savings Bank Training Centre and H. *Kono,* General Manager, Japan's Post Office Savings Bank stressed the need for job motivation, professional training and gradual relief from routine chores.

S. *Madsen,* General Manager of SDS, Copenhagen and President of the EEC Savings Bank Group, stated the reasons why savings banks should, in addition to their other activities, help industry as a means of supporting the country's economic development. Since this market contributes to profits and improves the bank's liquidity balance, industry-financing should not be left to the competitors. However, such financing calls for selective market surveys, long-term planning, a highly trained staff and setting up a foreign business department.

Other speakers on this subject, including assistance to agriculture, were: G. *Vercillo* (Deputy Director, Italian Savings Banks Association), D. *Svasti-Xuto* (General Manager, Thailand, National Savings Bank).

J. P. *Benoit,* Head of the Fiscal and Financial Branch, Department of International Economic and Social Affairs, United Nations, said that in developing countries only 10% of development financing was provided from outside aid. Indeed, the concept of saving as a source of investment capital is gaining ground in developing countries, where households are the sole providers of net savings. Now that growing importance is attached to the concept of economic growth as a means of achieving social justice, instead of growth purely for its own sake, the role of savings banks in many industrialized countries and their image as "family" banks has become attractive also for many developing countries.

Referring to Benoit's remarks D. *Wirmark,* Swedish Ambassador to Tanzania and Chairman of the International Savings Banks Institute's Development Aid Committee, strongly criticized the international development financing system. He mentioned more effective methods and instruments: first of all, improved cooperation with oil-producing countries; and, secondly, increasing aid on the basis of the donor developed countries' per capita national income. He endorsed the idea, put forward by Professor *Tinbergen,* of an international turnover tax based on trade earnings. The third alternative is the transfer of resources through the World Bank or other development banks, and multilaterally-guaranted loans.

J. *Olajide,* General Manager of the Federal Savings Banks of Nigeria, spoke of the need for post office banks to be reorganized in such a way as to mobilize – and not merely collect – savings.

H. *Heidinger,* General Manager of the Steiermarkische Sparkasse, Austria referred to the difficulties involved in such trade, of the need to work out mutually satisfactory conditions and to control its volume. Banks in general were helping East-West trade, he said, and savings banks were in fact doing so most actively wherever legislation so permitted.

K. O. *Pöhl,* President of the Deutsche Bundesbank, West Germany, advanced arguments against the floating of currencies; there now seemed to be a trend towards a

"multiple" monetary system (based on several currencies) calling for great flexibility in exchange rates – a trend which did not contribute to overall cohesion.

J. *Fekete,* Vice President of the National Bank of Hungary, said that floating currencies were simply a means of legitimate defence and that curbing inflation depended entirely on a fixed exchange rate system such as practised in large groupings like the EEC and CMEA.

G. *Grenier,* General Manager of the Caisse D'Épargne de la République et Canton de Genève, Switzerland, referred to the role of the Swiss monetary authorities in European and international markets as a result of the strength of the Swiss franc. It was high time, in his view, that the economic policies of industrialized countries were coordinated and aimed at achieving stability.

J. M. *Pesant,* ISBI's General Manager summed up the conclusions of the forum in the following guidelines for savings banks:

1. Greater exchange of information;
2. Mutual assistance in expanding the scope of activity of savings banks;
3. Protection of savers against inflation;
4. International strategies for improving the image of savings banks;
5. Joint efforts at developing payment systems for individuals;
6. Development of lines of operations;
7. Improved assistance to savings banks in developing countries.

The forum, *the first event* attended by savings banks managers from all parts of the world and every type of economy, provided a starting point for effective cooperation within the international community of savings banks, whose strength was made sufficiently clear on this occasion.

Acta Oeconomica, Vol. 24 (1–2), pp. 187–196 (1980)

COMMENTS AND CRITICISMS

A. KÖVES

ON STRUCTURAL CHANGES IN THE WORLD ECONOMY

Today, when the development of the structure of production is the most frequently quoted economic task in Hungary, an analysis of structural changes taking place in contemporary world economy performed by Béla *Kádár* in his new book* is of obvious importance and topicality. Kádár belongs to those Hungarian economists who became engaged in the accelerated structural transformation of industry and world trade not when it became fashionable, but much earlier, before the general recognition that changes in the world economy demand a profound revision of the way of approach and action of the Hungarian economic policy.

Béla Kádár was among the first to notice e.g. the new trends in the development of and participation in the international division of labour of the developing world and he has remarkably contributed to the fact that several views and dogmas inconsistent with the analysis of world economy have been mostly abandoned in the Hungarian economic literature.

Mention must be made of Kádár's pedagogic work and his guidance through which he helped to give due prominence to research into the structure of world trade and industry in the activities of Hungarian research laboratories and especially in that of the Institute for World Economics of the Hungarian Academy of Sciences. It is therefore a happy and welcome news that after numerous studies published in Hungary and abroad, his research work of many years is summarized in a book on the structural changes of world economy.

The book gives a comprehensive outline of the features of international industrial development and of structural policies in advanced capitalist and in developing countries. The system of instruments deployed by national economic policy in different countries in order to develop the macro- and microstructures is described in detail. Changes that occurred in the structure of world trade and capital exports in the last fifteen years are analysed. The author treats these issues in correlation with the changes in international economic power relations, attempting to show the social and political conditions and implications of structural transformation. The passages of the book analysing the reflection of structural changes of world economy in East-West economic relations and in the

*Kádár B.: Szerkezeti változások a világgazdaságban (Structural changes in the world economy) Közgazdasági és Jogi Könyvkiadó, 1979. 384 p. To be published in English by Akadémiai Kiadó.

development of Hungarian exports to Western countries may be especially interesting for the Hungarian reader. Kádár convincingly shows that the roots of the equilibrium problems encountered by Hungary and the other CMEA Countries in the seventies are to be found in the lack of adaptation to world economic changes, or, in the terms of the author, in their failing to "get adjusted". Only an economic policy setting out from the postulates of the international division of labour can make up for this lag. As Kádár puts it: "The implementation of a *foreign trade oriented and selective development policy* (italics in the original – A. K.) and, in particular, of structural policy is the clue to our socio-economic development. Solution of this key problem cannot wait, as the consequences of any delay in the course of adjustment to an external set of conditions which is becoming more and more disadvantageous and more and more determining, will be cumulative. A peculiar adjustment race is going on in the world and late-to-adjust countries cannot but come after those who adjusted themselves more promptly, and can easily loose all the fruits hoped from an often painful adjustment" (p. 378).

Understandably (and also in line with his earlier research subjects) Kádár concentrates his attention to the presentation of the actual development and economic development policies of those countries and country groups whose accelerated economic growth was one of the most typical new things in world economy in the last 10–15 years. As he states, these countries owe their success in foreign trade to their having changed the concepts of foreign trade strategy and economic development, namely, that instead of import substituting development they shifted to the strategy of export oriented industrialization. Import substituting industrialization that used to prevail for two decades after World War II generally led to slower rates of growth and even to growth crises and to internal and external imbalances because of development decisions taken in defiance of considerations of economies of scales, suppressing market competition mechanisms, end-product orientation, preference of more than reasonably intensive development variants, building out of overbureaucratized systems of industrial management, etc. (p. 129). The fact that intensification of the division of labour has become one of the main driving forces of world economic development has made it justified and pressing to substitute export oriented industrialization for the exhausted strategy of import substitution also from the aspect of external conditions.

What is it that causes the shift toward export oriented development strategy to succeed or to fail? What conditions are needed for countries that used to be cut off from intensive world economic relations or used to shut out themselves (or perhaps used to be present in the world market as food or raw material exporters) to successfully join the worldwide industrial division of labour? These are probably the most highly topical and difficult questions for the Hungarian researcher of world economy today. It is clear from Kádár's book which gives ample room to the description of the instrumentary of industrial development policies in developing and advanced capitalist countries that, even if some countries considered to be successful occasionally use very similar economic policy instruments and methods, there isn't any panacea irrespectively of time and location which only needs to be found and applied to resolve the economic policy

dilemmas once and for all. The economic policy instruments of the different countries are necessarily different, depending on their socio-economic system, economic development, historical traditions, geographic conditions etc. What is suitable in a South-East Asian city state is not sure to work in Southern Europe and especially in an East-European socialist country.

This is all the more true as the economic policy which powerfully link up individual countries with the world-wide division of labour does not result – in Kádár's terms – in some "structural convergence" (p. 78). Namely, the countries are able to formulate an efficient export policy when they specialize precisely in those products, i.e., develop such macro and micro-structure, which meet best their own specific endowments and conditions. An opposite policy, a strive of latecomer countries to reproduce the same economic structures as developed earlier in more advanced countries, is typical not of an export oriented development but precisely of the previous strategy of import substitution. Otherwise, it also follows that, though indispensable, yet it is not enough for the accomplishment of a world economic orientation to know what others do and how (which sectors are developed at the highest rate and which are suppressed, which exports expand the most dynamically and which stagnate, and what instruments are used to attain all these) or to be aware of the trends of supply and demand in the world market (this could do for the imitating and copying type of industrial development) but, over and above these, the ways of adapting this knowledge to the special conditions of a given country must be elaborated.

The aforesaid do not at all mean that it is not very important to pay attention to the generalizable experiences and conclusions to be derived from changes in the economic structures and world market positions of individual countries. For example it is a highly topical task to study the connections between structural transformation and social and economic development from this aspect. Kádár devotes a special chapter to this problem in the book. It will be discussed in more detail in the following as in some respects we disagree with the author here.

What are then the socio-economic conditions and implications of opening towards the world economy? Kádár notes that an "accelerated post-war growth took place in Southern Europe (until the mid-seventies, with the exception of Italy and with the partial exception of Greece), in South Korea, Taiwan, Indonesia, the Philippines, Thailand, Nigeria, Iran, Saudi Arabia, Morocco, Mexico, Brazil (since 1964), etc. in the framework of highly *centralized political structures* (italics in the original – A. K.), monarchies, single party systems, personal or military dictatorships. In the case of developing and medium-developed countries there is an unmistakeably close correlation between economic growth and structural transformation on the one hand, and the rate of building out a foreign trade orientation and the centralization of the system of political control on the other. The closeness of this correlation and the frequent occurence of the symptom hint that in backward or medium developed countries development taking place in a capitalist framework cannot yet widely rely on economic incentives (as in the more advanced countries), cannot operate with moral incentives (as a power created through revolution

does, at least in the medium run), and therefore the power mechanism constitute the main driving force of capitalist modernization.

In the said countries "... *the centralization of political power and opening towards the world economy coincide* (italics in the original – A. K.) ... and the development of the new state of affairs related to power centralization is explained by the requirements of the foreign trade oriented development strategies related to competitivity, stockpiling, and wage and income level." (p. 276).

The examples of Kádár are really very typical ones. A considerable part of the countries which made outstanding achievements in the accelerated post-war growth really have "centralized political structures". It is an irrefutable fact that the state's role in economic control is particularly important at the time of starting or speeding up growth or modifying the strategy. The correlation between opening and political centralization can nevertheless not be regarded as close as shown in the above text. Not only because, as we all know, there are countless countries with monarchies, single party systems and dictatorships without opening, let alone any attempt at economic development. Nor because the most significant acceleration of growth in a quarter of a century after World War II, that of Japan, took place under conditions of bourgeois democracy, and so did the fast development of West European economies in the fifties and sixties.

Moreover, in the majority of the countries listed above, political centralization did not coincide with opening but preceded it. It is even more important that the political system that had existed at the beginning of the new strategy was not always left untouched by opening, thus e.g. in all South European countries it led to the gradual disintegration of the fascist regimes and then to the restoration of bourgeois democracy. We assume that at a certain level of economic development in countries with diversified economic structure and considerable industrial export turnover social change along this line is a necessary condition to and at the same time outcome of the consistent implementation of world economic opening. Namely, on such occasions there are such cardinal conditions of joining the world-wide division of labour that get into more and more antagonistic conflict with the existing system of institutions and mechanisms. Beside many other conditions, the dynamic increasing of export, learning the ability of adjustment to the changing terms of world economy, stepped-up technological development, and the accentuation of efficiency considerations call for putting an end to any type of seclusion and reservation, to artificial handicaps and taboos and to fossil institutional and interest structures and for bringing about social climates favouring innovation and performance and ways of thinking that do not fit into the traditional patterns.

Béla Kádár is correct in stating that under today's conditions the state must play an extremely important role in the control of the economy. The economic role of the state has increased very much also in the advanced capitalist countries during the last quarter of a century. Analysis of the situation of the capitalist economy cannot be abstracted from this fact for a second. It is even more important that the state should promote the starting of economic development in the backward countries or such a change in

development strategic approach as could be the only one suitable for overcoming the growth crisis, internal and external disequilibrium. But the role of the state cannot be determined in terms of political centralization or decentralization. If political centralization were considered the *sine qua non* of opening, we could not give the reason why the most centralized regimes are so incapable of effective participation in the international division of labour. The efficiency of economic control by the state does not depend on centralization as such but on its ability to mobilize those mechanisms of the economy which make it possible to get adjusted to the world economy. Also Kádár states that in the developing countries "the competitivity and efficiency requirements produced by the change of conception in part narrowed and modified the scope of direct state intervention and in part tended to provide homogeneous economic environment and rules of the game for economic life" (p. 136).

We are of the opinion that the author describes many existing and really serious problems of some advanced capitalist countries in too general terms when he states that "the parallel existence of economic monopolies, big enterprises and the mechanisms of political democracy, economic concentration and political decentralization has in the last ten years and particularly in the stage of world economic integration and global strategies meant the gravest functional dilemma and anachronism of the advanced capitalist establishments" (p. 275). Indeed, the problems originating from lack of political stability and continuity, indecision of political leadership or decisions that turn out to be impracticable, are known. It will be enough to refer to the unfavourable influence upon the economic situation of the whole world of the failure of already the third American administration since 1973 to carry out its energy policy conceptions. *Certain* reforms of the political mechanism could certainly render the state control of economy more efficient in *certain* countries. But it would be unjustified to draw the general conclusion that abolishing the parliamentary "rotation system" or elimination of the "anachronism" noted in the quotation would produce a political continuity which would be durably advantageous for economic development. It involves the risk that political centralization might rather neutralize or wind up the social mechanisms and institutional systems required for effective development.

Going back to the problems of development: Kádár correctly states that "the acceleration of belated capitalist development may be financed in the backward countries in part from capital imports and in part from forced accumulation of capital" (p. 278). His statements concerning the import of working capital are particularly important. As he proves, in the developing countries the development of an export oriented development strategy was accompanied by modification of the policy pursued with respect to foreign capital: "While . . . earlier it was attempted to eliminate foreign capital from sectors considered to be vital and it was tolerated in less important sectors, the economic policy of the 1970s strives at controlled cooperation with foreign capital mainly in the key sectors of technological progress and in the more export oriented sectors, through prescribing tax and profit transfer facilities" (p. 138).

It is also evidenced by facts that the shift to export oriented development was accompanied by an increase of the rate of investment in most of the developing and medium developed countries. But it is worth noting that a considerable part of the countries which have been successful in opening towards the world economy also showed remarkable improvement in the standard of living in the seventies. In this context it must be also noted that adaptation to world market terms and reduction of backwardness (and in less advantageous international conditions than before) can be a very painful process and demands such concentration of resources on export development objectives that can set limits to the implementation of other social targets. But in countries where export orientation followed a long period of import substituting industrialization and a related powerful accumulation activity, it is not obvious at all that the revision of the development strategy should be necessarily accompanied by any further increase in the rate of accumulation and by a cutting down of consumption. On the contrary: the functioning of incentive and interest mechanism so very important for successful export orientation, and in extreme cases even political stability might be affected adversely by a decline in the standard of living. Therefore, in such cases export oriented development strategy cannot rely any longer on changing the rates of consumption and accumulation in favour of accumulation. However, it should much rather rely on promoting such a redistribution of the available investment resources in which preference is given to export development objectives as against the traditional priorities of the policy of import substitution. The task is not an easy one, among others because important forces are interested in the maintenance of the old priorities. But unless the economic policy of the state is consistent enough and determined on this very point, execution of a change of conception may be challenged.

Despite the few critical remarks outlined above, it can be stated that the Hungarian literature of world economic problems has become richer with a significant scholarly treatise supported by the analysis of a big spectrum of sources and casting new light on several problems of economic development. The comprehensive outline of world economic changes given by Béla Kádár and the abundance of ideas – including such as may provoke discussions – may be important contributions to the development of thinking in terms of world economic relationships in Hungary. And, as is suggested by every chapter of Kádárs' book, increasing international economic interdependence is a fact deserving much more serious consideration by every country as a condition determining the whole of economic development.

A REJOINDER

András *Köves* has written, with the feelings of a fellow author, a very high-level criticism of my book published in the summer of 1979. Every remark of his criticism points to a real and very up-to-date problem. At the emergence of tendency-like new interrelations and especially at their interpretation pointing to the future, the basic

requirements raised towards the critical genre are reckoning, confrontation with real processes which prompt both reader and author to go on thinking. András Köves's exacting criticism was written in this spirit, and this rouses the author's mood for entering into discussion with the central idea of the criticism, namely with the interpretation of the interrelations between the degree of centralization of the control and management system and the export-oriented development strategy. Coming back to the debated questions may perhaps help to clarify further new aspects of these problems not in the least of secondary significance.

András Köves disputes principally my statements calling attention to the characteristics of world economic opening and its inner connections on the basis of historical experiences of the so-called moderately developed and undeveloped capitalist countries' accelerated modernization during the last two decades amidst political power centralization, and indicating the relations between political instability and structural change, the contradiction between political decentralization and economic concentration also in the case of developed capitalist countries.

Before answering his most stimulating counterarguments I should like to clarify a misunderstanding concerning certain ideas attributed to myself. I did not at all have in mind formulating some kind of generally valid regularity and I did not at all determine the state's role in terms of political centralization or decentralization.

As it is well known by András Köves and by my readers, I do not regard the views concerning the "single path" character of economic growth, some kind of common main-stream, well founded by experience. Similarly, I do not believe in the existence, nor in the possibility of scientific generalization, of a common management-system-optimum independent of space, time, evolutionary heritage, development strategy, manpower, level of qualification and the personality of managers and managed. What level of centralization is expedient in a given country may only be established, in my opinion, after weighing the mutual interrelations of the above factors and not by copying some kind of general theoretical optimum or foreign example.

I very much agree with András Köves that the state's role cannot be determined in terms of political centralization or decentralization. Moreover I should like to add that it is misleading to measure the strength of a given political power simply by the extent of the state's role as owner and economic process manager, by the degree of economic-political centralization. The extent of power is hallmarked both in international relations and inside national society by the capacity of *will transmission* which induces partner countries or different power factors of society to behave as desired by the national state or its power organizations. A formally centralized power may even be weak, if it dissipates its energies or does not possess implementation capacities, adequate executive instruments because of setting inaccurate targets or failing to correct targets. Strengthening the power measured by will transmission, implementation capacity is an objective evolutionary requirement even in competitive circumstances; and even the narrowing of the sphere of centrally directed processes or the state's role as owner may coincide with the enforcement of executive efficiency. Liquidation of state-owned firms steadily in deficit, curtail-

ment of state subsidy for non-efficient social activities, reduction of the number of administrative regulations does not at all mean the weakening of the state or its political power.

Well, so much of the possibility of generalization and the interpretation of political power. As to the closeness of the correlation between the world economic openings and centralized management systems of developing and moderately developed countries, nobody affirms that the mere fact of power centralization, relying on compulsory mechanisms would in itself guarantee the acceleration of economic development. Bocassa's, Duvalier's, Idi Amin's and Pol Pot's régimes present quite convincing examples. Previous literature and today's professional public opinion considers quite unambiguous the relationship according to which inward-looking, protectionistic, import substituting development strategy or development period is in organic relationship with dirigist-centralistic political power and management, while political decentralization, liberalization are unavoidable concomitants with world economic opening and economic liberalization. The new and not at all accidental phenomenon is that, contrarily to the above mentioned suppositions, the acceleration of the process of retarded capitalist modernization – from South-European countries to the latest Chilean experimental laboratory of the neoliberal Chicago school – was related to the widespread application of political centralization, to compulsory mechanisms in the past two decades. The process of political and economic liberalization thus might be separated during quite a long period.

The function of political centralization is not necessarily to hamper changes. Depending on a given system of goals, in order to avoid a power crisis, under duress it may even produce changes, or direct socio-political tensions, the will of masses for a change of régime into economic channels, not independently, of course, of the power system's quality and time limitations. Thus, the control system cannot be qualified in itself, it may realize, although with different degrees of efficiency, conceptions differing in the end. Political centralization is not an autonomous category either, and can also be judged only by the targets to be achieved, since the problems of over-centralization are also known and to increase the degree of centralization in such countries is nonsense. At last, as regards the time factor, my book sketched the relations between centralization and opening towards world economy and not the relations of time sequence. I believe that from the point of view of these relations it is not relevant whether political centralization preceded the opening or happened at the same time, or that later on the opening did not leave intact the system which had existed at the beginning of the strategy-switch. The essential thing is that amidst the conditions of the change of era of the world economy the belated capitalist modernization and the acceleration of growth did not find an alternative to its relying on coercive mechanisms.

Rather the following question may be asked: since it has happened in this way, was it and is it a must? It seems difficult to avoid applying compulsory mechanisms and political centralization on the inner side, if a country cannot truly rely on economic incentives because of its underdevelopment or economic crisis, nor on ideological incentives because of its socio-political situation. A centralized power under duress, facing a

structural crisis – contrarily to András Köves's suppositions – could not easily permit itself giving up economic limitations and former isolation and at the same time political liberalization, if only because this would lead with great probability to problems of power security, the breaking up of the power system, which can hit back like a boomerang from the political side on the successfulness of economic opening. On the outer side, if competition hardens in the international arena, if the number and intensity of outside conflicts are growing, falling back in international competition will be a danger to the existence even of a less developed country, and on the other hand the increase of international tensions generally impedes reliance on the growth-accelerating role of foreign resources. If international détente cannot become a material power, cannot liberate economic resources, reserves of international cooperation for the acceleration of growth and structural change, then the less developed and moderately developed countries will hardly have the possibility to further abolish political systems based on compulsory mechanisms.

The train of thought concerning the above connection is not refuted by the fact that the most significant acceleration of growth in the quarter century after World War II took place in the case of Japan and the FRG within the scope of political democracy. In the case of both newly emerging big economic powers – in spite of the obvious changes – because of the heritage of thousand years of evolution and World War II, social discipline, cooperativity, implementation capacity and acceptance of the central will are still greater than in other industrial countries and these constitute the sources of certain advantages both on micro and macro levels. On the one hand, this has permitted more than three decades of political stability, on the other hand the efficient functioning of a mature industrial society's model without political coercive mechanisms. We might even say that the heritage of overdosed coercive elements of a historical past have turned into fuels of growth. In the efficient functioning of most industrial countries' models the strengthening of executive power is not demanded only by the wish to escape from the present economic duress, and to ease the institutional contradiction between economic concentration and political decentralization, but indirectly also by the fact that new types of duties of power arise in the context of influencing social consciousness and forms of behaviour. Big historical traumas of the first half of our century must have contributed to the significant shift in the former proportions of social rights and duties in numerous industrial countries during the last quarter of a century. Political practice, but on scientific basis politology, pedagogy, socio-psychology, have much more looked for the nodes of "solution" than for those of "tying". But lately, all this has little helped the formation of a social scale of values and behaviour making possible a relatively shockfree structural adjustment to the requirements of world economic changes and keen international competition. Remarkable indeed are those management-science experiments conducted amidst Western social conditions, which show on the basis of concrete surveys – differing from traditional organization concept –, that in heavy competition, on a higher level of utilization of human resources, more autocratic management style, higher management centralization are more wide-spread and this is accepted by those employed

in a *successfully* functioning organization. On social level, under historical duress, in increased competition the coming into prominence of requirements concerning social discipline, accomplishments, or sometimes of unpopular tasks is inavoidable and this requires the strengthening of management centres, executive bodies and different "will transmitting" mechanisms.

András Köves's contribution which is rich in ideas proves also that as regards the interrelations between political power, control system and economic growth there still remain many unanswered questions, which can be clarified only by the help of interdisciplinary cooperation elaborating international experiences of different social sciences.

B. KÁDÁR

Acta Oeconomica, Vol. 24 (1–2), pp. 197–206 (1980)

BOOK REVIEWS

VARGA, GY. (ed.): *A mezőgazdasági kistermelés helyzete és jövője* (The present and future of small-scale farming.) Budapest, 1979. Mezőgazdasági Könyvkiadó. 229 p.

The book written by researchers of the Agricultural Research Institute in Budapest deals with small-scale farming, an existing and functioning part within socialist agriculture. In Hungary, small-scale farming is mainly carrried out by cooperative members on their own household plots, further by workers of state farms or by those whose full-time job is other than agriculture on their auxiliary farms.

The first chapter gives a historic survey of the changing attitude of agrarian policy towards small-scale farming both in the Soviet-Union and in the other socialist countries, striving to show their actual impacts. The attitude of the Hungarian agrarian policy towards this problem was more consistent than in other socialist countries; the Hungarian policy has always considered small-scale farming as an integral part in the development of the national economy as a whole.

In the same chapter, I would like to draw attention to two ideas related to the significance of small-scale farming. The first tries to clear up the delusion that small-scale farming contributes exclusively (or at least: mostly) to the increase of peasant incomes. The truth is, namely, that in the incomes of small-scale farming the share of household farming plots (i.e. those belonging to peasants) and of auxiliary farms (i.e. those belonging to nongaricultural workers) was around 50 per cent each in the mid-seventies (with the share of household plots declining and that of the complementary forms growing). Incomes derived from supplementary farming plots accrue to workers, non-agrarian pensioners and "white collar" employees.

The other idea which deserves attention is as follows: as a result of the process of growing specialization and of the increasing commodity-production character of small-scale farming, it serves less and less the supply of the consumption of the owner himself. Through expansion of this kind of activity, small-scale farms became more and more specialized, and procure commodities, produced earlier by themselves, through trade channels from the market.

Chapter Two deals with the force of production of small-scale farming. The authors draw attention to the critical situation of machinery supply in Hungary. The low level of technological equipment results in a high labour input and a shortfall of gross product per man-hour, as compared to those in large-scale farms. Some 3/4 of the gross commodity turnover of small-scale farms is composed of animals and animal products. It is a very important recognition of the authors (based on their own experience) that animal breeding for marketing purposes is only possible on those small farms where retired persons or unemployed women do the job.

The following chapters introduce those branches of small-scale farming which are of importance for the national economy as a whole. The sectoral analysis comprises two principal branches (particularly characteristic for small-scale farming): gardening and animal breeding.

Vegetable growing in the framework of small-scale farming provides the decisive part of certain vegetables. In Hungary, vegatable growing for the market is concentrated in the framework of small-scale farming in a couple of counties (so-called vegetable growing areas), while in other

parts of the country mostly self-sufficiency is the purpose of production. Whilst vegetable growing may follow the changes in market demand almost within a year (or even faster), the same takes more time in fruit and wine growing. In the opinion of the authors the creation of some major conditions for the further development of this branch is yet to be solved.

Such problems are, e.g. the supply of seeds, choosing the right plantation methods, possibility of mechanization, age pattern of the plantations, etc.

The authors see the future in block plantations cultivated by methods applied on large farms. The emphasis is on large-scale farming technologies with the purpose of carrying out large-scale farming and private (family) cultivation together. Unfortunately, the books does not deal with other plantation methods in fruit and wine growing, and recommends block plantation as the only alternative for the future. However, in Hungary there are quite a few orchards around living or weekend houses, the primary problems of which (organization of marketing, supply with means, etc.) should be solved in the first line. The sizes of plantations regarded as optimal are in most cases too large for the purposes of small-scale farming. Block plantation does not seem to be a very good solution in the case of berries either.

In Hungary the fodder supply of small-scale animal husbandry is mainly based on the supply channels provided by large-scale farms and on the fodder market. This applies especially to private cattle breding demanding rough and mass fodder. For those branches where corn fodder is required – considering that we are talking of production for the market – the related fodder market has to be created as well.

A cutback in the cattle stock at small farms (especially in the household farms) has been a lasting process in Hungary, started already long years ago. One of the main reasons for this is that the gross income per working hour in small-scale private milk production and cattle fattening proved to be the smallest among all small-scale production branches. The bulk of the stock can be found in countries where the "capital power" of large-scale farms is below the average as well. It is to be added that in these areas average per capita gross income of cooperative members is among the lowest. Future prospects do not seem very promising in this respect either.

In Hungary pig-breeding is the most dynamic branch within the framework of small-scale farming. In 1976, some 53.3 per cent of the country's total saughter pig production and some 40 per cent of the total procurement came from small-scale farming. A characteristic phenomenon for the branch in question is the considerable decrease of self-sufficiency coupled with a strong expansion of production for marketing purposes. Cost and income analyses show that it is rather difficult to harmonize interests between show-keeping and pig-fattening small farmers.

The problems of poultry breeding show many similarities to those of pig-breeding. As a result of specialization egg and broiler production separated. The authors describe three models of small-scale farming – that of self-supplying nature, the one bringing seasonal surpluses to the market and that of producing entirely for the market – and review their cost and income situation. Small farmers specialized in poultry-farming make some 1 to 2 per cent of all poultry-farms. In the period of transition when poultry-farming for market purposes is started, a special problem is the volume of the starting capital needed: namely, poultry-farming proves to be economical only above a certain stock-level. Both branches are very much dependent on market conditions, what makes it rather risky to pass any judgement concerning their future prospects.

The last chapter gives a summary of the economic problems of small-scale farming previously discussed branch by branch. The Hungarian price system and its impact on small-scale farming is discussed here, followed by an analysis and criticism of the prevailing tax system influencing small-scale farming. A rather interesting table shows a sectoral breakdown of gross incomes and the number of working hours needed for 150 thousand Forint sales receipts – the basis of income tax assessment – based on the calculations of the authors. These figures show quite a large dispersion between the branches, reflecting that the production incentive function of the tax-system is not functioning, what is more, uniform taxation results in a cutback of production in some sectors of animal husbandry.

Another part of the chapter deals with the methods of cost and income accounts of small-scale farming. In spite of their approximate accuracy the analyses of the authors meet a long felt need. It is to be emphasized – like the authors themselves do, over and over repeating in many chapters – that the subject of the study are small farms producing for the market, however, these are only a very narrow stratum of small-scale farms.

The above discussed book is very useful, as it gives a brief survey of the problems – also in a sectoral breakdown – of small-scale farming and contributes to a better understanding of the present and future of small-scale farming in Hungary.

ZS. KOVÁCS–CSERES

WASS von CZEGE, A.: *Ungarns Außenwirtschaftsmodell. Eine Untersuchung des Spannungsfeldes zwischen Ost–West-Kooperation und RGW-Integration.* Stuttgart–New York, 1979. Fischer. 355 S. (Ökonomische Studien, Bd. 28)

Die Ausdehnung und Vertiefung der internationalen Wirtschaftsbeziehungen in den 70er Jahren, sowie die sich herausbildende neue Umgebung, die die Ursprungsziele der regionalen Wirtschaftsintegrationen modifizierte, bzw. die letzteren zu einer verstärkten Anpassung an die außenwirtschaftlichen Verhältnisse zwang, hat das Problem aufgeworfen, das im vorliegenden Buch behandelt wird. Selbstverständlich haben wir es hier mit einem universellen Prozess zu tun, und die vorhandene Literatur bezieht sich vor allem auf die westeuropäische Integration, wo die Beziehungen zu Drittländern in den letzten Jahren an Bedeutung gewonnen haben. In dieser internationalen Umgebung ist es interessant, einmal auch das Verhalten eines kleinen, rohstoffarmen und stark außenwirtschaftsabhängigen sozialistischen Landes zu untersuchen, und die Eigenarten des Bereichs aufzuzeigen, in dem sich Wirtschaftsbeziehungen innerhalb der Integration und mit Drittländern (vor allem mit den westlichen Industrieländern) treffen.

Wass von Czege versucht die ungarischen Erfahrungen anhand einer beachtenswert reichen, wenn auch nicht immer sorgfältig genug selektierten Literatur darzustellen. Er geht von dem Reformmaßnahmen der ungarischen Wirtschaftspolitik aus, die die Außenhandelsbeziehungen dieses Landes direkt oder indirekt beeinflußt haben. Der erste Teil behandelt die Wirkung der ungarischen Wirtschaftspolitik auf die Ost–West-Wirtschaftsbeziehungen, während der zweite Teil den Einfluß auf die RGW-Integration.

Teil A enthält vier Kapitel. Das erste befaßt sich mit Grundsatzproblemen und Begriffsbestimmungen. Das zweite Kapitel stellt am Anfang fest, daß die im Jahr 1968 eingeleiteten Reformmaßnahmen nicht nur eine Veränderung der binnenwirtschaftlichen Verhältnisse mit sich brachten, sondern gleichzeitig der Konzeption unterstellt wurden, von einer importorientierten Außenwirtshaftspolitik auf eine wachstumsoreientierte Exportpolitik überzugehen. Ausführlich sind in diesem Teil die wichtigsten Merkmale der Reformvorhaben behandelt (Verlagerung der Außenhändelsentscheidungen auf die Unternehmensebene, Kompetenzverteilung zwischen Ministerien und Unternehmen, Verbindung von Binnen- und Auslandsmärkten, usw.). Große Aufmerksamkeit schenkt der Verfasser den in der Organisationsstruktur der Außenwirtschaftsorgane eingetretenen Veränderungen: ungarische Beteiligungen im Ausland, die verstärkte Rolle der Ungarischen Nationalbank und die Tätigkeit der Ungarischen Außenhandelsbank werden erörtert.

Kapitel III geht auf Probleme ein, die sich aus dem unterschiedlichen Charakter der Ost–West-Wirtschaftsbeziehungen und dem ungarischen sozialistischen Planungssystem ergeben. Mit Recht stellt der Verfasser fest, daß zahlreiche ungarische Unternehmen aus Unerfahrenheit, Personalmangel oder Uninteressiertheit auf die Ausarbeitung eigener Außenhandelspläne verzichten, und die Entscheidungen der Lenkungsorgane abwarten. Dieses Verhalten ist aber in den meisten Fällen nicht damit zu erklären – wie es in der westlichen Presse häufig erscheint, und sich auch Wass von Czege zu diesem Standpunkt zu bekennen scheint –, daß die ungarischen Betriebe immer noch zu stark von den zentralen Organen "abhängen". Es ist in der Regel eben umgekehrt: der Planungsmechanismus gewährte den Unternehmen einen größeren Raum, den die Unternehmen nicht entsprechend auszunutzen wußten.

Im vierten Kapitel analysiert der Autor die Lenkungsmechanismen in der Außenwirtschaft (Wechselkurse, Preise, finanzielle Brücken, Förderungsmittel, usw.). Er gibt hier ein detailliertes Bild von den wichtigsten Mitteln der ungarischen Außenwirtschaftspolitik, vor allem in der ersten Hälfte der 70er Jahre. Die im allgemeinen klare und verständliche Schilderung bedarf nur einer Ergänzung: die Verschiebung des durchschnittlichen Forintaufwandes zugunsten des Dollars – wie der Verfasser schreibt – ist nicht ohne weiteres einzusehen. Einmal beziehen sich die mitgeteilten Daten auf die zweite Hälfte der 60er Jahre, wo der neue Wirtschaftsmechanismus entweder noch nicht in Kraft getreten ist, oder seine ersten Schritte – zunächst ohne direkte Einwirkung auf einen längerfristigen Trend – gemacht hat. Zweitens besagt der sinkende Forintaufwand pro Rubel (von 47 Forint in 1965 auf 42 Forint in 1970) noch keineswegs, daß die Unternehmen – trotz der relativ kleineren Einnahmen – nicht weiterhin dem Export in Rubelrelationen den Vorzug gegeben haben. Wenn nämlich Produkte hergestellt werden, die im Westen nicht zu verkaufen sind, bzw. nur mit sehr hohem Aufwand abgesetzt werden können, lohnt es sich immer noch in den sozialistischen Ländern nach Märkten zu suchen, und eine zwar geringere aber immerhin sichere Einnahme zu erzielen. Genau der verhältnismäßig geringe Unterschied zwischen dem Dollar- und Rubelmultiplikator hat zahlreiche Unternehmen dazu geführt, die kleinere Einnahmen versprechenden, aber ohne große Anstrengungen erzielbaren, "langfristige Sicherheit" bietenden und vor ständigen Strukturanpassungen hütenden sozialistischen Geschäfte vorzuziehen.

Das fünfte Kapitel, mit dem Teil B des Buches einsetzt, behandelt die Probleme der Wirkung der Außenwirtschaftsreformen auf die Integration im RGW. Der Verfasser stellt fest, daß die intraregionalen Außenhandelskontakte weiterhin auf bilateraler Grundlage stehen. Im nächsten Kapitel versucht er die Außenhandelsverflechtung Ungarns mit dem RGW zu quantifizieren. Dabei geht er von den Wachstumsraten des RGW-Handels, des Gesamtaußenhandels und der industriellen Bruttoproduktion aus. Die Außenhandelsanteile sind schon in sich fragliche Merkmale, denn die heutige Weltwirtschaft läßt sich durch die internationale Bewegung unterschiedlicher Produktionsfaktoren charakterisieren, unter denen die Warenströme nur einen Faktor darstellen. Technologie-, Kapital- und Arbeitskräfteströme müßten hinzugerechnet werden, um ein annähernd genaues Bild vom "Verflechtungsgrad" zu ermitteln. Das Heranziehen der industriellen Bruttoproduktion wirkt noch verwirrender. Zwischen industrieller Bruttoproduktion und Außenhandel sind die Korrelationen gar nicht eindeutig, insbesondere nicht in einer Gemeinschaft, in der ein Großteil des Außenhandels aus Rohstoffen und landwirtschaftlichen Erzeugnissen besteht. Zu Beginn der 70er Jahre handelt es sich demnach nicht unbedingt um einen "besonders starken Integrationstrend" im RGW-Außenhandel, sondern vielmehr geht es darum, daß fast alle sozialistischen Länder zu dieser Zeit die wachstumsfördernde Wirkung der internationalen Wirtschaftsbeziehungen anerkannt haben, und die Intensität der Außenhandelsverflechtung *international* (und nicht nur im RGW-Bereich!) zunahm. (Die Wachstumsraten des Außenhandels übertrafen in jedem Land die der industriellen Bruttoproduktion.)

Aus den Unterschieden, die sich zwischen den ungarischen Außenhandelsreformen und der Integrationsentwicklung bemerkbar machen, kommt Wass von Czege im siebenten Kapitel zu der im Grunde genommen richtigen Feststellung, daß es Ungarn daran liegt das System der heute gültigen und praktizierten internationalen Plankoordinierung im RGW weiterzuentwicklen. Einer der interessantesten Teile der Arbeit ist der Versuch, wie Ungarns Außenwirtschaftsbeziehungen zum RGW, bzw. zum Westen auf einen gemeinsamen Nenner gebracht werden können. Nach der Darstellung unterschiedlicher Argumente – die vielleicht noch kritischer hätten angegangen werden können – lesen wir den Schluß: "Unterstellt man, daß sich langfristig gesehen die Wettbewerbsfähigkeit der ungarischen Produkte durch die Ost–West-Kooperationen erhöht, so würde dieses sowohl einer Zusammenarbeit im RGW als auch einer Ausweitung des Westhandels dienlich sein, so daß sich die Entweder-oder-Alternative zwischen stärkerer Integration in den RGW auf Kosten der Ost–West-Kooperation und vertiefter Zusammenarbeit mit dem Westen zu Lasten von Spezialisierung und Kooperation

innerhalb des RGW nicht stellt." (S. 233). Dieser Feststellung kann man zustimmen, sie ist aber nicht in allen Teilen des Buchs konsequent vertreten. Manchmal spricht der Autor – auch ungewollt – für die „Entweder-oder-Alternative" aus, wo er zum Beispiel der Ost–West-Kooperation nur eine Mittlerfunktion zuschreibt (S. 212).

Das letzte Kapitel bewertet die Realisierungschancen der ungarischen Zielsetzungen im RGW. Dabei behandelt Verfasser auch die Zielsetzungen anderer sozialistischer Länder. Es fällt auf, daß seine Klassifizierung von der in der internationalen Literatur üblichen abweicht. Er nimmt Polen und die ČSSR, dann Bulgarien und Rumänien zusammen, und geht gesondert auf die Sowjetunion und die DDR ein. Üblicherweise spricht man von einer polnisch-ungarischen, und einer deutsch-bulgarischen Vorstellung, wenn auch diese Klassifizierung sehr grob sein mag.

Die Anhänge mit den wichtigsten statistischen Daten bilden einen wertvollen Teil der Studie.

Im allgemeinen kann man das Buch als eine wertvolle Hilfe für Wirtschaftler bezeichnen, das vorwiegend auf ungarisches Quellenmaterial zurückgreift. Jedoch wäre es besser gewesen, wenn weniger unveröffentlichte und nicht besonders aussagekräftige Universitätsdissertationen herangezogen worden wären, sondern mehr, in ungarischer Sprache reichlich vorhandene Studien, die eine begründetere Stellungnahme ermöglichen.

Est ist kaum zu erwarten, daß alle Aspekte des Themas behandelt werden. Was man allerdings vermissen kann, ist das Fehlen der Analyse der weltwirtschaftlichen Veränderungen, die auf ein außenwirtschaftsabhängiges Land, wie Ungarn naturbedingt einen großen Einfluß ausgeübt, und dadurch auch die Reformkonzeptionen modifiziert haben mußten. Aus interner Kräfteverschiebung, bzw. RGW-internen Schritten kann man die Akzentverschiebungen der ungarischen Wirtschaftspolitik nicht nur ungenügend erklären, sondern sind diese Erklärungsversuche notwendigerweise irreführend. Da der Untersuchungszeitraum auf die erste Hälfte der 70er Jahre beschränkt bleibt, vermissen wir einen dritten Teil – der vielleicht das Fortführen dieser interessanten Arbeit bedeuten könnte –, in dem die Ereignisse der zweiten Hälfte der 70er Jahre ausführlich behandelt werden könnten. Eine solche Behandlung würde nicht nur das Zeithorizont ausweiten, sondern wahrscheinlich auch einige grundsätzliche Feststellungen in neues Licht stellen, bzw. im Grunde weiterhin bestehende Beziehungen modifizierter beschreiben.

Dieses Unternehmen würde einmal Möglichkeit dazu geben das statistische Material aufzufrischen, und nicht zutreffende, bzw. einem stichhaltigen Grund entbehrende Erläuterungen zu revidieren (z.B. die Schlüsse, die auf Seite 194 aufgrund von Daten zweier aufeindanderfolgenden Jahre gezogen sind). Andererseits würde sich dabei herausstellen, daß die bestimmenden Wirkungen nicht von der ungarischen Wirtschaftspolitik auf den RGW, bzw. die Weltwirtschaft hinausgehen, sondern umgekehrt (statt oder neben Kapitel 7.2.1. "Die Auswirkungen der Reformen auf die äußeren Bedingungen für eine Integration" wäre viel gewichtiger gewesen ein anderes, nämlich: die Auswirkungen der Integration auf die Reformen). Drittens – aber gar nicht zuletzt – könnte man mit einer solchen Behandlung die häufigen Mißverständnisse im Westen beseitigen, die darin bestehen, daß die Dezentralisierung immer "reformpositiv", dagegen die Rezentralisierung "reformnegativ" zu bewerten sei. Dementsprechend bilde die erste gute Möglichkeiten zur Ausdehnung der Ost-West-Kooperation, während die zweite ihr im Wege stehe, oder sie nur beschränkt zulasse. Eben die heutige weltwirtschaftliche Umgebung und die Erfordernisse des raschen und effektiven Strukturwandels der ungarischen Wirtschaft weisen darauf hin, daß in bestimmten Perioden und in bestimmten Entwicklungsphasen, die vertiefte Eingliederung in die weltwirtschaftliche Arbeitsteilung und eine starke zentrale Kontrolle einander gar nicht ausschließen, sondern einander gegenseitig bedürfen. In diesem Zusammenhang stellen sich auch manche Fragen anders, die mit dem zweifellos hochinteressanten Themenkreis verbunden sind, den das vorliegende Buch bearbeitet hatte.

A. INOTAI

BÁCSKAI, T. – FOGARAS, I.: *Struktur des Bankwesens in Ungarn.* Frankfurt a. M., 1979, Fritz Knapp Verlag. 100 S.

Beide Verfasser haben lange Jahre in der ungarischen Finanzpraxis verbracht. Aus ihrer Feder erschienen zahlreiche ökonomische Abhandlungen, Finanzstudien.

Struktur des Bankwesens in Ungarn befaßt sich mit dem ungarischen Wirtschaftsleben, mit dem Lenkungsmechanismus der ungarischen Planwirtschaft, und behandelt die Rolle, die das ungarische Bankwesen im Regelungsystem der Planwirtschaft cinnimmt; gleichzeitig detailliert das Werk die Aufgaben, die Tätigkeit des ungarischen Bankwesens.

Im *ersten Teil* geben die Autoren eine zusammenfassende Information über das ungarische Wirtschaftsleben und seine Entwicklung seit 1970. Weiters untersuchen sie das Instrumentarium der Wirtschaftslenkung in der ungarischen Planwirtschaft: das System der direkten zentralen Direktiven, sowie der indirekten ökonomischen Regler.

Im weiteren legen die Verfasser die Ausgestaltung und Entwicklung des ungarischen Bankwesens vor 1945 dar, gehen dann auf die Ausgestaltung, Entwicklung des sozialistischen Bankwesens über und untersuchen die Rolle, die Bedeutung der Banken unter den Umständen der ungarischen Planwirtschaft. Sie bezeichen die Hauptaufgaben des sozialistischen Bankwesens in zwei, miteinander eng zusammenhängenden Zielsetzungen. Das Gleichgewicht zwischen Waren- und Geldmarktbeziehungen, die relative Wertbeständigkeit des Forint in den binnen- und außenwirtschaftlichen Beziehungen müssen gefördert, sowie die Erfüllung des Volkswirtschaftsplanes vorgetrieben werden, neben einer Beachtung der Effektivität, der Wirtschaftlichkeit und Rentabilität.

Im *zweiten Teil* des Buches befassen sich die Autoren mit dem strukturellen Aufbau, der Tätigkeit und den sonstigen Aufgaben der *Ungarischen Nationalbank.* Sie untersuchen die Tätigkeit der Ungarischen Nationalbank, welche sie als Zentralbank, als Bank der Banken, als Staatsbank und Devisenbehörde ausübt.

Weiters werden die von der Ungarischen Nationalbank erfüllten Aufgaben dargestellt, die sie als Handelsbank (kurz- und langfristige Kredite an die Unternehmen) und als Investitionsbank (mittel- und langfristige Investitionsfinanzierung) ausübt.

Die Autoren untersuchen eingehend die Aufgaben der Ungarischen Nationalbank

- bei der Organisierung und Abwicklung des Geldumlaufs,
- bei der Devisenwirtschaft,
- bei der Kreditwirtschaft der Zweige, darunter unter anderem
  - bei der Finanzierung des Außenhandels (Export, Import) und
  - auf dem Gebiet der Kreditgewährung bei Investitionen.

Damit im Zusammenhang werden im Buch die in Geltung stehenden passiven und aktiven Zinsfüße dargelegt.

In einem gesonderten Punkt befassen sich die Autoren mit den Aufgaben der Ungarischen Nationalbank im Zusammenhang mit den heimischen Wirtschaftsvereinigungen.

Sie machen die Leser mit den ausländischen Interessen der Ungarischen Nationalbank (Central- Wechsel- und Creditbank AG, Wien, 100% Interessiertheit; Hungarian International Bank Ltd, London, Aktienmajorität; Central European International Bank, Budapest, 34% Aktieneigentum) und den Vertretungen (Paris, Zürich, Frankfurt a/M., New York) bekannt. Damit in Verbindung untersuchen sie auch die Beziehungen, die zwischen der Ungarischen Nationalbank und der Internationalen Bank für Wirtschaftliche Zusammenarbeit (RGW-Bank) mit dem Sitz Moskau, sowie der Internationalen Investitionsbank des RGW – ebenfalls mit dem Sitz Moskau – bestehen.

Der abschließende Teil des Kapitels behandelt die jährliche Schlußbilanz and das Informationssystem der Ungarischen Nationalbank.

Der *dritte Teil* der Arbeit befaßt sich mit den übrigen Geldinstituten des ungarischen Bankwesens. Die Verfasser untersuchen den Aufgabenkreis, den die *Staatliche Entwicklungsbank* in Verbindung mit der Vorbereitung, der Finanzierung, der finanziellen Abwicklung, der Kontrolle ausübt, wo staatliche Entscheidung beanspruchende Investionen diese benötigen. Sie befassen sich mit den Grundprinzipien and Funktionen des volkswirtschaftlichen Investitionsinforma-

tionssystems, das durch die Staatliche Entwicklungsbank ausgestaltet wurde.

Die Autoren analysieren die Rolle, die Rechtslage, die Tätigkeit der *Außenhandelsbank*, die als Devisenbank, Handelsbank und Finanzbank funktioniert.

Das Werk befaßt sich im weiteren mit der Geschäftstätigkeit der Außenhandelsbank, mit dem charakter der durch sie abgewickelten internationalen Handels- und Bankoperationen, mit besonderer Beachtung der Rolle der Bank bei der Finanzierung, der Abwicklung und Kontrolle der in der ungarischen Außenhandelstätigkeit immer größere Bedeutung erlangenden Kooperationsvereinbarungen.

Die Autoren legen die Tätigkeit der *Landessparkasse* als Bank der Bevölkerung und Kommunalkbank dar.

Sie befassen sich ausführlich mit den verschiedenen Konstruktionen der Spareinlagen der Bevölkerung, mit der Geheimhaltung der Einlagen, der Steuer- und Gebührenfreiheit der Einlagen und Einlagezinsen. Diese Freiheit bezieht sich – wie die Autoren hinweisen – auch auf die von Ausländern getätigten Einlagen in konvertierbaren Währungen. Übrigens verfügen die Ausländer – mit Beachtung der Vorschriften der Geschäftsregeln der Landessparkasse – gänzlich frei über ihre Einlagen (Transferieren von Kapital und Zinsen in Währung). Sie befassen sich auch mit den Spargewohnheiten der Bevölkerung, und vergleichen die Entwicklung der für die Gestaltung der Spareinlagen charakteristischen Kennziffern unter sozialistischen Verhältnissen.

Im weiteren untersuchen die Verfasser die Kreditgewährungtätigkeit der Sparkasse, solcherweise die langfristigen Wohnbau- und Kaufkredite, die Entwicklung der mittelfristigen Verbraucher- und Produktionskredite. Auch sonstige, sich auf die Bevölkerung beziehende Geschäftszweige der Landessparkasse werden dargelegt. Ein gesonderter Punkt analysiert die durch die Landessparkasse ausgeübten kommunalen Bankaufgaben.

Die Autoren zeigen uns die Tätigkeit der *Geldinstitutszentrale* und der mit dem Institut eng verbundenen *Allgemeinen Wertverkehrsbank*.

Sie befassen sich im weiteren mit den Aufgaben, die die *Spargenossenschaften* versorgen und heben die Bedeutung des Genossenschaftssektors neben dem staatlichen Banknetz hervor.

Als letzten Punkt des Kapitels legen sie die Tätigkeit der in Ungarn befindlichen Vertretungen der ausländischen Banken – des österreichischen Creditanstalt-Bankvereins, der italienischen Banco di Sicilia, der französichen Banque Nationale de Paris, der jugoslawischen Ljubljanska Banka und der amerikanischen First National Bank of Minneapolis – sowie die Tätigkeit der in letzter Zeit mit dem Sitz Budapest gegründeten "Off-shore" Bank, der Central European International Bank Ltd. dar.

Die Arbeit der Verfasser ist durch Ausführlichkeit, Objektivität und durch eine für die ausländischen Leser verständliche Darlegung des Objekts gekennzeichnet. Das Buch trägt nützlich dazu bei, die interessierten ausländischen Finanzexperten, Ökonomen auf eine authentische Weise mit dem ungarischen Bankwesen, mit seinen Aufgaben, mit seiner Tätigkeit innerhalb der ungarischen Volkswirtschaft, sowie mit seinen ausländischen Beziehungen bekannt zu machen.

I. SZENTIVÁNYI

Yearbook of industrial statistics, 1978. Budapest, 1979. Hungarian Central Statistical Office, 391 p.

The use of statistical publications describing the economy in the light of figures is indispensable for any economic researcher concerned with the problems of the Hungarian economy. The work of researchers with a poor knowledge of the Hungarian language may be hampered by linguistic problems or even misinterpretetions might occur. In order to solve this problem, the Statistical Publishing House, besides its regular comprehensive publications in foreign languages, comes out for the second time (first in 1978) with a statistical publication covering the Hungarian industry as whole. In the three-language issue of the Hungarian Yearbook of Industrial Statistics the reader will find to each table with Hungarian heading a precise English and Russian translation.

In the first part of the Yearbook one can find the most significant aggregate figures about the

Hungarian industry, comprising a fairly lengthy period, going back to 1960. In the same part one finds figures on the structure of industrial production and a sectoral breakdown of employees in the industry.

The other parts of the publication inform about the performance of the industrial enterprises and cooperatives in Hungary in the course of 1978. The reader receives ample information on the development of gross and net industrial output and productivity, further on the changes in production conditions (e.g. number of employees, the structure of fixed assets). Interesting statistical tables give a picture on the present level of concentration of the Hungarian industrial organizations. Figures related to this aspect (concentration of employment, fixed assets, industrial establishments) are available in sectoral breakdown, enabling a fairly detailed analysis. Changes in market orientation and possibilities, the development of domestic and foreign sales (both in terms of value and in physical quantities) are shown in the tables. Price indices concerning output, sales and materials complete the picture. The publication is rich in information on the characteristic features of labour force.

Those concerned with the economic environment of the Hungarian companies, may find interesting information on it in the part of the Yearbook dealing with financial processes. Here the reader finds tables comprising figures on profitability, net incomes, profits after the deduction of state subsidies and payments to the budget and on funds formed out of profits. One can find figures on the raw material and energy consumption of the various branches of industry.

The last and most comprehensive part of the Yearbook contains detailed statistical information about the specific characteristics of the various industrial branches.

S. R.

BOOKS RECEIVED*

BÁCSKAI, T.–FOGARAS, I.: Struktur des Bankwesens in Ungarn. Frankfurt a. M. 1980. Fritz Knapp Verlag. (Struktur ausländischer Banksystem, Hgb.: Prof. Dr. Manfred Hein) 100 p.***

BAGOTA, B.–GARAM, J.: Mit kell tudni az 1980. évi népgazdasági tervről? (What to know about the 1980 national plan?) Budapest, 1980. Kossuth Könyvkiadó. 237 p.

BENET, I,: Mezőgazdaság, élelmiszergazdaság, agráripari komplexum (Agriculture, food economy and the agroindustrial complex.) Budapest, 1979. Közgazdasági és Jogi Könyvkiadó. 275 p.**

CSIKÓS-NAGY, B.: A magyar árpolitika. Az 1979/80. évi árrendezés (Hungarian price policy. The price rearrangement in 1979/80.) Budapest, 1980. Közgazdasági és Jogi Könyvkiadó. 258. p.**

HEINSOHN, G.–KNIEPER, R.–STEIGER, O.: Menschenproduktion. Allgemeine Bevölkerungstheorie der Neuzeit. Frankfurt a. M., 1979. Suhrkamp Verlag. 258 p.

HERNÁDI, A.: A japán gazdaság a 70-es években (The Japanese economy in the seventies.) Budapest, 1980. Kossuth Könyvkiadó. 173 p.**

KOVÁCS, G.: Jövőkutatás és társadalmi tervezés (Future research – social planning.) Budapest, 1979. Közgazdasági és Jogi Könyvkiadó. 365 p.**

LAKI, M.: Uj termékek bevezetése és a piaci alkalmazkodás (Introduction of new products and adaptation to the market.) Budapest, 1979. Közgazdasági és Jogi Könyvkiadó. 220 p.**

MĂNESCU, M.: Cibernetica economică. Bucâreşti, 1979. Editura Academiei Republicii Socialiste România, 512 p.

MOSÓCZY, R.: A KGST-országok gazdaságpolitikája (1976–1980) (Economic policies in CMEA countries.) Budapest, 1979. Kossuth Könyvkiadó. 398 p.

PÉCSI, K.: A magyar-szovjet gazdasági kapcsolatok 30 éve (Thirty years of the Hungaro-Soviet economic relations.) Budapest, 1979. Közgazdasági és Jogi Könyvkiadó. 300 p.

ROBINSON, J.: Aspects of development and underdevelopment. Cambridge, 1979. Cambridge University Press. 146 p.**

SÁRKÁNY, P.: A világélelmezési válság (The world food crisis.) Budapest, 1979. Közgazdasági és Jogi Könyvkiadó. 401 p.

STOLL, H. R.: Regulation of securities markets: an examination of the effects of increased competition. Monograph Series in Finance and Economics 1979/2. New York University Graduate School of Business and Administration. 86 p.

Yearbook of industrial statistics 1978. Budapest, 1979. Hungarian Central Statistical Office. 391 p.***

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

**To be reviewed in Acta Oeconomica.

***Reviewed in this issue.

YUNKER, J. A.: Socialism in the free market. New York, 1979. Nellen Publishing Co. Inc. 268 p.

ZALESKI, E.: Stalinist planning for economic growth 1933–1952. Translated from the French and edited by M.-Chr. Mac Andrew and J. H. Moore. London and Basingstoke. 1980. The Macmillan Press Ltd. 788 p.**

ZELKÓ, L.: International value international prices. Alphen aan den Rijn, The Netherlands-Budapest, 1980. Sijthoff and Noordhoff – Akadémiai Kiadó. 154 p.**

ŻURAWICKI, L.: Multinational enterprises in the West and East. Alphen aan den Rijn, The Netherlands, 1979. Sijthoff and Noordhoff International Publishers B. V. 207 p.**

ZWASS, A.: Money, banking and credit in the Soviet Union and Eastern Europe. London and Basingstoke, 1979. The Macmillan Press Ltd. 233 p.**

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Kamilla LÁNYI, b. 1929. Economist. Senior research worker at the Institute for Economic and Market Research. Author of „Some remarks on the product balances in kind" in: Input-Output Techniques. Proceedings of the Second Hungarian Conference on Input-Output Techniques. Budapest, 1976. Akadémiai Kiadó; " Une situation paradoxale en économetrie" Lyon, 1977. and several other studies – in Hungarian.

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Quatrième Conférence générale des Conseils Nationaux des Sciences Sociales et Organismes Similaires. — Paris, UNESCO, 19/21 novembre 1979

Dixième Assemblée générale du CLACSO. — Rio de Janeiro, 29/11 au 1er/12 1979

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13. IV. 1981

HU-ISSN 0001—6373
Index: 26.033

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AKADÉMIAI KIADÓ, BUDAPEST

VOLUME 24
NUMBER 3—4
1980

ACTA OECONOMICA

A MAGYAR TUDOMÁNYOS AKADÉMIA
IDEGEN NYELVŰ KÖZGAZDASÁGTUDOMÁNYI FOLYÓIRATA

Felelős szerkesztő:

FÖLDI TAMÁS

Szerkesztőség: 1112 Budapest, Budaörsi út 45.
1502 Budapest Pf. 262.

Megjelenik évi 2 kötetben. Megrendelhető az Akadémiai Kiadónál (1363 Bp. Pf. 24.), a külföld részére pedig a Kultura Külkereskedelmi Vállalatnál (1389 Budapest, Postafiók 149).

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Acta Oeconomica Vol. 24(3–4), pp. 213–232 (1980)

L. FALUVÉGI

CONDITIONS OF HUNGARIAN ECONOMIC DEVELOPMENT AND FINANCIAL POLICY

The study examines the changes in the system of internal and external conditions of the Hungarian economy as well as their effects on the economic efforts. Future tasks of the Hungarian financial policy are discussed by taking the above into consideration.

Changes in the system of conditions of the Hungarian economy

The Hungarian economy has reached a stage of development in the 1970s where both foreign economic conditions and domestic circumstances raise new, greater requirements. It is now a key-issue in building socialism how permanent changes in conditions determining economic management are recognized and how the necessary conclusions are drawn.

Economic progress and the level of development

The rate of economic growth in Hungary corresponded to the average of CMEA-countries during the past 35 years and it can even be considered to be rapid, though not outstanding, if compared with that of the developed Western countries. In this period considerable changes took place in the macrostructure of the Hungarian economy: employment in agriculture fell by more than 50 per cent, while that in the industry doubled. In recent years also the proportion of those working in service branches has begun to increase, though only at a slow rate as yet. In the first period the main source of development was, beside fast industrialization, a powerful increase of employment and productive accumulation.

International experience indicates that having reached a certain level of development intensive growth and qualitative transformation of the economy come to the fore. This process takes place more deeply, in the microsphere, mainly through changes in product pattern and technological progress.

From the mid-1960s on changes in proportions between various sectors of the national economy have slowed down also in Hungary. Though the present sectoral structure of the industry already approaches that of the economically developed countries – with a great weight of engineering and a strongly increasing share of the chemical industry –, the up-to-dateness of its products lags in many respects behind the products coming from advanced countries. This is the reason why, for example, the proportion of up-to-date machines, representing high technological standards, is very low in our exports to Western countries – relative to their share in the national economy.

As a result of her development Hungary can be qualified at present as an economically *medium* developed country. Measured by per capita national income her development level corresponds to the average among European CMEA-countries. Making comparisons on the basis of per capita gross national product Hungary is still lagging by 40–50 per cent behind Western European countries with similar potentialities and size. Our backwardness is even greater relative to some especially developed nations.

However, the level of development cannot be judged on the basis of a single indicator alone – particularly if it can only be compared unreliably. There are some fields – as for example the proportion of qualified manpower – where we are ahead of countries on a similar development level. Our lag behind the most advanced countries is not so considerable concerning the ratio of expenditure on research and development, either. However, those domains cannot be neglected either where our lag is considerable. The most important ones among them are the following: Hungary still lags behind by a decade in per capita production and consumption if compared to the leading countries. The main reason is that investments do not result in a desirable increase of national income. Despite achievements of the last ten years the lag is even greater in infrastructure, since catching up with other countries requires much greater efforts in this field than in the level of national income or consumption.

The level of productivity is also lower than would be justified by the level of economic development. The raising of technological standards has not been followed by the development of organization. The innovation process is slow. The state of economic foundations of the society and its inner dynamics have gradually become a key-issue of further progress which has to be faced.

The organizational system of enterprises is much more centralized in Hungary than even in the most developed countries; in this regard we are "placed high" even among CMEA-countries. This, however, does not mean either a real concentration of resources – concomitant with development –, nor a proper exploitation of economic advantages resulting from the scale of production. Adaptability of the overcentralized economic units is low, their inner control is clumsy, their monopolistic situation makes them sluggish and they are run, after all, with considerable administrative burdens imposed on society.

It was recognized already in the 1960s that the process of development based on quantitative expansion could hardly be continued because of scarcity of labour and the increased demand for new, up-to-date products, and thus an intensive development had to begin. Conditions of development have changed also because the overwhelming majority of the population spends part of its income no longer on the consumption of prime necessities. Qualitative requirements have come to the fore also in consumption, the share of services is increasing, tourism is developing, there are more and more durable consumer goods, making life easier: cars, weekend plots and holiday homes.

In the world economy as well as in meeting domestic consumer needs such factors of economic development have become determinant as adaptability, the possible most economical satisfaction of given demands, quality, reliability, etc. New sources of energy

have to be sought after in enterprise management and human factors – i.e. in inventiveness, enterprising, risk-taking, organization, etc.

Nowadays difficulties are in Hungary more frequently mentioned than before. However, when speaking about new, more difficult tasks it should not be forgotten either, that there *are several domestic possibilities that could be utilized to our advantage* with a conscious transformation of economic and social approaches. Of course, these are not tangible advantages, but will become so if they are recognized and utilized.

Such an advantage can be in Hungary an important part of the agriculturally utilizable area with good soil and climatic conditions. With rational labour management large proportions of highly qualified people, also internationally acknowledged traditions and experiences in some industries and in agriculture could be better utilized.

These advantages could be more easily exploited so much the more, because the *system of economic control and management* introduced in 1968 gives wider scope to enterprising and inventive economic and enterprise management.

In the new system of control and management the role of economic tools based on value and monetary processes was extended with a simultaneous restriction of the sphere of directives. The purpose was to make all decisions where

– the necessary information on prices, costs and market possibilities is best known;

– changing market demands can be most rapidly adapted to;

– the harmony between interest and responsibility makes likely that the best results will be attained. Therefore, precisely for a better realization of central objectives, decision-making and responsibility have been divided more rationally and, through this, a considerable amount of previously hidden energy has been released.

People heading economic units have become leaders with the possibility and obligation of making decisions instead of being executors of concepts and instructions. *The new system of control and management has been an important achievement of our development not only in the economic but also in the social sense.* Development of the system of economic control and management does not proceed without hitches and obstacles, partly because of some inconsistencies of practical implementation (e.g. in price formation or organizational matters), furthermore, because of a wrong handling of conflicts unavoidably concomitant with changed circumstances and deficiencies of central control, and partly because of the well-known turn on the world market in 1973. Even if progress was much more modest than we had believed it would be and also unexpected practical difficulties have arisen, the results achieved as well as the urging internal and external necessity of intensive development have led to the recognition that the aims set can be better approached exclusively by proceeding along this way.

The impact of international environment

We have arrived at a period when it will become an almost determinant element of Hungary's economic development to what extent and mainly how efficiently we shall be able to utilize the *advantages of the international division of labour.* Similarly to other

socialist countries we, too, are striving after expanding international economic relations on the basis of mutual economic advantages and improving the profitability of foreign trade. This is expressed in Hungary's case first of all in the ever widening planned economic cooperation with other CMEA-countries, but also in permanently developing commercial and economic relations with countries with different social system.

This is an important process since thus the circle widens where the world market measures the standards and competitiveness of our work through the quality, production costs and attainable prices of products. The value judgement of the world market – be it favourable or unfavourable – shows the activities qualified as outdated, that must not be developed, but even have to be suppressed. It also indicates where possibilities for an economical development of production are given and where this is in our interest.

Participation in the international division of labour makes it into an elementary interest for us to follow processes going on in the world economy with special attention, because advantages stemming from them can be utilized and disadvantages diminished only in this way.

Hungary's economy was shocked by environmental effects not for the first time in the mid-1970s. The agrarian crisis of the 1870s, then the big crisis between 1929 and 1933 also rearranged the structure of world trade, the system of international division of labour as well as economic and power relations. These challenges were answered at that time by individual or regional isolation and protectionism. This resulted in a rigidity of economic structure, and the backwardness of the Hungarian economy increased. Now historical lessons, possibilities inherent in the socialist community and economic self-knowledge make answering the new challenge easier. And this can only be an even better utilization of advantages offered by the international division of labour relying on previous achievements! This concept has to be kept in view also in periods when the international situation becomes more complicated and the process of détente is over-shadowed.

World economic changes have in their majority disadvantageous and in a smaller part advantageous effects on Hungary. We are disadvantageously affected by rising prices of raw materials and advanced technology, as well as by the protectionism concomitant with the slow and unbalanced development of capitalist countries. The former increases costs, while the latter makes exports more difficult.

In several traditional industries, especially in the manufacturing of labour-intensive and medium-quality products countries of the developing world are new rivals of Hungary. They enjoy also tariff concessions beside wages advantage – i.e. extraordinarily low wages – which impairs Hungary's possibilities for profitable sales.

Increasing costs of raw materials and energy and environmental protection engage sooner or later considerable amounts of capital all over the world, therefore it has to be reckoned with that the excessive liquidity characterizing monetary markets at present will cease or at least diminish. This fact alone is a warning that greater efforts have to be made than previously in order to obtain most favourable terms when raising foreign credits

since they will be needed also further on. We have to strive after the advantages to be gained from the international monetary mechanism.

The sharpening of world economic competition means a *greater disadvantage* for us if we are unable to adapt ourselves to changed circumstances. This situation can be compensated by the modernization of economic work, by relying on the mobilizing and pressing force of economic competition.

In the process of world economic changes *advantageous possibilities* are offered by the fact that the absorptive capacity of the market and solvency widened and improved in some developing countries, furthermore, that food exports are not only of economic but also of strategic importance. How far Hungary will be able to utilize these possibilities will be determined by the development of competitiveness. In this field, however, it will be of ever greater importance whether production structure is elastically adapted to sales possibilities.

It has become a permanent concern during the last decade – partly owing to more rapid growth – that imports from Western countries have considerably increased. More vivid East–West economic relations were aimed at accelerating the taking over of technology and latest results from developed countries.

In this we succeeded partly, but imports of materials and semi-finished products as well as of productive spare parts increased more rapidly than expected. This is partly a consequence of the import of up-to-date machines, since the latter require continuously raw materials and spare parts of adequate quality. But this import rapidly increased also because domestic cooperation ability is poor and this could not be properly compensated by CMEA-trade either. The problem lies not alone in increased imports but in that the export capacity of the Hungarian economy could not keep abreast of more expensive Western imports; more precisely, exports did not properly increase and export prices could not be adequately raised either.

In the 1970s new phenomena could be observed also in the trade with CMEA-countries. In previous years this market meant for Hungary an almost unlimited source of energy and raw materials. Even in 1979 Hungary bought 80 per cent of the oil and 30 per cent of the gas used from CMEA-countries, first of all from the USSR. Furthermore, 20 per cent of electric energy was obtained from the joint CMEA-system of transmission lines.

Hungary is thus supplied with energy mostly by the socialist community also today, though the possibilities of increasing imports are already limited. At the same time, the CMEA-market offered wide possibilities for export with its large absorptive capacity and great demands. Thus it stimulated the developing Hungarian industry in a certain sense.

In recent years all CMEA-countries have developed contacts with third countries, both for external and domestic reasons, often to a greater extent than Hungary. Conditions of realization within the CMEA have also become harder. Qualitative requirements towards export goods have become higher also here, and that with good reason considering conditions of economic competition. Demand shifted – also in

structure – towards more valuable products, the price policies of partners became more definite, the level of Hungarian export prices could be raised according to world market trends only with difficulties, while the costs of import kept considerably increasing.

Despite the problems appearing also on the CMEA-market it is a great advantage for Hungary also further on that large series adjusted to the size of this market can be produced and advantages inherent in cooperation and specialization are better exploited. It is a guaranty for further development if security resulting from long-term cooperation is built upon. It is in Hungary's interest that scientific, technological and production cooperation should develop and also the necessary modernization of the price, monetary and credit mechanisms of the integration should be implemented. Namely, we have to be able to strike continuously a more exact balance between potential possibilities and practically enforceable advantages which is in many respects a new and demanding requirement – thus concentrating efforts on cooperations promising the most mutual advantages.

Much has already been spoken in Hungary about changes in foreign economic conditions, about the *terms of trade.* Deterioration in the terms of trade in exports and imports transacted *with developed Western countries,* continuing since 1973, touched bottom in 1975 when it amounted to almost 17 per cent. Since then some improvement occurred, but the loss was 6–7 per cent even in 1978 as compared with 1972. Though the trade with *developing countries* is smaller, the terms of trade are here much more unfavourable than with the former, mainly because of the specific commodity pattern of trade. In the trade transacted with socialist countries deterioration in the terms of trade has been slower, more even in time, less in the first years of the price explosion, but more in the last 1–2 years – according to the pricing principle applied in the CMEA. Total losses resulting from deterioration in the terms of trade amounted to 16–18 per cent in 1978 as against 1972 and some further deterioration could be observed in 1979, considering the three markets together. This means that accumulated losses resulting from deterioration in the terms of trade during the last seven years amounted nearly to half of the increment of Hungarian national income.

Deterioration in the terms of trade was caused by external reasons, since Hungary cannot determine world market prices. But losses could have been more rapidly moderated than they were in reality. Prices attained in exports throw a new light upon foreign trade activity and domestic production, too, beside world trends.

Difficulties resulting from the changes in economic conditions – and the fact that we could not properly adjust to these changes yet – can be summarily attributed to the unsatisfactory efficiency and profitability of the entire functioning of the national economy. This statement is true despite the circumstance that people do not work worse in factories even at present, nor is the functioning of the economy weaker than, say, 8–10 years ago. This is one aspect. But *international comparisons* also indicate that the efficiency of utilizing assets, i.e. output per unit input of capital decreased, and the growth of productivity, i.e. of output per unit input of living labour is slow. Hungary's lag behind the most developed countries further increased with regard to both the efficiency

of capital utilization and the level of productivity, especially in some branches. It may be added that products on which a considerable part of domestic labour is spent were devalued on the world market. This rapid change *could not be followed by a similarly rapid improvement in adaptability,* because *productive enterprises* were not pressed enough either by their interests or by necessity.

The considerable changes that occurred in the world economy in 1973 forced the Hungarian economic control agencies to make a choice from the following possibilities: either to allow the changing conditions to assert themselves also in Hungary, i.e. to reduce *domestic consumption radically* and to make the conditions of management much more stricter, or *to adjust the economy gradually* to new conditions. The latter possibility has been chosen.

Graduality as a concept was all right, but as reflected by economic facts it has to be stated that:

– the real weight of the impacts of changes had not been properly appraised, and thus the plans, which were in addition belated, reckoned with a too slow adjustment. However, even these were not implemented, because the ways and practice of adjustment were not elaborated in detail;

– the system of control did not stimulate enough changes, first of all because domestic prices were not adjusted to new conditions and because lack of adjustment had no real financial consequence;

– in the development concepts of various branches these requirements were not consistently enforced, because in the decisions often partial interests and the equilibrium of economic units were preferred to those of the national economy to an exaggerated extent;

– public opinion was not prepared enough to endure the consequences of greater requirements and adjustment; it was not clarified enough what contradictions and difficulties might arise and how they would be solved.

All these, that is, the considerable changes in international economic conditions, the deteriorating trend in the terms of trade and the slow adaptability of the economy demand that new tasks should be set and the order of importance should be newly determined in economic policy.

Restoration of economic equilibrium

By economic equilibrium harmony between production and consumption, as well as between demand and supply in consumer and capital goods, repectively, is meant. Of course, there is no perfect harmony. Development can be regarded as balanced if smaller partial disequilibria, unavoidable from time to time, are reacted to by the economy by eliminating them, while at a higher development level new partial disequilibria may arise. If equilibrium trends are prevailing in development, then receipts and expenses of the

budget, the population and enterprises are in harmony in the longer run, or at least all those receiving incomes – for example the budget – spend only by so much more than their incomes as is saved by others.

In the Hungarian economy the notion of equilibrium cannot be regarded merely within the national framework, since other countries daily qualify the labour materialized in our goods through their demands thus limiting our import requirements by increasing or diminishing foreign exchange revenues to a smaller or greater extent. This limit can be extended by credits raised from abroad. With foreign credits newly raised partly the surplus of domestic use – consumption and accumulation – exceeding the national income created and partly previously raised credits and their interests can be covered.

Lack of external equilibrium is characterized by the fact that it temporarily conceals the lack of equilibrium on the domestic market, since domestic demand can be met by import surplus. This may also contribute to delays in socio-economic reactions aimed at eliminating this state of disequilibrium. This can be formulated also by stating that the quantity and composition of domestic production and use are not balanced at present without foreign credits; consumption and accumulation could not be realized at this level without them.

A country may always develop more rapidly by making use of foreign resources but resulting burdens have to be taken into consideration as well, and the resources raised from abroad have to be utilized so as to moderate these burdens in the coming years. These credits can be taken into consideration in our armory as complementary sources of development. However, the raising and utilizing of such credits should be allowed only with the guaranty of future export surplus and repayment ability.

Resulting from the conditions of the Hungarian economy the lack of the harmony in development is expressed by the lack of external equilibrium in a summary way. Therefore, the most important objective of economic policy in the years to come will be to *re-establish external economic equilibrium.* The question is which way will lead to the re-establishment of equilibrium. It is already obvious at present that the key to overcoming external economic difficulties should be sought after in the efficiency of social production, in a production structure and a product pattern rapidly adjusting to the changing circumstances. It is, therefore, the first and main condition of the establishment of equilibrium.

The other condition is that the domestic use of national income, i.e. *consumption and accumulation, should increase temporarily more slowly than at present.* If the growth of domestic demand is slower, this will diminish import needs, simultaneously allowing a more rapid increase of export and a more resolute elimination of uneconomical activities, products and organizations. At the same time, the *growth rate* of the economy will slow down as a consequence of all these changes.

Interrelations among economic processes should be taken into account, as well as that only such a growth rate can be planned with which the production surplus achieved is really suitable to meet domestic needs and allows that profitable export should be increased more than continuous imports, in such a way that the growth of production be

realized in a competitive and economical product pattern, in the assortment of goods required by domestic and foreign markets. In an opposite case there would be sales difficulties. This would lead either to a growth involving the freezing of stocks and resources, or would enable only such exports where not even the import contents would be covered and thus the balance of foreign trade would not improve but even deteriorate.

Tasks of economic control and financial policy

The place of financial policy in economic control

The economic policy elaborated in the late 1970s lays down not only strategic guidelines but also clarifies the means by which the objectives can be rationally attained.

Rational management and economic decisions postulate among others also the functioning of value categories, since labour input cannot be measured directly and also the social utility of work can be judged only by the value judgement of consumers and users. This is why we necessarily reason at each level of economic management in terms of *costs, prices and profits* verifying the efficiency of input – or *losses* proving the contrary. The existence of commodity and monetary relations does not depend, therefore, on our resolutions, nor is it temporary, but appears as a law. By the *conscious* utilization of value categories economic activity may be qualified and improved. By consciousness it is meant sometimes only that measures and value judgements valid on international markets can be deviated from. But at present it should rather be emphasized that we cannot deviate from them in the long run and without any limit, but have to adjust to them similarly consciously, in an organized way.

Money appears in each economic process – in production, distribution and consumption as well – in a decisive way, it stimulates action or prevents certain decisions. Therefore, the task of *financial policy* regulating monetary processes is to strengthen economic activity prompting the attaining of economic policy objectives and to thwart behaviour impeding their realization. *Financial policy means "translation" of the system of goals of economic policy into the special language of finances,* the selection and setting into action of proper tools. Financial policy has, therefore, an independent system of tools and within it also a relative freedom of decision on the basis of economic policy strategy.

In our system finances are given a special role in national economic planning. Plans are in a bilateral relationship with market relations and control. Financial policy relies on a specific system of signals and tools, on value and monetary processes in marking out desirable trends and proportions of development, determining social and economic objectives and looking after the conditions of their realization. The national economic plan is partly a concept on economic development and a guideline of action based on a system of definite conditions, but partly includes also direct decisions and orders.

In recent years enforcement of the requirements of efficiency and profitability has often been impeded in Hungary by the circumstance that certain decisions on manage-

ment did not properly take profitability consequences into consideration and even such direct tasks were prescribed by the plan that could not be successfully fulfilled. Should such contradictions arise also in the future, it would be better to revise the objectives than to relax requirements of efficiency, otherwise the profitability of production might not at all or only more slowly be improved.

Plans should be, therefore, more elastic than previously and, beside concentrating on basic processes, more freedom of decision should be allowed for changing conditions, but for this greater reserves and incomes not distributed in advance are needed. Of course, this makes the task of planning specialists more difficult, since it is well-known that each branch would like to develop powerfully. But the plan can envisage only a differentiated development and the criterion of making a distinction is profitability – of course over and beyond meeting primary needs. As profitability is not a permanent phenomenon either, but one changing in time, planning should better rely on financial policy and its flexible system of tools. This increases the efficiency of the decision-making processes and the responsibility of control.

In *control,* too, considerable changes are needed, in order to stimulate the enterprise activities furthering equilibrium and to suppress those impairing it. The modified regulators were put into force with January 1, 1980. In order that the new regulators might produce the desired effects changes in attitude are required in both the controlling agencies and the economic organizations.

a) The normative character of control will be enforced if the financial system raises uniform requirements towards economic units. It should be known, however, that not all enterprises can meet these requirements to the same extent. Therefore, it should be reckoned with that firms unable to meet the requirements and unable to stand fast in competition because their products are not up-to-date or their activity is not profitable cannot develop, what is more, their difficulties will sooner or later appear in shortages in development and sharing funds, perhaps even in losses. Up to now these financial difficulties were overcome mostly by means of central aid. Thus there was no adequate pressure for making the structure and the entire economy profitable. By now we have learnt that it was not the phenomena, but their causes that have to be eliminated.

In the present economic structure in Hungary the efficiency of several economic units does not meet the requirements of competition expressed in prices adjusted to the world market ones. However, these enterprises cannot be liquidated or made profitable overnight, thus our financial system is not fully consistent even today, but gives several allowances to them. The main issue is, therefore, whether we succeed in eliminating these allowances within some years or shall grant new ones.

This depends first of all on the behaviour and consistent attitude of control agencies, since the latter can force the enterprises to eliminate their backwardness by putting forth favourable economic processes.

We know, of course, that transformation is accompanied by conflicts, and, not only by economic, but even social ones interpreted in a broader sense, for example, because of the regrouping of labour or the movement of consumer prices. It would not be realistic to

expect that these conflicts of interests will disappear. Therefore, a practice of control and management has to be developed that reckons with such conflicts and clash of interests, and in order to solve them looks for ways promoting economic development by mobilizing people and not by making them comfortable! Where eagerness to act exists, financial regulation does not impede, but allows a transitional period for the change-over and drives gradually, but irreversibly towards meeting higher requirements.

b) In enterprise management *lasting and solid* regulators are needed, because this enables thinking in broader context, foresight in business policy and well-founded development decisions. It is an elementary interest that the behaviour of enterprises should be adjusted to changing external and domestic conditions without delay and this is made possible for the enterprises precisely by *flexible* regulators. It is a serious dilemma and a subject of permanent discussions in Hungary how stability and flexibility of regulators can be simultaneously realized.

I think that this contradiction can only be mitigated if neither stability nor flexibility are interpreted in extreme ways.

At present we have more orderly ideas about the uniform flexibility or stability of the elements of control than we had in the early 1970s. The most elastic control elements are prices and rates of exchange. From another viewpoint credit policy can also be ranked here. If they transmit the value judgements of the changing world really adequately, then other control elements can be relatively permanent within a reasonable time-span and taxation rules for forming funds, principles of stimulation and restriction as well as related tools can all be determined on the basis of economic policy objectives of a more lasting character.

c) An important fundamental principle of financial regulation is the *profit motive.* Development possibilities of enterprises and cooperatives as well as possibilities of increasing personal incomes differ depending on profits. Regulation was often criticized in Hungary for not allowing enterprises to *carry risks* that could have resulted in a temporary decrease of gains or perhaps in losses for some years.

In the modifications of control introduced in 1980 there are several such elements which allow enterprises to ward off the consequences of fluctuating development within their own sphere of authority. Such possibilities are provided, for example, by obligatory reserve funds and the rules of their utilization, reserve funds for price deviations, advances for wage increase or by financing of temporary losses from own resources or credit. Though these modifications have somewhat improved the previous situation, the entire regulation can be developed towards more daring risk-taking and a greater role of enterprise independence only in the longer run and gradually. Anyway, this is the direction in which we should like to progress.

In several fields, thus in wage control, consequences resulting from the yearly accounting period are still affecting the economy – sometimes unfavourably. In the long run we wish to make the utilization of obligatory reserve funds for purposes of wages management and development even freer, since also such an increase of enterprise independence is a factor of development and stability.

The exaggerated centralization of *enterprise organization* has already been mentioned. This does not properly further the realization of our goals from the financial viewpoint. Too large units do – in most cases – weaken the effectiveness of financial control since they make possible the levelling of incomes among units within trusts and big enterprises and thus restrain the development of more capable units.

Organizational amalgamations carried out in Hungary in recent years made control by the supervisory (ministerial) agencies more comfortable and, almost as a tendency, they further increased the centralization of the organizational system. They contributed that control and management should guarantee enterprise stability even to an unhealthy extent or under uneconomical circumstances. This process had also other harmful effects. It can be observed, for example, that smaller enterprises and cooperatives refrain from establishing cooperation relations with permanent character, fearing that this would sooner or later lead to loosing their independence.

The organizational system of enterprises should, therefore, be further developed. There are two possible parallel lines for that, namely,

– decentralization, improving flexible adaptability, where no economic advantage results from big organizational forms, but disadvantages entailed by clumsiness and the bureaucracy of enterprise management can be shown;

– application of new organizational forms, combination of production and sales functions in order to increase vertical integration.

It is important that necessary organizational changes should not be carried out like a campaign and in the course of their preparation and realization economic rationality should not be merely a basis of reference, but a real criterion of decisions.

Prices, rate of exchange and the purchasing power of money

Financial policy is *closely connected and interrelated with price policy.* The price system in Hungary has been considerably changed at the beginning of 1980 and a new price mechanism is gradually introduced.

a) Domestic producer prices of *energy and raw materials* already slightly reflected relative world market prices and their trends for some time. But it has been necessary to enforce this principle more consistently and resolutely.

It is a new feature that in prices of the manufacturing industry world market prices are made to be felt. Therefore, profits of manufacturing enterprises will develop in the new price system depending on the efficiency of their export sales. We have to make further progress in enforcing relative world market prices, since with the steps taken we are still far from a consistent assertion of this principle. Namely, to enforce in prices profits calculated on the basis of international competitiveness is a requirement that cannot be immediately met by the entire Hungarian industry. That is why the transitional category of so-called production modernization supports is needed to surmount precisely

this accommodation period. Thus for a while our price mechanism has to keep abreast not only of future changes in world market prices but also still existing deviations – surmounted by subsidies – have to be gradually eliminated.

External and domestic prices should continually be in harmony, not only at the date of price and financial adjustment. Therefore, changes in domestic prices should also be made dependent on those in world market prices. Enterprises temporarily availing themselves of production modernization support for structural transformation may increase their domestic prices only if support has been stopped. With this method enterprises are forced to profitable activity even if compared with the real world economic environment.

If overall excess demand can be avoided through the regulation of purchasing power then those management production and market conditions have to gradually become a natural order of the economy which are now mainly still imitated and dictated by the price system. Enterprises in buyer's position will thus be able to have a controlling and influencing role in the development of prices.

The new system of producer prices and mainly the price mechanism will be tested in practice only hereafter. World market prices have considerably changed even since the introduction of the new prices with January 1, 1980 and they should be followed by domestic prices according to our principles in a controlled way. The unusual mechanism developed for this purpose existed previously only in imagination. In the course of its functioning will those difficulties come to light that are caused by it in management, calculation, adaptation, but despite this the way already started has to be continued step by step.

b) In a price system based on the harmonization of domestic and external prices the economic power of *exchange rates* increases. This is an important instrument in relating domestic and world market price levels to each other and in protection against world-wide inflation.

Commercial rates of exchange are determined with the joint consideration of several viewpoints. Effects of exchange rates on export and import, as well as on domestic prices – often conflicting – have all to be taken into consideration. In the CMEA-countries a special system of price formation, though adjusting to the world market, is in force. The exchange rate of the transferable rouble had to be set accordingly. However, in this relation a system of monetary bridges has to be operated – both in positive and negative direction – in view of the inter-state agreements and the characteristics of relative prices developed. But the endeavour is even here to eliminate the latter and to further enterprise initiative.

It is desirable that also the valuation of foreign means of payment should help in a realistic orientation towards conditions on external markets. Therefore the exchange rate policy has to be *active and flexible,* namely,

– changes in valuations on world money markets have to be followed with the shortest possible delay;

– proper reactions should be made if the realization of economic policy objectives – either the increase of exports or the saving of imports – are impeded or at least not furthered by changes on external markets or in domestic economic conditions.

We believe that an elastic exchange rate policy may provide some protection against world-wide inflationary trends, but neither a full, nor an automatic one. Exchange rate policy cannot prevent the revaluation of the forint – in the longer run –, the increase of the price level brought about by deterioration in the terms of trade or by the low level of productivity as compared to the international one. Therefore, if the competitiveness of Hungarian products will not satisfactorily improve simultaneously, then the deterioration in the balance of foreign trade cannot be prevented even by the exchange rate policy, nor can the increase of domestic price level be properly limited.

c) In finances it is a permanent endeavour to ensure relative stability of the purchasing power of money. However, it has to be reckoned with that the price level – of both producer and consumer prices – will rise also in the years to come, since in our contemporary world only relative stability can be spoken of. There are several reasons for that. Lasting trends of world market inflation cannot be fully neutralized; for this such huge economic resources ought to be regrouped that could not be endured by the economic branches and fields of social supply concerned. The process of the restoration of equilibrium will not be free from inner tensions, inner dissonances between demand and supply in the future either, and they will be dissolved partly by price movements, thus the latter cannot be eliminated.

Since in previous decades people got used to basically unchanged prices in Hungary it is understandable that public opinion accepts the contrary together with its consequences only with difficulty. An exaggerated rigidity of domestic prices would prevent, however, users, i.e. economic units and consumers from obtaining proper information about real costs and returns, and thus, after all, would also frustrate endeavours aimed at achieving an economical structure, good commodity supply and rich assortment.

Adequate limitation of price increases – first of all that of consumer prices – should be promoted by such financial instruments that will neither lead to a multiplication of financial interventions, nor to rigid consumer prices. Nor is it a good method if, with the slogan of restricting price increases, considerable "packages" for later price increase are accumulated, since their "digestion" is a too great burden both for society and financial control. But, then there remains no other solution than to accept justified prices of products which are continuously changing, if necessary – possibly not only upwards, but also downwards.

In the system of regulators – first of all in exchange rate policy and price control – there are instruments and eventual guarantees available for the limitation of overall price increases. These instruments can successfully function, however, only on the basis of very well coordinated policies on prices, wages and incomes. This means that price movements required by economic rationality should be made possible but without decreasing living standards. Money held in esteem, relying on a solid economic background has to be approached, however, also by *an adequate regulation of the purchasing power of the*

population and its subordination to economic interests. Important principles in this regard are the following for the next years:

– differentiation of wages according to performance has to be realized even if living standards rise only to a lesser extent than previously. Namely, this is not only an issue of stimulating individual work, but also of the efficiency of productive work in a broader sense. Wage payment according to measurable work, and regular costs analysis may jointly found the continuous improvement of efficiency;

– it has to be striven after that the real value of pensions, family allowances and other monetary social allowances be maintained, but it has to be achieved by all means that the real value of low pensions and family allowance due after several children should not decrease;

– in meeting credit demands of the population for the building of flats and other purposes a continuous increase in the savings of the population is reckoned with, since this is a natural consequence of development and commodity supply. The idea has also been raised that in settlements the population should contribute a greater share to the development of infrastructure, making everyday life easier;

– small-scale industry and retail trade, household and auxiliary plots as well as other complementary production and services are useful, thus incomes and tax policies will be developed so that production and economic viewpoints should not be damaged, material incentives be maintained and security supported even from several aspects.

Adequate commodity supply in the desired composition is especially important in the context of requirements raised towards the stability of the value of money. Poor supply impairs also the good effect of increasing incomes and vice versa, if supply is satisfactory, then even a more modest increase in income can be more easily endured. It can be proved that deficient supply leads to waste. At such times consumption is not rational from the viewpoint of the utilization of national economic resources, industry is not forced to innovation, the old structure becomes rigid and the stimulating effect of wages cannot be enforced since there is no proper opportunity to spend money. Therefore, efforts are made in order that the supply of the population should be not merely acceptable, but should keep abreast of demands.

State budget – fiscal policy and subsidies

In Hungary the major part of revenues of the state budget derives from enterprises and cooperatives. It is considered an important requirement that incomes necessary for the fulfilment of central tasks should be drawn away on the basis of general and uniform principles and rules. With some simplification this means that, for example, from 100 forints of profits all enterprises should uniformly pay 45 forints to the state budget and not 20 forints should be paid by one firm and 60 by another one. Thus it can be achieved that an enterprise becomes rich or poor depending on its own results and not on the category it belongs to on the basis of decisions made by central agencies.

This also means that the more efficient enterprise managements are, the more revenue will accrue also to the budget and the better the state can progress in the interest of the entire society by means of social public expenses. From this it naturally follows that if efficiency and profitability develop less favourably, then state revenues will not increase to the same extent as expenses either. This brings about *budgetary deficits*. If we wished to avoid this under the present circumstances, then either state expenses on investment and consumption should be considerably diminished or payment obligations and taxes increased.

In recent years budgetary expenses on investment and subsidies decreased in proportion, but by no means to an extent that could have resulted in a budgetary equilibrium. It is difficult to reduce further a part of expenses because expenditure on health and educational matters as well as amounts to be paid as pensions or family allowances are automatically growing also in periods when even their real value cannot be fully preserved. The reason for this phenomenon is that there are more and more pensioners and children, furthermore incomes serving for basis of pensions are also growing just as are the wages of people working in health and educational institutions, and all these increase the maintenance costs of the institutions as well. Expenses of central and local budgetary institutions may grow in the coming years at much lower rates than previously, similarly to that of national income. This requires rational saving in the management of all institutions. Of course, institutions of primary supply as for example hospitals, kindergartens, infants' nurseries should be run also further on at adequate standards, but this can be realized only with structural changes in public social expenses, that is, by reducing expenses of other institutions. Therefore, some previous concepts have to be revised, too.

A possible solution by which a moderate increase of revenue may be compensated is to raise taxes. This, however, would restrict the scope of activity of enterprises and thus impede their development. It is obvious therefore, that it is an issue of primary importance also from the viewpoint of budgetary equilibrium that the efficiency of the economic sphere should steadily improve.

Incomes have to be divided between central and decentralized monetary funds, that is, between the state budget and the enterprises so that they correspond also to the division of tasks; revenues should allow the budget to finance the government tasks included in plans. The formation and utilization of enterprise funds should be such – even if not in each enterprise, but in the entirety of enterprises – that the purchasing power available for development and personal income should make possible the financing of enterprise tasks. We wish that the general rules of taxation should make natural selection depending on the activity of enterprises. However, a few exceptions are necessary in order to enforce economic policy priorities and order of importance, but, if possible, these should be attached rather to activities or products than to individual branches or enterprises since in this way they may be of an objective nature.

In Hungary one of the key-issues of budgetary policy has recently developed in the field of *subsidies*. In the mid-1970s – because of inconsistencies in the price system –

more than 40 per cent of budgetary expenses were various subsidies. There were only very few enterprises which did not receive some allowance or subsidy and in order to cover these subsidies certain income has to be drawn away even individually from enterprises achieving the most outstanding results. Thus the development of efficiency was neither directly nor adequately fed back to the development of purchasing power. In other words distributable incomes originated in fields where the increase of performances did not at all or not adequately justify this.

Such a system of subsidization and taxation impeded an economical structural transformation because it made not only possible for uneconomical activities to expand but even restricted the sphere of profitable activities. In this process uneconomical operation did not exert coercion for greater efforts on the one hand, and even the thrust of those excellently developing slowed down on the other hand, since they could not fully utilize advantages resulting from fast development.

According to our experiences, beside the fact that the system of prices and subsidies did not allow a proper survey of what was economical and what was not, a considerable part of enterprises to be qualified as weak got into an unfavourable situation because of the low level of efficiency of their investment activity and such human factors as the low standards of management and deficiencies in the organization of economic activity. Uneconomical activities were sponsored by supervisory organs up to now with reference to alleged or real interests while financial agencies were often lost amidst unprincipled bargaining.

This is why fundamental principles of the policy towards subsidies had to be revised. In the future uneconomical activities will not be maintained with subsidies and especially no possibility will be given to extend them. We think that uneconomical activities should be gradually suppressed and finally eliminated. The new rules include also tools forcing this. For example, the production modernization support, already mentioned, will be given on a decreasing scale, limited also in time and attached to certain conditions determined in advance.

It is our intention to particularly examine uneconomical enterprises and take measures concerning them with special care also further on. It is first of all the task of the enterprise to improve or eliminate uneconomical activities. The enterprises in question may receive assistance even in case of financial difficulties only if they have already worked out some perspectivic concept concerning solution – new production structure, market possibilities, reduction of material and energy costs, etc. Any kind of assistance is aimed at promoting the realization of such concepts and not the reproduction of unchanged conditions.

Consistent enforcement of the requirement of profitability will result in *that the development of each enterprise will depend on its own work, its previous results, creativity and, after all, on future results based on the former.* Therefore, a successful, good enterprise may rapidly develop, while an uneconomic one has no possibility for development.

Development policy and control

While in financial policy the intention is to withdraw resources as much as possible from the system of subsidies, *in development policy greater movement and activity of finances are striven after.* Many people are inclined to simplify the greater activity of finances in such a way as to identify the issuing of greater purchasing power and credits with greater activity. Nothing of the kind, but financial organizations try to develop a clearer system of requirements and more useful measures of judgement for setting development objectives and judging them. The enterprises capable of meeting these requirements and undertaking to repay the funds obtained can indeed reckon also with complementary financial resources.

In the next few years the key-issue of development in Hungary will be to what extent and at what rate the manufacturing industry may contribute to the improvement of equilibrium, that is, whether export capacity can be improved and not simply in the quantitative sense. A relatively fast adaptation to changing market demands is most possible here. This can be achieved first of all by increasing the proportion of products representing a higher technological level, that better correspond to demand and can be economically produced, by better servicing and spare parts supply, through an essential improvement of market organization activity and by eliminating the products which are uneconomical and not in harmony with changing demand. In the future possibilities provided by specialization and cooperation have to be elaborated more precisely, first of all with CMEA-countries and as much as possible also with enterprises of capitalist and developing countries.

Possibilities will be given to establish and expand projects of the manufacturing industry with favourable efficiency and rapid returns in foreign exchange:

– credit possibilities for the development of products well saleable on all markets will be maintained, what is more, even extended, but credit terms will be made stricter;

– enterprises rapidly developing and producing economically saleable products may complete their circulating capital – partly – from their reserve funds;

– such rapidly developing enterprises whose development funds are strongly engaged may get state funds allocated for the realization of their development concepts with fast returns and are obliged to pay rent on it;

– for activities expanding export not through traditional forms of international cooperation a special venture fund has been created;

– the formation of an Inter-Sectoral Development Association is under preparation; this would make use of incomes of foreign trade enterprises – at the discretion of the enterprises concerned – in order to improve marketing activity, to enlarge market organization and improve the delivery terms of products;

– further methods promoting a favourable transformation are sought, for example, possibilities of founding new enterprises.

In these tasks the role and responsibility of banks will grow: the supporting of progressive ideas and greater initiative are also expected from them.

It may be seen that a more modest growth does not mean general restriction, but requires a faster development of those with better performance and most profitable while simultaneously pushing into the background the weaker ones. It is in our interest that persons, collectives and organizations working well and cleverly be stimulated for even greater performances by better possibilities and greater advantages.

УСЛОВИЯ ЭКОНОМИЧЕСКОГО РАЗВИТИЯ И ФИНАНСОВАЯ ПОЛИТИКА ВЕНГРИИ

Л. ФАЛУВЕГИ

В 70-е годы венгерское народное хозяйство вступило в такой период развития, в котором как внешнеэкономические, так и внутренние условия выдвигают новые, повышенные требования по отношению к труду. Поэтому автор ключевым вопросом социалистического строительства считает изучение постоянно меняющихся условий хозяйственной деятельности и приспособление к ним, учет новых требований. Новые необходимые для развития резервы следует искать в хозяйственной деятельности предприятий, в человеческих факторах, то есть изобретательности, предприимчивости, желании идти на риск, организованности. Требования качественных изменений могут быть удовлетворены только путем повышения продуктивности физического и умственного труда, увеличением ценности продукции.

На нынешнем этапе одним из решающих элементов экономического развития является использование преимуществ, вытекающих из международного разделения труда. Как и другие социалистические страны, Венгрия также стремится к расширению своих международных связей на основе взаимной экономической выгоды и повышению экономической эффективности внешнеторгового оборота. Это находит свое выражение в первую очередь в планомерном экономическом сотрудничестве со странами СЭВ, а также в развитии торговых и экономических связей со странами с другим общественным строем.

Из-за особенностей венгерской экономики нарушение гармоничности развития суммарно выражается в настоящее время в целом отсутствием внешнего равновесия. Поэтому важнейшей целью экономической политики ближайших лет будет восстановление внешнеэкономического равновесия. В качестве задачи финансовой политики, регулирующей финансовые процессы, автор указывает на укрепление хозяйственной деятельности, служащей выполнению целей экономической политики, и ограничение деятельности, препятствующей осуществлению этих целей. Автор подробно рассматривает основные вопросы финансовой политики: политику цен и валютного курса, покупательную способность денег, государственный бюджет, налоговую и дотационную политику и финансовое регулирование развития производства.

В наступающий период необходимо считаться с более скромными темпами роста венгерской экономики. Однако это означает не общее ограничение, а требует наряду с ограничением более слабых предприятий и видов деятельности более быстрого развития наиболее производительных, наиболее рентабельных предприятий и производств. Поэтому более широкие возможности и преимущества будут стимулировать отдельных лиц, коллективы, организации, умеющие хорошо и разумно работать, к достижению еще более лучших результатов.

Автор указывает на необходимость пересмотра целого ряда понятий, укоренившихся не только в общественном сознании, но и у спациалистов. За десять лет своего существования нынешняя система управления экономикой в Венгрии привела к большим изменениям в образе мыслей тех, кто участвует в разработке регулирования, и кто работает с учетом этих регуляторов. Однако определяемые новыми потребностями и качественными изменениями требования предполагают дальнейшее развитие общественного сознания. Это является одним из необходимых условий разработки и успешного выполнения 6-го пятилетнего плана на период 1981—1985 гг., работа над которым ведется в настоящий момент.

Acta Oeconomica Vol. 24(3–4), pp. 233–250 (1980)

J. FEKETE

CRISIS OF THE INTERNATIONAL MONETARY SYSTEM – IMPACT OF WORLD ECONOMIC CHANGES ON HUNGARIAN ECONOMIC POLICY

The author reviews the circumstances under which the international monetary system of Bretton Woods collapsed, and the resulting impact on present-day western economies. He analyses the relationship between inflation and monetary policy, the negative consequences of the demonetization of gold and of the balance-of-payments disequilibria, which may start a financial and even a grave economic crisis in the early eighties. In order to avoid this a proposal is made for the creation of a new monetary system.

In the second part of the paper the author examines the impact of world economic changes on the Hungarian economy. He gives a detailed description of the ideas and measures of economic, price and exchange rate policies with whose aid the Hungarian economy will implement the structural changes required by the changed world economic circumstances, while it will continue to participate intensively in the international division of labour.

In the course of her development over almost a quarter of a century Hungary attained a favourable international appraisal exceeding her modest economic dimensions because she pursued an economic policy *reckoning with realities* in respect of both the external economic environment and the domestic conditions.

This process found expression in the steps taken in the first half of the sixties, as e.g. in the reorganization of agriculture into large-scale farms, in the comprehensive reform of the economic mechanism introduced in 1968, in several targets of the fifth five-year plan (1976–1980), in the party resolution of October 1977 advocating a structural transformation corresponding to changes in the external economic environment, and in quite a few economic policy measures taken in the last one and a half years. Their continuation may be justly expected from the sixth five-year plan (1981–1985).

Today we have to draw conclusions for the Hungarian economic policy to be followed from a much more complicated picture of world economy, much more deeply interwoven with threads of economic and political conflicts than characteristic of the external conditions of economic development only five years ago. Accordingly also the external impacts affecting the Hungarian economy became more complex and the conflicts arising between a "traditional" economic policy and the requirements *"corresponding to the new conditions"* have become sharper in several respects.

In a great part of the countries of the world problems of economic growth have again come to the fore, while inflation is increasing, balance-of-payments disequilibria are growing, open or concealed protectionistic measures are spreading and, partly as a consequence, foreign trade is expanding more slowly. These are closely interrelated and inter-

dependent factors and they have become accompanying phenomena of our age in the last five or six years. They characterize the external economic environment in which Hungary has to develop, and whose negative effects the socialist countries cannot escape either – even if they have different endowments and possibilities.

The idea might emerge that these negative effects do not affect us, or only to a negligible extent, since we transact the bulk of our foreign trade with the socialist countries and tensions of the economic and financial positions of the capitalist world do not assert themselves in this trade. Indeed, economic cooperation with the socialist countries does have a stabilizing effect on our development. But even if damped, and with a delay the tendencies, effects prevailing in the capitalist sector of the world market are gradually built into the mutual economic relations of the CMEA member countries as well. If we reckon realistically with this fact and take it into account in our plans, the difficulties menacing the external and internal equilibrium of the Hungarian economy can be avoided.

Undoubtedly, from among the economic problems of the capitalist world, it is the international monetary questions that are in the focus of discussions. This justifies that we should pay due attention to the subject when drawing conclusions for economic policy and identifying the tasks to be actually done. A brief introductory survey of the preliminaries seems to be in place.

The present state of the international monetary system

Disintegration of the Bretton-Woods system

When, in the last years of World War II, the allies, headed by the United States and the Soviet Union, set themselves to work out the post-war institutional system of the international economic order, they started from the dismal experience accumulated after World War I, (inflation, the Great Depression of 1929–33, fascism and World War II). To avoid them, they set the objective of bringing about such system in whose framework balanced economic growth would be secured on a world scale. They intended to create its preconditions in three directions.

– To bring about a new international monetary centre, the International Monetary Fund (IMF), which would be called upon to promote the gradual elimination of foreign exchange restrictions, to settle monetary cooperation among countries, that is, to create the institutional system for the *monetary preconditions* of economic growth.

– To bring about a World Bank (IBRD) which would promote reconstruction after the war by extending long-term credits and *regroup the capital necessary for further development of the economies in the proper direction.*

– Finally, to bring about an international trade institution that would secure commodity trade among the countries, free from discrimination, that is, to create *a comprehensive foreign trade system of economic development.*

In agreement with the first two objectives, at the Bretton Woods (USA) conference in July 1944 the IMF and the World Bank were founded by 45 countries – among them the USSR, Poland, Czechoslovakia and Yugoslavia. The third objective's institutional form was not realized then and the place of the international trade organization originally conceived was later on taken by the General Agreement on Tariffs and Trade (GATT).

The general objectives of monetary policy and the methods of attaining them, "institutionalized" in the International Monetary Fund, *were correctly laid down at the founding conference,* and also *the methods* may be considered realistic with which it was intended to attain the general objectives.

The reorganized international monetary system rested on three basic pillars:

a) gold, as measure of value and instrument of final settlements;

b) the US dollar, which could be exchanged for gold by foreign central banks and thus became the key currency of the monetary system;

c) the system of fixed exchange rates, in which the values of all currencies were stated relative to gold and to the dollar.

But the danger was inherent in the system that it would be used by the largest member country of the IMF, the USA, for its one-sided advantage. The danger which later turned into reality, was composed from the following three factors:

– the economic and financial potential of the USA, the main supplier of war materials in World War II, had grown extremely strong. As a consequence, the USA could underwrite an inordinately big capital share relative to the other member countries;

– in conformity with the capital contribution, there was but a single country that could veto alone the decisions taken in the international monetary institutions;

– under such conditions the national currency of the United States, the dollar, could obtain a particularly favourable, privileged position as the key currency of the international monetary system.

Because of these circumstances and later because of the well-known developments of the cold war, the Soviet Union did not ratify the Bretton Woods agreement and in the fifties also Poland and Czechoslovakia left the IMF. With this the planned balance of the international monetary system coming about under the auspices of the UN became upset. At present the weight of the socialist countries is so small in the organization, having 139 members, that even today we can speak only about a capitalist monetary system – or rather the lack of it.

The system, also called after the location of the founding conference the Bretton-Woods system, functioned during the first about two and a half decades of its existence, till the late sixties, on the whole satisfactorily. It contributed to securing economic development for the capitalist world that was free from crises. The annual rate of inflation in the ten most developed capitalist countries could be kept around 2.5–3 per cent on average.

But beside the positive features the period had also an extremely negative one which in the end *undermined the stability of the whole world economy.*

Because of the privileged position occupied by the dollar in the system, the United States could cover the deficit in her balance of payments, approaching 50 billion dollars between 1950 and 1970 by increasing her short-term foreign debts, practically by issuing dollar notes. With this the United States, as issuer of the world currency, put her own interests before her commitments deriving from the role of the key currency and thus undermined the stability not only of her own currency but also that of the whole monetary system. Owing to the deficit in the balance of payments, huge amounts of dollars were flowing out, the scarcity of dollars was replaced by an abundance all over the world and thus the dollar became gradually overvalued. This new situation created the possibility for American capital to invade foreign markets cheaply: e.g. between 1960 and 1970 the foreign investments of US companies rose from 32 to 78 billion dollars. From the growing foreign investments annually 20 billion dollars are being repatriated.

The onesided, more and more open and rude exploitation of the Bretton-Woods mechanism on part of the Americans met with a growing resistance of her allies. In order to put a brake on the American expansion, the allies started to exchange their dollar surpluses in growing quantities for gold at the Federal Reserve System of the USA. The American gold reserves fell to their half. Under such conditions the monetary system grew more and more uncomfortable for the USA, it became a "straightjacket". In this situation the USA were striving, rather with onesided steps, after an open destruction of the system. In 1971 Nixon abolished the exchange of the dollar for gold and in spring 1973 also the system of fixed exchange rates was set aside, and "floating" became general practice. In consequence of these developments the Bretton-Woods international monetary system disintegrated.

Inflation and monetary policy

Disintegration of the international monetary system entailed grave consequences for the whole world economy. *One of the most important consequences was the starting of an inflationary process of a new type and its becoming constant.* Namely, up to the early seventies inflationary tendencies had been released only by the overspendings of governments, public bodies, firms and private persons. Their extent could be restricted with the aid of traditional instruments of monetary policy. In the seventies, however, an increased inflationary pressure deriving from the disintegration of the international monetary system was added to these. The large and uncontrollable increase of international liquidity, the free flow of speculative capitals, so-called hot money running into billions and the shaken trust in paper money entailed an acceleration of rising prices. The weighted growth of consumer prices in the capitalist world has attained or exceeded 10 per cent in each year since 1973 and in some periods it has reached even 12–15 per cent.

In the sixties, when the international monetary system was still relatively well functioning, the average annual nominal increase in international foreign exchange reserves was not more than 7 per cent – in spite of the overspending of the USA. In the seventies when Nixon "sanctioned" the cutting of the umbilical cord between the dollar and gold,

the average yearly growth of reserves accelerated to 22 per cent. Foreign exchange reserves increased from 33 billion dollars at the end of 1969 to 303 billion by mid-1979 and more than three quarters of it accumulated in dollars. The gross volume of the so-called Euro-money markets, not subject to foreign exchange regulations, soared in these years to tenfold, i.e. 1000 billion dollars.

It is not difficult to reach the conclusion that disintegration of the monetary system was closely interrelated with the acceleration of inflation. To this was added the raising of oil prices by producers and the mediating oil monopolies – to an extent which was not justified economically. This increased the production costs of users and through them also consumer prices. However, it would be an exaggeration to state that the higher prices of energy were the *causes* of inflation; at most they "poured oil on the fire", since their total effect on the price level may be judged at most to 1–1.5 per cent p.a.

Under the circumstances of increased inflation *the importance of monetary and exchange rate policies of the developed capitalist countries has increased.* After the disintegration of the international monetary system the new exchange rate policy target of the USA was trying to reconquer the export markets lost before 1973 because of the overvalued dollar through a gradual devaluation – of greater extent than what was justified. But the undervalued dollar, while facilitating the sales of American commodities at the expense of the competitors, made US imports more expensive and became one of the further causes of increasing American inflation. At the same time, it started reckless speculation on the money markets and thus introduced a new element of uncertainty into international monetary relations.

Beside other factors – as the boosted US military budget – also American monetary policy is responsible for the double-digit inflation in the United States, thereby contributing to the world-wide increase of inflation. As the former minister of finances, Blumenthal, put it, they did not recognize in time how great troubles might be caused by disturbances on the money markets. And Wallich, member of the board of governors of the Federal Reserve System, confessed to the recognition that the US economy and the rest of the world would be best served by a strong dollar. But the self-criticism of the leading financial people proved to be belated: *inflationary psychosis has become too much widespread in the capitalist world economy for changing its grave consequences in a short time.*

In October 1979 a new chairman was appointed to the Federal Reserve System who tried to brake inflation with resolute measures. Strict monetary restrictions were introduced to stop further deterioration in the value of the dollar. The internal rate of interest in America (taking for basis the commercial rate charged to the biggest customers, the so-called prime rate) approached 16 per cent by mid-October.

The strongest Western partners of the USA – above all West Germany, Japan and Switzerland – exploited the "indifferent" behaviour of the US government towards the depreciation of the dollar and regularly revalued their currencies relative to the dollar. With this policy they made for themselves the imports of raw materials, particularly of crude oil, cheaper and could thus successfully protect themselves against external infla-

tionary pressure. True, the revalued currency made exports more difficult, but it simultaneously exerted a growing pressure on exporters so that they should make efforts at retaining their competitiveness on international markets by rationalizing production and employing more advanced technologies. At the same time, the raw materials bought more cheaply because of the high rate of exchange, the more modest increase in nominal wages because of low inflation and the low rates of interest helped enterprises in maintaining their competitiveness. Therefore, while in their declarations the competitors always supported the US government in its policy aimed at strengthening the dollar, in practice, when at last the Washington government decided to protect the dollar, they tried to neutralize the positive effect of the American measures on the exchange rate of the dollar by means of credit restrictions and by raising the rate of interest. A regular war of interest rates developed between the USA and its allies, raising the cost of credits to an unprecedented level.

Demonetization of gold

Under the international financial relations characterized by inflation, uncertainty of exchange rates, war of interest rates, balance-of-payments disequilibria and mounting tensions on the credit market also gold comes naturally under a new light. Nevertheless, there are many, who, independently of facts, invariably speak about the "dethronement" of gold, about its successful elimination from the monetary system – its demonetization. But has demonetization of gold really occurred?

Legally, it has. In the statutes of the IMF – modified for the second time and put into force with April 1978 – demonetization of the yellow metal was formally declared: the Special Drawing Rights (SDR) – its value being expressed in terms of a currency basket – was made into the general equivalent of the "system". The member countries must not link the value of their currency to gold even if they returned some time to the system of fixed exchange rates. No part of the quota of the Fund has to be paid in gold etc. . . . But, from a few obvious facts we have to conclude rather on the growing practical importance of gold:

– when trust in paper money became shaken, gold again appeared on the scene. Since its "demonetization" its price has been rising, jumping high at the end of 1979: it exceeded 700 dollars/ounce. (At the moment of demonetization the price was 42 $/ounce).

With price changes of such an extent the growing importance of gold obtained ever greater emphasis. In fact, its role as reserve cannot be substituted by any kind of national currency or international claims. With a price of 700$/ounce its share in the monetary reserves of the developed capitalist countries rose to above 75 per cent. (The failure of the SDR is proved at the same time by its 2 per cent share in reserves.) While the growing weight of gold reserves cannot be challanged, their use, their regrouping among countries is negligible. In the course of the monthly auctions a mere 0.4 per cent of the gold stocks of member countries are exchanged between owners. The regrouping of foreign exchange is frequent and at times represents large volumes, – but gold moves between owners at a

snail's pace. (90 per cent of the US monetary reserves are in gold, this figure being 44 per cent in West Germany, and 30 per cent in Japan which "closed up" only later. As against that, in France and Switzerland, which have been traditionally favouring gold, its share moves around 70 per cent.)

– In crisis situations gold has been the ultimate reserve even in recent years. Suffice it to mention in this context the Italian and Portuguese gold pledged against credits raised. Gold has a role and importance also in the European Monetary System.

From all that we have to conclude that gold has gained ground increasingly against paper money and its rising price has caused further uncertainties in the anyway extremely unstable money markets.

Balances of payments and credit markets

The lasting disequilibria in the current account balances *are a further expression of the changes in international monetary power relations* after 1973.

In the years 1974–79 the balance-of-payments positions have become extremely *polarized* as a combined result of "oil surpluses" and other factors. Though in these years there were minor or major fluctuations – particularly in the case of certain countries – the most characteristic feature was still that some developed capitalist countries (West Germany, Japan, Switzerland) and the OPEC states have accumulated in the last six years a combined surplus of 300–320 billion dollars in their balances of payments, while in the other countries of the world – almost without exception – growing deficits have become characteristic. Particularly the deficit of the medium developed capitalist countries and non-oil exporter developing countries has become acute. The current account balances of the CMEA countries with the capitalist countries have also been characterized by deficit in recent years.

In order that the debtor countries should be able to cover the deficits in their balances of payments, the surpluses in the current account balances originating in the years 1974–79 and concentrated to a few countries had to be "recycled" to them in the form of credit and money market transactions. The wide international bank network of the developed capitalist countries has become the main channel for these transactions, particularly through the so-called "Euro-foreign-exchange markets" which have not been under control up to now. Thus, the "recycling" *came about primarily through market mechanisms and was not implemented in an internationally organized manner.*

But this fast-rate expansion of foreign credit granting activities by commercial banks – whose possibility was created by satisfactory international liquidity and its necessity by the large disequilibria in international payments – has given rise lately to growing concern. These concerns are diversified and are closely related to the complex nature of the indebtedness processes. Suffice it here to indicate only three aspects.

First: An inordinately great part of international capital has accumulated in such countries where investment and consumption capacities are small. Therefore, these surplus moneys – instead of appearing in the form of long-term investment capital

creating new jobs and generating producers' and consumers' demands – are placed in the form of short-term deposits, thereby further increasing the instability of the international monetary situation. With their quick alternating flows these hot moneys have become a not negligible element in the emergence of continual monetary crisis.

Second: Because of the source of credits the foreign bank debts are of such composition in respect of expiration which has brought about a great mutual dependence in the world economy. E.g. the stock of outstanding foreign credits of commercial banks in developed capitalist countries was at the end of 1978 285 billion dollars, of which 42 per cent(!), that is 119 billion, were claims expiring within a year or sooner. From the viewpoint of the debtors this is such a commitment, to be continually renewed, whose "behaviour" is the most sensitive to fluctuations in economic, political and market factors.

Third: Recently there are growing efforts on part of international organizations and central banks to control the foreign credit granting of commercial banks, to assess credit risks better, and to introduce certain restrictions. Although today we can speak rather about efforts, ideas, discussions about ideas and about creating the statistical and organizational conditions in this respect, these efforts may soon become such concrete factors in the international credit market which will slow down and render the present free flow of capitals difficult, and with it the solution of aggravating imbalances.

All these signs indicate that a widening monetary crisis is evolving, and, although a monetary crisis is not identical with an economic crisis since it affects a much narrower field, yet the possibility persists that the monetary crisis may trigger a grave economic crisis in the early eighties.

Impact of world economic changes on the Hungarian economy

The international monetary situation and its consequences affect also Hungary. Since 1968 the Hungarian system of economic control and management has been employing, instead of central plan instructions, economic regulators which can more flexibly support the objectives of economic policy. These regulators transmit also the changes in the foreign economic sphere and thus the Hungarian system of control reacts more sensitively on the changes in the external economic situation.

From 1968 to 1973 the Hungarian economy progressed in correspondence with every essential condition of planned proportionate development:

– an annual 6 per cent growth rate of the economy could be secured in a manner that in the meantime the net national product (the sum of new values created) and its domestic uses were in equilibrium both at current and at unchanged prices;

– accordingly, also external economic relations were characterized by balanced development; the balance of payments showed a surplus, and the national economy did not suffer major price losses in foreign trade;

– also the requirement of domestic price stability could be asserted, which provided favourable grounds for living standard policies: real consumption of the population expanded at a rate exceeding 5 per cent p.a., much faster than between 1960–1967.

But the favourable results of this balanced period, showing also the signs of dynamic growth, could *be attained also because* – and this must not be forgotten – *the external conditions of Hungarian development, among them the market relations in Western countries, were propitious.* At the same time, the fortunate external market relations covered up our internal structural troubles. This is why at that time the assumption seemed justified that further improvement of the structure of the economy, otherwise one of the major objectives of the reform – *could be implemented gradually, in the long run,* as a part of a balanced yet dynamic development process.

The explosion of world oil and raw material prices in 1973–74 and the persistence of all the problems rooted in the capitalist world which have been mentioned in the preceding, suddenly revealed the weak spots of the Hungarian economy. These and the net raw material importer position of the country were reflected in the fact that relative to the 1973 price levels we suffered a considerable, 20 per cent, deterioration in the terms of trade. For the same volume of imported commodities we have now to export by as much more. In the case of foreign trade settled in convertible currencies this deterioration occurred immediately. In the trade settled in roubles the deterioration in the terms of trade was not sudden, but, owing to changes in the principles of price formation, the world market prices infiltrate into our economy also from this side. Thus, the price movements abroad cause such losses for the Hungarian economy which can be counterbalanced after some time only by real savings, increased productivity, i.e. from additional national income. The regulators, too, have to express these requirements.

This recognition and the intention of adaptation were partly reflected already by the *fifth five-year plan* (1976–1980). This was expressed first of all in the emphasis put on four elements of economic policy:

– in order to restore external equilibrium, the domestic use of national income may grow only more slowly than the rate at which domestic resources are expanding, and the difference between these two rates must be reflected in a faster rate of growth of exports than of imports;

– in investment policy the promotion of export-oriented development projects was underlined; the government approved separate credit lines for the National Bank of Hungary for investments with quick return, securing the production of commodities which can be sold at a profit on any market;

– the policy of raising credit abroad was put at the service of this export-oriented investment credit policy;

– bringing domestic prices and relative prices into harmony with external price relations became an increasingly important element in the attainment of economic objectives.

Relying on experiences of economic development over almost four years, the October 1977 resolution pointed out the main direction of economic policy even more markedly by stating: "In the coming period the main source of rising efficiency (should be) the changes in the pattern of production corresponding to domestic and international conditions, satisfying the requirements of foreign markets . . . only efficient development targets should be implemented and, simultaneously, activities which claim resources uneconomically should be restricted and suppressed . . . It is particularly important to improve the system of prices and subsidies in a direction which better helps us solve our structural tasks." The resolutions of December 1978 and 1979 centred on the main economic policy guideline that the domestic conditions of economic development and the system of conditions of economic control should be subordinated to our equilibrium targets.

In the last two years Hungarian economic policy has been enriched with further recognitions and made further steps towards solving the problems of equilibrium. Since the approval of the fifth five-year plan three facts have become particularly obvious. *The first* was that five years ago we underestimated the extent of the external factors and the size of their negative impacts on the Hungarian economy which finally influenced our development. *The second* was that our structural conditions are much too rigid to be fundamentally changed in a few years. *The third:* owing also to the first two circumstances, we can make faster progress in solving our troubles if we handle the complex problems of improving the system of economic control more boldly.

Setting out from these internal and external conditions, the stand taken already by the 1979 annual plan was that incomes policy, budgetary policy and domestic credit policy have to create a system of domestic conditions under which production for profitable exports becomes the *primary carrier of the growth of the economy.* This approach and financial policy guideline intends to provide *dynamic* development possibilities for efficiently producing export-oriented enterprises, but increasingly restricts the development possibilities of competitive firms which cannot produce commodities saleable on any Western market. Naturally, the consequence of selectivity of this type is a transitory slowing down of the rate of growth even for several years, but *within this* slower growth differentiated processes may emerge. This approach, combined with the increased use of financial and monetary instruments, intends *to force* faster structural changes necessary for further economic progress. Such selective change in the structure of production increases export capacity, and simultaneously reduces import demands, thus improving the balance of trade from both sides.

The question may arise whether a situation can come about where export-oriented production draws away exaggerated amounts from the domestic market and the supply of home trade with commodities deteriorates. By influencing enterprise profitability relations the Hungarian economic and financial policies wish to avoid this danger by making domestic sales as attractive as foreign ones.

Also the question may be justified whether in a period of recession in the West the results of an export-oriented production and development policy can be realized, whether

there is a way to improve our balance of trade under such conditions. It seems that the processes evolving in 1979 provided already a positive answer. Experience has shown that with the modest share of the Hungarian economy in world trade (about 0.6 per cent) an annual increment of exports of 4–500 million dollars – negligible on world scale, but a considerable result in Hungarian dimensions – can be attained, if the intention to develop expressly in this direction is coupled with a greater diversification of markets, with honouring duly the "norms" of the new markets, with a greater flexibility of marketing activities. The export development projects which greatly burdened the balance of trade with machinery imports in 1976–1978, already produced additional export earnings in 1979 of $5–600 million and will produce $8–900 million in 1980. A part of these surpluses can cover the uneconomical exports dropping out because of selective development and, beyond that, they may contribute to producing the required additional exports, too.

Finally, also the question may be justly asked whether the Hungarian economic policy possesses a system of indicators relying on which effective decisions can be made on both national and enterprise levels.

True, because of a stronger assertion of economic and social interests related to price stability than would have been justified by our economic load bearing capacity, the domestic price system of Hungary has become rigid. Subsidy and price policies have become more complicated since 1974, in spite of the fact that – as an element of the five-year plan for 1976–1980, already mentioned, – partly because of central price measures, partly under the effect of market mechanisms, both the producer and the consumer price levels have increased in recent years by 3–5 per cent p.a. Since the rise in the international price level exceeded this rate, the Hungarian price corrections proved to be inadequate by the standards of the foreign markets.

The measures aimed at improving the price and exchange rate systems are aimed at "correcting the path". A great step in this direction was taken in June 1979 and, as regards the whole of the price system, a much more important one with January 1st, 1980. In the new situation our firms have to know the true price; what it is worth-while to develop; where can and must expensive energy and imported materials be increasingly saved; what it is worth-while to export and whereto; where it is possible and economical to replace imports by domestic production. In short: the Hungarian system of prices and exchange rates must approximate the actual world market ratios, and even levels of prices and exchange rates: we need a more advanced system of prices and a more advanced monetary system.

The fast rise in foreign prices necessitates a new approach also because if we introduce the rising foreign prices unchanged or more slowly into the Hungarian economy, with time such budget burdens will emerge, with which it will be actually the spontaneous changes in foreign prices and relative prices that will "decide" the extent of the central resources available for planned allocation and the direction of their uses.

In connection with improving the price system decision had to be taken on the place and role of exchange rate policy in the development of the system of economic control as a whole. Theoretically, exchange rate policy may have *three main directions:*

devaluation of the forint, maintaining the real value of the forint and revaluation of the forint against foreign currencies. That is, we may choose from among three possible ways:

a) In the case of a country with a trade deficit an *exchange rate policy expressed in the devaluation of the forint* may seemingly play a positive role, since it promotes exports. In fact, its effects are rather negative even in this respect. Such exchange rate policy increases, namely, the forint receipts of exporters and general interests in exports without its economic bases being supported with higher productivity, improving costs, careful pricing, better marketing activities. In some cases it may boost profits to such an extent that they have to be taxed away through individual budgetary measures. At the same time, the direct consequence on the other side of such exchange rate policy is an expanding "system" of import and consumer price subsidies. As a matter of fact, subsidies are as many subjective elements, engaging central monetary resources in an unplanned manner.

b) *Maintenance of the real value of the forint* – for which decision was taken – is capable of counterbalancing these negative effects. The profitability of exports may remain and even increase. Obviously, the competitivity of exports has to be enhanced. But this has to be achieved in a manner that our efforts should be in harmony with international rules, with the commitments undertaken under the GATT. Realistic possibilities for this do exist.

Certain support given to agricultural exports can be maintained since – because of the particularities of the sector – this is done in some form by every exporting country.

– Exporting firms can justly claim that the taxes on their production realized in exports should be returned to them. This is also done by Western competitors. Thus a refunding of taxes paid in various stages of production is justified in the case of exports.

– The resolution of October 1977 emphasized the importance of transforming the economic structure.

Increased introduction of developed technologies, rationalization of industrial and agricultural production, rational movement of materials and the saving of labour are all extremely capital-intensive goals. Obviously, transformation of the structure of production, investments made to this end and the period of introducing new products justify the claims of enterprises on support, which has to be given for a definite period and to annually diminishing extents to every interested enterprise, thus to the exporting ones as well.

In both variants of monetary policy – the one aimed at devaluation of the forint and the one aimed at maintaining its real value – state money is disbursed or refunded. *But in the first case the budgetary disbursements are in fact not governed by the central will.* They may be availed of by anybody – foreigner or citizen – since what we subsidize is distributed in an untraceable manner: let us think e.g. of the price subsidies to consumer goods. *In the second case, however, the state makes financial sacrifice in a planned manner, as a deliberate economic policy decision, in order to realize the desirable direction of economic development.*

c) The third exchange rate policy alternative, *the raising of the real value of the forint, that is, its revaluation against foreign currencies* can take place only if structural transformation has brought the expected and desirable results through higher productivity.

The Hungarian economic and monetary policies

The recent decisions are expected to restore in a few years the equilibrium of the Hungarian economy. This is a pressing and no easy task. In economic and monetary policies we could choose – in principle – between two main directions. *According to the first* one, equilibrium could be attained gradually, through increased participation in the international division of labour. *The other variant* would have been efforts at autarky, that is, reduction of dependence on foreign markets. But the latter variant exists only in theory. With the size, conditions and structure of the Hungarian economy an economic policy advocating autarky would very soon become an obstacle to development. Therefore, the main line for Hungary can only be to deliberately increase our planned participation in the international division of labour, expanding economic and financial relations with every sector of the world economy. Investment policy has to strive even more purposefully after increasing export capacities. Relying on the improvement of the price system, new, economical, so-called convertible commodity funds have to be created if necessary by importing advanced machinery, technology, turn-key plants. For such purposes it is allowed and rational to avail ourselves of foreign medium and long-term credits.

Beside this policy, it is important to emphasize that *when we are speaking about convertible commodity funds this does not mean the direction of exports but the quality of the products.* Even on the CMEA markets the growing demand for better quality goods is irresistible. Therefore, we have to produce such commodities for which we can justly demand commodities of similar quality on the markets of the CEMA countries. Rationality suggests that we should expand trade, through producing better quality products, first of all with the neighbouring socialist countries, since *this is more advantageous also from the viewpoint of transportation and because they buy in large volumes.* That is, we should expand trade with the market which – in the case of dynamic commodity deliveries of improving quality and mutually satisfying demands – is a primary external factor of Hungarian economic growth. In a period when business is declining in capitalist countries, the importance of this trade need not be separately proven.

Beside an export-oriented economic development, import saving investments must not be either belittled or pushed into the background, if they provide a possibility for substituting economically imports of considerable volume and value.

In monetary and exchange-rate policies the objectives to be asserted *in the short run should be distinguished from those* to be enforced *in the long run.* In this respect, in the short run the role of exchange rates, in particular of commercial exchange rates, in

domestic price formation has to be considered as decisive. In the long run, however, parallel and in harmony with shaping the domestic price relations the realistic objectives also include that the relationship between external and internal prices should be brought about by creating a uniform rate of exchange. In 1979 we made the first step in this direction by reducing the gap between the currently employed non-commercial and commercial rates of exchange. This may be followed by further similar steps until after some time we bring about the uniform rate of exchange – as a precondition of external convertibility which would be in harmony with a socialist planned economy.

In the course of further developing the Hungarian system of economic regulators the next link in the chain is – in my opinion – to bring about, in harmony with the goals set by the system of economic control, every condition of a more advanced monetary system and secure continuous practical functioning for this system. In the period before us I believe that three stages of developing a more advanced monetary system are possible and expedient.

1. Maintaining the process of organically linking external and domestic prices through "maintenance" of the price system.

2. Shifting to the uniform rate of exchange which would be a fundamental qualitative change. Money can best fulfil its functions as measure of value, medium of payment and accumulation, if exchange rates are uniform in every international financial settlement, in respect of both commercial and non-commercial transactions. A uniform rate of exchange can be implemented only with an adequate system of prices and income taxation. If we wish to make further steps towards a uniform rate of exchange, with time we have to regroup further elements of social net income (taxes, duties) from producer prices into the sphere of realization. With the uniform rate of exchange the national and enterprise level inputs and efficiency can be measured much more simply than at present, and thus economic decisions can be taken on every level of economic leadership more quickly and better founded.

3. Only after creation of the uniform exchange rate can the external convertibility of the forint be brought about. Standing on the base of a socialist planned economy, the external convertibility of the forint continues to presume the central handling of currency stocks, the monopolies of currency and of foreign trade. The convertible forint would be a tangible proof of the stability of the Hungarian economy, of its unbroken growth, and would result in a further improvement of our international appraisal and creditworthiness. With the convertible forint account possibilities would arise for an economical participation of foreign capital. I consider the creation of the external convertibility of the forint as a realistically attainable objective and compatible with socialist planned economy when, while maintaining the system of import and export licences, we introduce convertibility in respect of current payments (for the purchase of commodities, freight, insurance) but maintain restrictions on capital movements and satisfaction of personal demands depending on our foreign exchange situation and the changes therein.

The Hungarian monetary system's links with that of the CMEA

Hungary, as a member of the CMEA and signatory to the Comprehensive Program, participates responsibly and actively in the implementation of the monetary policy objectives of the latter, in the work going on in the Standing Committee for Monetary and Financial Problems, as well as in the Councils of the International Bank for Economic Cooperation (IBEC) and the International Investment Bank (IIB).

The objectives of the Comprehensive Program also include realization of the uniform exchange rate of national currencies. Thus, the Hungarian ideas about monetary policy concerning the realization of the uniform rate of exchange are in harmony with the objectives commonly decided upon in the Comprehensive Program (Part I, Chapter 7: "Perfection of monetary–financial relations"). According to par. 16. in Part I. Ch. 7 of the Comprehensive Program the member countries of the CMEA study the possibilities for introducing uniform exchange rates for the currencies of each of the member countries and are working on creating the conditions necessary for their introduction. Decision on the introduction of the uniform exchange rates of national currencies and on the date of introduction will be taken later. In par. 31 of the same chapter we find: "The CMEA member countries study the possibility to shift in the long-term period to settling all payments among each other at the uniform exchange rates of each country's currency – depending on the extent to which the considerable differences in the consumer and producer price levels and relative prices can be eliminated."

The present monetary system of the CMEA rests on the common currency, the transferable rouble, introduced with January 1st, 1964, issued by the IBEC jointly founded at the same time. By creating the transferable rouble a firm socialist unit of account relying on gold standard has been brought about, which would be called upon to fulfil all functions of a key currency within the community. In transacting the trade in the framework of commodity trade agreements the transferable rouble fulfils certain functions of the key currency – to the extent of obligatory quotas and bilaterally balanced trade.

The situation is different if some country undertakes in the course of the year deliveries beyond the planned ones for which it cannot receive adequate counter-deliveries or, if, for some unforeseen reason, a country cannot fulfil the planned deliveries. In this case the creditor country cannot use automatically the surplus arising in this manner for purchase in a third country. (According to experience of many years this surplus is only a fraction of total trade: 2–3 per cent.)

Thus, the bilateral approach to foreign trade is opposed to a more advanced – multilateral – system of financial settlements. This situation does not allow the development of an optimal level of trade in the mutual turnover of the CMEA member countries that would be most advantageous for every member, since in bilateral relations turnover is limited – as everywhere in the world – by the possibilities of the country with smaller (export) capacity. It seems thus, that it is in the interest of the CMEA countries, in conformity with the objectives set out in Chapter 7 of the Comprehensive Program, to accelerate their work aimed at improving monetary and financial relations.

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In order that the conditions of economic growth should be realized in the framework of an international monetary system capable of functioning, it seems necessary to bring about several preconditions. In my opinion, these are above all the following ones.

1. Creation, by common decision of interested governments, of such an international measure of value, a world money which would be the key currency of the monetary system. Developments of recent decades have proven that national currencies are unsuited for this purpose, since those issuing them put their own interests always before international commitments.

2. Settlement of the "gold problem": "rehabilitation" of gold as a measure of value. That is, recognition of the situation that gold *de facto* cannot be ousted from the monetary system. The idea that the central banks will be willing to abolish the monetary role of their gold stocks amounting to three fourths of their reserves, is completely irrealistic.

3. Statement of real parities between convertible currencies and the new world money. On this basis it would be possible to return to the system of fixed exchange rates, which would be, though more flexible than the earlier one, abandoning thus the present practice of floating which is harmful in several respects.

4. Securing universality for the international monetary system by asserting the economic and political realities of the world. But such a system cannot be brought into being overnight. Therefore, first regional monetary systems or zones should be created. Such could be: a) the dollar zone, b) the Common Market, c) the yen zone, d) the OPEC countries, e) non-oil developing countries and, last but not least, f) the CMEA. Then connections should be established between the zones and in this manner the universal monetary system could be gradually attained.

Obviously, on the basis of the Leninian principle of peaceful coexistence of different social systems, it is in the interest also of the socialist countries that instead of the present monetary chaos some new settled monetary situation should come into being. The capitalist and the socialist world economies are not hermetically sealed off from each other, they have mutual impacts on each other and even compete with each other. In this external economic medium it is in the interest of Hungary and every socialist country to develop separately and jointly such an economic policy and carry on such an economic practice which best secures the assertion of their interests in world-wide competition.

КРИЗИС МЕЖДУНАРОДНОЙ ВАЛЮТНО-ФИНАНСОВОЙ СИСТЕМЫ И ВЕНГЕРСКАЯ ЭКОНОМИЧЕСКАЯ ПОЛИТИКА

Я. ФЕКЕТЕ

При разработке венгерской экономической политики сегодня нужно исходить из гораздо более сложной внешнеэкономической ситуации, чем та, которая определяла внешние условия даже еще пять лет назад. В большинстве стран мира на первый план вновь выступили проблемы

экономического роста в условиях усиления инфляции, возрастания несбалансированности платежных балансов, распространения открытых или завуалированных протекционистских мер, что отчасти приводит к более медленному расширению внешнеторгового оборота. Социалистические страны также не могут обособиться от негативных влияний этого положения. Экономическое сотрудничество с социалистическими странами оказывает стабилизирующее воздействие на развитие венгерской экономики, однако наблюдаемые в капиталистическом секторе мирового рынка тенденции и эффекты постепенно, хотя и с опозданием и не в такой резкой форме, влияют и на связи между странами СЭВ.

Одним из наиболее существенных последствий распада международной валютно-финансовой системы Бреттон-Вудса было начало и закрепление нового типа инфляционного процесса. Его усилило повышение в экономически необоснованной степени цен на нефть производителями нефти и нефтяными монополиями-посредниками. Инфляционный психоз настолько распространился в мировой капиталистической экономике, что его последствия нельзя ликвидировать за короткий срок.

В условиях капиталистических рыночных отношений, для которых характерна инфляция, непрочность валютных курсов, борьба из-за процентных ставок, несбалансированность платежных балансов и возрастающая напряженность кредитных рынков, на Западе говорят о демонетизации золота. Однако на практике из целого ряда очевидных фактов следует сделать вывод, скорее, о возрастании значения золота.

Состояние прочной несбалансированности текущих платежных балансов является другой особенностью сложившегося после 1973 г. нового международного соотношения финансовых сил. Непропорционально большая часть международного капитала скапливается в странах, которые располагают небольшими производственными и потребительскими возможностями. Вследствие быстрого и беспорядочного перетока эти «горячие» деньги стали одним из существенных элементов возникновения систематических валютных кризисов. Все более вероятна возможность, что в начале 80-х этот финансовый кризис приведет к тяжелому экономическому кризису.

Венгерская система хозяйственного управления стремится к осуществлению целей экономической политики не с помощью разбивки плановых показателей по предприятиям, а с помощью экономических регуляторов. Эти регуляторы передают также и изменения внешнеэкономической сферы, и поэтому венгерская система экономического управления чутко реагирует на воздействия внешнеэкономического положения. Обострение проблем, коренящихся в капиталистическом мире, неожиданно вскрыло слабые места структуры венгерской экономики. Это, наряду с тем, что Венгрия является нетто импортером сырья, выразилось в ухудшении условий торговли почти на 20 процентов, по сравнению с уровнем цен 1973 г.

Главный курс венгерской экономической политики сегодня состоит в подчинении экономического развития цели достижения равновесия. В стране должна быть создана такая система условий, при которой главным носителем роста национальной экономики станет рентабельное производство на экспорт. Предприятиям, наладившим рентабельное, ориентированное на экспорт производство, должны быть обеспечены возможности динамичного развития, а возможности развития для нерентабельных предприятий должны все более ограничиваться, Следствием этого будет временное замедление темпов роста, однако при более медленном росте смогут развернуться дифференцированные процессы.

При масштабах, особенностях и структуре венгерской экономики экономическая политика, направленная на самообеспечение, может очень быстро стать препятствием развития. Поэтому Венгрия планомерно усиливает свое участие в международном разделении труда. Инвестиционная политика должна еще более целенаправленно способствовать расширению мощностей производства на экспорт путем создания новых, рентабельных, реализуемых на любых рынках т. н. конвертируе-

мых товарных фондов. Это касается не географического направления экспорта, а качества товаров. На рынках СЭВ также неуклонно растет спрос на товары более высокого качества, в обмен на которые Венгрия также может требовать на этих рынках равноценные по качеству товары.

Одной из реальных целей на длительный период является установление с помощью единого валютного курса связи между внутренними и внешними ценами как одной из предпосылок внешней конвертируемости валюты в условиях социалистической плановой экономики.

Концепции венгерской валютной политики относительно создания единого валютного курса соответствуют целям, поставленным в Комплексной программе. На основе ленинских принципов мирного сосуществования различных общественных систем социалистические страны также заинтересованы в том, чтобы нынешний валютный хаос сменился новым, упорядоченным валютным положением, которое будет способствовать бесперебойному развитию международных экономических связей.

Acta Oeconomica Vol. 24(3–4), pp. 251–262 (1980)

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MONETARY POLICY AND BUSINESS SITUATION IN THE FEDERAL REPUBLIC OF GERMANY

The article discusses the new international and national situation which monetary policy in the Federal Republic of Germany has to take into account and on which it has to react. The author laid stress first of all on working out the basic position of German stabilization policy against the background of the present state of affairs. A medium-term-oriented monetary policy – which the author advocates – is burdened mainly by the emergent reasoning in terms of a system of fixed exchange rates; this penetrates first of all the European Monetary System. The growing weight of elements of fixed exchange rates became evident in the international monetary relations also in spring 1980 when the D-Mark showed a strong downward tendency. The central banks responded with interventions and interest rate measures. German monetary policy, though taking into account foreign economic conditions, was guided primarily by internal economic requirements. The main task of monetary policy is to prevent the external price shock, caused by the high prices of crude oil and other raw materials, to release again an inflation-oriented behaviour at home. But this does by no means warrant short-term data serving for standards of monetary policy. The new phenomenon of deficit in the current account balance supports a consistent medium-term orientation just as well.

Challenges to monetary policy

Monetary policy in the Federal Republic of Germany is facing for some time increasingly difficult conditions. Particularly in foreign trade new facts emerged which proved to be lasting. Growing dissatisfaction with the results of a considerably free formation of exchange rates has led to a situation where again several elements of fixed rates were drawn into the international monetary system. Only part of them was of an official nature, as the European Monetary System (EMS).* Besides, on the basis of more or less informal agreements, the central banks maneuvred on foreign exchange markets to keep the daily fluctuations within limits. German monetary policy which, after having been essentially freed in 1973 from the burden of compulsory intervention,** could on

*The European Monetary System (EMS) came into force with 13th March, 1979. Members are those of the European Economic Community, with the exception of Great Britain.

**It was precisely the Federal Republic of Germany that had to experience in the sixties and in the early seventies that however many times a central bank tries to secure stability in a system of fixed exchange rates, its policy will be again and again frustrated from outside. It was only after the freeing of exchange rates in spring 1973 that it regained its freedom of action. Even afterwards, monetary policy had to look also outward – as shown by the rather massive interventions on the foreign exchange markets, – but it could be always weighed up whether this would be detrimental to goals on the domestic market. Thus, monetary policy took into account the processes in the world, but it was not determined by the latter.

the whole successfully concentrate on its domestic economic tasks, now again runs the risk – because of strengthening ideas on fixed rates – of coming under the influence of external economic coercion.

Monetary policy presently has to bear the burden of the recent price hikes of crude oil and its derivatives. Monetary policy is mainly concerned to restrict, as far as possible, the secondary price rise due to this external impulse and to hinder the spreading of an inflation-oriented behaviour. In its efforts it must by all means avoid to exaggerate the use of restrictive instruments lest a too long observation of the lagging indicator of "price development" should lead the expected cooling of business in the course of the year into a recession.

The position of the German current account balance also constitutes a challenge to economic policy. A traditionally surplus country, the Federal Republic of Germany,* has now to look for the best ways to adjust to the deep gap that the higher price of oil has opened in the current account balance. This is quite a new problem.

Problems of the exchange rate system

The definite inclination to bring again a growing number of fixed elements of exchange rates into the international monetary relations finds its roots – apart from considerations of principle – in the, at times surely hectic, fluctuations of exchange rates during the phase of flexible rates after 1973. Among politicians, and to a growing extent also in academic circles the view asserted itself that flexible exchange rates did not deliver the results as expected in 1973. [1] There was a fear that the monetary uncertainty could spread and entail mistaken measures in the economy. [2] At any rate, it had to be conceded, the consequences of the first price rise of oil could not have been countered so well internationally by fixed exchange rates as was actually the case. This prohibited a world-wide formal shift to a new system of fixed rates.

The discontent prompted in the European Economic Community the idea to take a fresh start for a common currency system. Although, because of the wide dispersion of inflation rates, the initial conditions were anything but propitious, it was believed that all of the countries wanted to attain a hard currency block. The European Monetary System should, [3] according to the will of its fathers, promote both the external and the internal stability of the participating currencies. [4] But, almost according to tradition in the Community, almost everything remained uncommitted as regards a better coordination of economic and monetary policies. The point of emphasis of the control mechanism lies no doubt in the securing of external stability of the currencies. Thus, problems for a

*Between 1950–1978 the current account balance of the Federal Republic of Germany showed a deficit only on three occasions: 1950 (0.4 Bn DM), 1962 (1.6 Bn DM) and 1965 (6.2 Bn DM).

medium-term monetary policy oriented towards the stability requirements of the domestic economy can be overcome in the Federal Republic only if the central rates are successfully adjusted in time and to the necessary extent. At any rate, changes in the central rates of exchange can be made in the system only with the consent of all concerned.* The first experiences with the "mini-realignment" of exchange rates in September 1979** hardly justify high optimism. In the first year of its validity the adjustments of the central exchange rates were by far insufficient to compensate for the inflationary margin.

Thus an import of inflation beyond the direct international price implications of 1979 is already on its way. It is difficult to judge whether this would have been different without the EMS. The fact that the German Mark was only rarely under pressure of revaluation is no counter-proof as yet, since the anticipated rates are different in a system of fixed rates from those of a free one. Moreover, it must be taken into account that intramarginal interventions and various kinds of administrative interferences can influence and also garble the formation of foreign exchange rates. On the other hand, in the short period of the existence of the EMS one cannot state without any qualification that a flexible rate of exchange would have exactly levelled out the differences in inflation rates.

But an inclination to fix rates increasingly asserts itself also in relations with countries not participating in the EMS. This manifests itself – in harmony with the guidelines concerning exchange rate policy of the IMF*** – above all in the efforts to keep the daily fluctuations in exchange rates as far as possible within limits. This occurs through close cooperation of the participating central banks. One of the origins of this behaviour goes back to autumn 1978. Not least under the pressure of the Europeans the United States abandoned their "benign neglect" towards the development of the exchange rate of the dollar to demonstrate to the market that the Americans were themselves interested in a stable dollar. [8] Since that time both the Bundesbank and the Federal Reserve System influence the relation of the dollar to the DM. Since the phases of strong and weak dollar affect within the European exchange rate alliance first of all the German Mark, such alternating judgements of the US dollar can cause tensions within the EMS. This is why there is a strong pressure also within the EMS to attain binding commitments

*This need be so, since the design relying on a currency basket entails that a change in the central ECU rate of a currency induces also changes in the central ECU rates of the other currencies. For details see [5].

**The currency realignment of 23rd Sept, 1979 meant a 1 per cent revaluation of the D-Mark against the ECU, a devaluation of the other currencies by similarly 1 per cent, and, in addition, a 3 per cent devaluation of the Danish Krone. See, also for an evaluation of this realignment [6].

***After the reform of the statutes of the IMF, which came into force in Spring 1978, the member countries are free to choose a system of exchange rates, but the use of the exchange rates is subject to certain duties. There are thus three rules of exchange rate policy which say, among other things, that a country should avoid manipulating the exchange rates in order to attain a competitive advantage, and that, if necessary, it should intervene in the foreign exchange market to counter conditions opposed to the system, as f.i. short-term erratic fluctuations in the exchange rate. See [7].

about the permissible fluctuations of the dollar. There was repeated discussion about so-called "target zones" for the dollar.* The German Bundesbank has up to now successfully withstood the drive toward a fixed exchange rate of the dollar.

External and internal impulses for the economy

This idea of new fixed rates of exchange had no small role in that the Bundesbank felt forced in spring 1980 to shape its monetary policy increasingly by a concern with external economic conditions. Though the loss of the value of money was much smaller in the Federal Republic than in most other countries, in the new year there appeared a clear tendency for the devaluation of the D-Mark.** This has to be viewed against the background of accelerated inflation in the Western industrial countries which forced the governments – if rather too late – to take world-wide a restrictive course: The main role was allotted in this to monetary policy. Rates of interest started to soar. This was particularly strong in the United States and through this an expressly international interest margin emerged.*** Naturally, this had its impact on the valuations on foreign exchange markets. In itself, this need not have led to a sensitive burden on the German monetary policy, since the real rates of interest were not lower in our country than in the United States. It would be almost paradoxical to object first to the undecided stabilizing policy of America and then to explain our own problems, when action is needed, just with such a switch.

On top of it came an unusual constellation of the balance of payments. Against the usual textbook case the balance of payments did deteriorate not in high inflation countries, but precisely in countries with relatively stable currencies. Thus the current account balance ran into particularly high deficit,**** while the United States, after high deficits through years, could present in 1979 a balance of payments practically in equilibrium. The market attributed to the deterioration in the German balance of payments a greater weight than to its greater stability over the USA. There were no longer expectations towards the revaluation of the D-Mark. Since with the missing expectations towards revaluation capital investors had no longer to reckon with a loss of the advantages deriving from higher rates of interest abroad when re-exchanging the cur-

*From Belgian part (*van Ypersele*) there have been recently proposed such "target zones" in order to improve the coordination of monetary policies between Western Europe and the United States. Accordingly, the movement of the exchange rate of the dollar should be narrowed in the European countries to a jointly agreed zone. Such target zone should be at times revised by the participating countries and set again in agreement.

**The rate of exchange of the D-Mark against the US dollar rose from its deepest point of 1.7062 DM/$ on 3rd Jan., 1980 to 1.9770 DM/$ by lst April, 1980, corresponding to a round 14 per cent devaluation of the D-Mark.

***The USA Federal Funds Rate, which was in the first half of 1979 still at about 10 per cent, was raised by the end of March and the beginning of April 1980 to 18.5 per cent.

****After a surplus of 17.5 Bn DM in 1978, there came a deficit of 10.5 Bn DM in 1979.

rencies, a tendency towards export of capital developed. With a free formation of the rates of exchange this tendency could have been stopped if the price of the more demanded currency rose as long – that is the D-Mark became devalued – as the investor could have reckoned with a revaluation corresponding to the interest margin. Already the elements of fixed rate described worked against a solid approach of the central bank. The Bundesbank supported the D-Mark with heavy sales of dollars.* The smoothing of exchange rates was in the foreground; it also played a role that with a strong devaluation of the D-Mark a greater import of inflation was to be feared. The IMF expressly greeted this practice of intervention. But it cannot be established for sure whether, if left alone, no counterpositions could have been built on the market. As a matter of fact, the interventions do not necessarily provide guidance for expected rates; it cannot be even excluded that with formally free formation of exchange rates they will lead to a further destabilization of the expectations. [9]

If the rate of exchange cannot fully exercise its balancing function, there remains but to bridge the interest margin domestically through foreign trade-oriented raising of the rates of interest. In early April, 1980 the Bundesbank almost came under such pressure. But the turn came by itself, facilitated also because, under the influence of recessive tendencies and an easing of the monetary policy, the US rates of interest began to fall. The external economic influence lost from its weight and the Bundesbank was again able to orient its decisions primarily towards the domestic economic requirements. The raising of central bank interest rates soon afterwards** was motivated by domestic economic reasons.

Monetary policy in the Federal Republic is challenged for domestic economic reasons mainly because of the considerably increasing inflation rates. Prices have been particularly fast rising in the last one and a half year in the stage of industrial production. In autumn 1978 the current rise in prices was still 2 per cent annually, while in the first quarter of 1979 producer prices were rising at an annual rate of more than 9 per cent. The price rise clearly accelerated also for the consumer, in April 1980 a household had to pay for its commodity basket 5.8 per cent more than a year ago. It is poor consolation that this is still small by international comparison.

The triggering cause came at any rate from without, through the excessive price hikes of crude oil and its derivatives. To this was added a considerable increase in the prices of other raw materials on the world market, in the first place of non-ferrous metals, and also hides and skins. These price shocks, still continuing even today, penetrate into the domestic markets and affect first of all those products for which oil is an important raw material, or whose production is highly energy-intensive. In the meantime, they have

*From January till early April the Bundesbank gave away during its maneuvres foreign exchange in the amount of about 20 Bn DM.

**With 2nd May, 1980 the discount rate was raised from 7 to 7 1;2 per cent and the lombard rate from 8 1/2 to 9 1/2 per cent. These measures were coupled with the reduction of the minimum reserves ratios by 8 per cent and the raising of the re-discount quotas of the credit institutions by 3 Bn DM.

begun to act also where dependences are no longer so transparent. Therefore, in individual cases it is difficult to judge to what extent the present price rise is a consequence of such secondary effects and to what extent the domestic inflationary tendencies are growing in importance. This is important because with the given rigidities of prices and wages we cannot assume that – as is quite possible theoretically – the higher price for crude oil can be compensated by reducing prices of other commodities.

Thus the Bundesbank has always emphasized that it intended to let the external impulses have their way but that it would take pains to prevent a new inflationary mentality. [10] And this is no small undertaking if, as was the case then, there are always new external attacks and thus the impulse is not only a matter of a "price-hump". It is all the more difficult to estimate the endemic danger as the state of the economy in the Federal Republic anyway leaves room for raising prices. And there are some indications that prices were in part more strongly upwards adjusted than could be explained merely by the expensiveness of raw materials. The development of construction prices is the best, though surely not the only example.* It is a clear indication of inflation-oriented behaviour that the continuing rise in the prices of construction and building plots has prompted many people, in spite of high rates of interest, not to delay but rather to bring forward their building projects.

Many observers believe to perceive such initiatives already in other fields. For them, the result of the wage negotiations this year,** which will entail a rise in total national wage costs per unit of product of about 5 per cent, is an indication that the conditions of stability have started to deteriorate in this country also from the side of costs. Sure, the wage contracts of this year cannot be regarded in themselves as being in conformity with stability; at any rate, there is nothing extraordinary in a growing cost pressure in a favourable business situation, particularly if – as was the case in the previous years – the employees have brought about with moderate wage contracts the conditions for a strong self-generating upswing. It is at any rate a positive sign that these contracts clearly indicate the employees are ready to share the real burdens of the deterioration in the terms of trade, that is, the increase in the price of oil would not become – as it did in 1974 – a starting point for heavy debates about income distribution. [11]

On the whole, one cannot yet state that the battle on the front of stability has been already lost. Inflationary expectations have not yet become so fixed that a turn could be implemented only at the risk of production and employment. These are the chances but also the risks of German monetary policy.

*Housing constructions cost in the first quarter of 1979 6 per cent more than a year ago, and in the fourth quarter the distance rose to 9.8 per cent, and in the first quarter of 1980 it clearly exceeded 10 per cent.

**Although it does not quite cover the facts, this expression came to be accepted, partly because most of the wage negotiations are concentrated in the Federal Republic of Germany on a few weeks in the first third of the year, and partly because the deviations from the first contract are, as a rule, small. Thus it *de facto* has a kind of leading function.

Thus, the primary task of the Bundesbank should be now to advance against the inflation by keeping the supply of money scarce – as also in the preceding year. The target is to keep the expansion of central bank money between 5–8 per cent from the fourth quarter of 1979 to the fourth quarter of 1980.* It has also been made clear that in the present circumstances it seemed advisable to keep the growth of the volume of money rather in the lower half of this target zone. Economic research institutes rebuked the Bundesbank for running the danger of overdoing the restrictions. Apart from the influence of various monetary policy concepts of individual observers, such critique became substantiated mainly in the concern that the Bundesbank might come too much under the spell of the delayed price indicator and might be late in considering in its policy the weakening of business conditions. It was frequently observed also in the Federal Republic of Germany that economic policy authorities missed the best date for a change of course; this may justify such argumentation as not necessarily false from the outset. The problem to find the correct balance between business policy and stability policy requirements still seems to be smaller now than it was expected at the turn of the year.

Already in early autumn of last year it was reckoned in the Federal Republic that the upswing started in mid-1978 and quickly gaining strength would come to an end. This view was supported not only by the deteriorating future expectations of the enterprises as found in the monthly surveys of the IFO-Institute of Munich, but also by the fact that some elements of demand which had earlier contributed to the upswing were already stagnating or even declining. Thus the strong accumulation of inventories began to take a milder course and the increased costs of energy began to affect also consumption. Foreign orders became more sluggish than before. There was wide agreement that the danger of sliding into recession was relatively small, yet there were considerable differences in estimating the development prospect of the economy in 1980. Particularly the international organizations reckoned with a growth rate of 1.5 per cent. At the other end of the scale we find the Bundesbank and the Federal Government which thought possible to attain 2.5 per cent.

When the annual report for 1980 was submitted by the Federal Government this was interpreted as a kind of official optimism.** Yet the data on the first months of 1980 seem to confirm rather the more favourable prospects. In the first quarter business was on the upswing. The investment propensity of the economy stayed high and every information indicates that there will be no decisive change in this. A no small role is

*Since December 1974 the Deutsche Bundesbank announces always a year ahead what monetary expansion it strives after in the next year (monetary target). For this, it sets the target for the wanted increase in the central bank money, which forms the basis of the expansion of credits and deposits. With this setting of targets a clear information is closely related about the rate of inflation the central bank still thinks to tolerate and what monetary conditions it will create for that. This should serve first of all for mutual coordination.

**According to § 2 of the stability and growth act (StWG) enacted in 1967, the Federal Government is under obligation to present in January each year an annual report and to include in it the economic policy objectives aimed at and the planned measures of economic and financial policy.

played in this by the fact that, owing to the steep rise in oil prices, many investments serving directly or indirectly the saving of energy have become profitable. A typical example for such investments highly independent of the actual state of demand is the field of automobiles. Other components of demand, which rather surprisingly again carried the business, are likely to take a weaker course in the next months. But nothing indicates an early or sensitive decline in business. Thus, as seen today, a rate of growth of 2.5 per cent, if not 3 per cent, is valid.

Since at the end of the last year the capacities of the economy were almost optimally used [12], and in 1980 the production potential will equally grow by 2.5 or 3 per cent, this means that we move almost along the potential path. With this the level of employment seems to be rather limited. At any rate, there are already indications that unemployment will grow in the course of the year. It can be, namely, seen that the supply of labour will considerably increase for demographic reasons. Thus, from the aspect of the real sphere no such development can be discerned which could or should prompt the Bundesbank to alter its basic stand.

A policy of tightening the supply of money offers a chance to brake already this year the current depreciation of the currency. With this it could be made clear to investors and producers, and first of all to the parties in wage negotiations that they need not reckon in their decisions with a further acceleration of price rises, but rather again with a smaller rate of inflation.

Such policy also supports the adjustment process necessary because of the changed balance of payments situation of the Federal Republic. First of all, depending on the oil prices, we have to reckon with a deficit in the current account balance of at least 20 billion DM, some estimations reach even 30 billions. No doubt, a country like the Federal Republic should attempt to attain again an active current account balance, since the necessary transfer of capital and technology to the third world assumes a surplus in the current account balance of the industrial countries. Nor can it be doubted that a policy of easy money would not solve the adjustment problems but, as everywhere in the world, it would make the problem of inflation sharper.

At any rate, opinions widely differ as to the time needed to eliminate the deficit. Those considering mainly that a country with a deficit in the current account balance lives beyond its means will press for a fast elimination of the deficit. This could be done, but this monetary policy would have to use such restrictive measures as would reduce intermediate consumption – but this would be a deviation from the medium-term orientation. Imports would decline and domestic suppliers would have to look for and find compensation on foreign markets lest greater domestic unemployment should be the price to be paid. The question arises then, whether they could find such a market and whether this was at all desirable.

As against 1973/74, this time the OPEC countries will not validate so fast their higher demands on the gross output of the industrial countries. But if the OPEC countries are missing as buyers, a compensation could be found only if we attracted demand from other industrial countries. The deficit in the current account balance and the burden

involved would be pushed unto other industrial countries which could no doubt tackle them with greater difficulty than the Federal Republic. Earlier, for such behaviour the term "beggar-my-neighbour-policy" was used. The Federal Republic should not and cannot expose itself to such objections.

The same holds for those who – based on mechanical balance interrelations – find in the forced reduction of the new debts of the state an elegant way for quickly improving the current account balance. In the last resort, here too resources are freed for exports which cannot be realized or cannot be considered desirable. But this should by no means be understood to mean that the financial deficit of the German public authorities in 1979 and the deficit of 1980 already to be seen should not be considered as decisively high even if for stabilization policy reasons and that, in view of the development of the current account balance a restriction of public expenses would not be desirable.

As long as the OPEC countries do not strongly raise their demand, the industrial countries can reduce their deficit positions towards the oil-producing countries effectively and for some longer time only if they reduce their dependence on oil. But this is a long way to go.

Even if we cannot rapidly redress our deficit position, this should not mean that we can leave things as they are, or that we should run into debt with the OPEC countries. In view of the huge volume of OPEC funds looking for investment, to obtain the necessary capital imports should hardly cause any problem to the Federal Republic [13]. But on these means interest has to be paid, so that – apart from a short period of transition – they cannot be used for purposes of consumption. This means that the adaptation of consumption expenses of both private persons and the state has to take place relatively fast, so that a restructuring towards a greater production of investment goods can be started. With this we would be also prepared to satisfy a greater demand of the oil-producing countries, should it come. Until then we could use the available capacities ourselves, particularly to cope with the enourmous investment potential for the saving of energy and for the development of alternative sources of energy. Since these are highly profitable projects from the aspect of the economy as a whole, there is nothing bad in this indebtedness.

Instruments of monetary policy

What follows from all that for monetary policy? As long as the elements of fixed exchange rates allow it in respect of world currency relations, the Bundesbank should pursue a medium-term policy consistently, perhaps even more consistently than up to now. Quite independently from the standpoint of monetary theory it should be learnt in the meantime that medium-term policy is perhaps not the first best solution, yet by dint of it the mistakes, attached to a political decision process, can be kept to a minimum. [14] Neither higher prices nor the situation of the current account balance should tempt us to deviate from this medium-term course.

The Bundesbank must be ready with its instruments to respond to disturbances which will again originate in the foreign exchange markets and might demand, among other things, in relatively fast succession emission or withdrawal of central bank money. Thus, instruments are needed which can be fast reversed and implemented within a short time span.

To cope with these growing tasks of monetary control the Bundesbank resorted already in 1979 to new instruments beside the already tested ones. To these belonged operations under repurchase agreements in bonds, foreign exchange swap transactions applied in expansive and contractive directions, besides also foreign exchange transactions under repurchase agreements transferring call rights of US dollar assets to credit institutions for a definite time, resulting in a corresponding decrease in liquidity. Altogether it was a fair success to maintain the scarcity conditions believed to be desirable on the money market, in spite of the influence of market-dependent factors of liquidity [15]. Nevertheless one should see that the many occasions of using the instruments with alternating signs presented a rather confused picture outwards. As long as the monetary target is attained, this may be unimportant, but one can assume that the Bundesbank can better carry out its intentions if the banks can anticipate its behaviour and the possible instruments to be used. The disturbing factors could have been countered in a more transparent manner and less hectically if, beside the rate of discount and the lombard rate, we had had also other possibilities in interest policy for expanding the range of rates of interest.

For the time being, there are but two rates of interest for refinancing the credit institutions with the Deutsche Bundesbank, namely the rate of discount and the lombard rate. The Bundesbank applies discount rate on bills of exchange submitted by the credit institutions, which the latter have discounted for their clients. Lombard credits are advances on securities. This has a function of a safety valve, it serves in the first line for easing the short-term liquidity bottlenecks of the credit institutions. The safety valve function is of importance mainly when bank liquidity has to be kept scarce, but there are repeated fluctuations in liquidity supply on account of foreign exchange market transactions of the Bundesbank. It appeared last year and also this year that under such conditions the banks sometimes lay claim to advances on securities to an extraordinary extent. In order to hinder excessive resort to advances on securities, there is a possibility to set a quantitative ceiling on such credits. But then the Bundesbank has to react on stronger fluctuations in the creation and extinction of liquidity, e.g. on the basis of foreign exchange market operations, with short-term balancing transaction. Another way would be to make lombard credits less profitable for banks by making them more expensive, so that they should ask for only as much as is really necessary for liquidity purposes. In principle this could be done if the "correct" rate of advances on securities could be found. As experience has shown this is a difficult matter, a purposeful solution would be to set rates of interest in a graded manner, according to the volume of lombard credits demanded. This would mean that lombard credits would be more and more expensive by stages, depending on the size of credit asked for. But this would simultaneosly involve a wider range of the rates of the

central bank: there would be at least three central bank rates of interest then. This would have the advantage that the refinancing demands of the banks could be more flexibly handled through prices; it could be prevented, if necessary, that lombard credits should be used for long-term financing. On the other, the short-term balancing transactions which presented such a disturbing picture, would not be needed any longer. The Bundesbank has not yet decided on this way. But a spreading of the rates of interest was anyway necessary, since the rates for the short-term balancing transactions were sometimes between the discount rate and the lombard rate, but mostly above the lombard rate.

Financial policy can best support monetary policy if it shows a stronger medium-term orientation than up to now. It has been precisely the latest business stimulants of the state – to which it saw itself pressed by international agreements – which have clearly shown how great the danger is that actions meant to be anticyclical can work in the end procyclically. A great part of expenditure programs was realized already when the construction industry worked full steam; thus they rather helped to raise prices than contributed to bigger employment. To this contribution of the state belongs also the consolidation of state finances. Neither the credit raised in 1979 nor the new indebtedness planned for 1980 fit into the business situation. Consolidation is made more difficult also by the large-scale tax reduction planned for 1981. Since it is meant to balance the progression of the taxation system which, during a relatively high inflation, hits the taxpayer more than corresponding to his increased performance, it should be considered just. On the other hand, one can hardly see how the regional authorities should cope with this loss of revenues if simultaneously the raising of credit has to be also reduced. For the time being these are no small contradictions in financial policy actions and between fiscal and monetary policy.

ВАЛЮТНО-ФИНАНСОВАЯ ПОЛИТИКА И КОНЪЮНКТУРА В ФРГ

Н. КЛОТЕН

В статье представлены основные аспекты финансовой и валютной политики ФРГ, которые разъясняются на примере современного экономического положения ФРГ. Внешнеэкономическая среда выдвинула новые требования перед монетарной политикой. Официальные (создание ЕВС) и неофициальные (соглашения между эмиссионными банками о мерах по уточнению курса валют на валютном рынке) международные соглашения вновь внесли в международную валютную систему элемены фиксирования валютных курсов. Вследствие этого вновь возникла опасность подчинения монетарной политики вынужденным внешнеэкономическим обстоятельствам. В начале 1980 г. в ФРГ эта опасность действительно имела место. Высокая ставка процента в США, а также сообщения об ожидаемом дефиците баланса товаров и услуг ФРГ временно привели марку на грань девальвации. Учитывая внешнеэкономическое положение, монетарная политика была вынуждена прибегнуть к новому повышению процента в таких условиях, когда внутреннюю конъюнктуру можно было считать относительно непрочной. Однако это положение со временем изменилось. На валютном рынке вновь ожидается ревалоризация марки и конъюнктура оказалась более благопри-

ятной, чем предполагалось в начале года. Федеральный банк вновь получил возможность заниматься своими первостепенными задачами: поддерживать денежное обеспечение в средних рамках, снижать темпы инфляции без ущерба для экономического роста и занятости. В заключительной части статьи рассматривается стратегия, направленная на преодоление дефицита баланса товаров и усуг. Показывается, что нынешняя ситуация не является случаем, содержащимся в «учебниках», и поэтому в ней неприменимы методы, предлагаемые «учебниками». Поэтому не следует прибегать к политике форсирования экспорта и ограничения импорта, а сохранять в течение определенного времени дефицит, ослабляя зависимость экономики от нефти. Такая стратегия во всяком случае рекомендуется до тех пор, пока страны ОПЕК будут тратить свою возросшую выручку от повышения цен на нефть не на покупку благ, производимых развитыми промышленными странами, а возвращать ее в форме капиталовложений. Однако это не значит, что необходимые структурные изменения произойдут сами по себе.

Acta Oeconomica Vol. 24(3–4), pp. 263–276 (1980)

G. BIRÓ

UNGARNS INTERNATIONALE WIRTSCHAFTSBEZIEHUNGEN AN DER SCHWELLE DER ACHTZIGER JAHRE

Die ungarische Wirtschafts- und Außenwirtschaftspolitik steht vor der Aufgabe der Erhöhung ihrer Anpassungsfähigkeit an die sich schnell verändernden weltwirtschaftlichen Verhältnisse der achtziger Jahre. Wachstumspolitik, das Lenkungssystem der Wirtschaft, die RGW-Zusammenarbeit und die wirtschaftlichen Beziehungen zu entwickelten Industrieländern sind Schwerpunktbereiche des Anpassungsprozesses.

Da Ungarn ein auf die Außenwirtschaft orientierter Kleinstaat ist, dessen Teilnahme an der internationalen Arbeitsteilung wachsende Tendenzen aufweist, erscheint es unerläßlich, bei der Ausarbeitung der Entwicklungsstrategie der internationalen Wirtschaftsbeziehungen und somit auch der Wirtschaftspolitik von einigen wesentlichen Tendenzen der Weltwirtschaft auszugehen, die es in diesem Zusammenhang zweckmäßig erscheint, in Betracht zu ziehen.

Vor allem muß in dieser Hinsicht berücksichtigt werden, daß sich seit der zweiten Hälfte der siebziger Jahre in den hochentwickelten Staaten eine neue Etappe des Wachstums entfaltet, in der den Hauptimpuls des Wachstums nicht mehr die Erweiterung des Input von Arbeitskräften, Rohstoffen und finanziellen Ressourcen bildet, sondern die Rationalisierung der Aufwendungen und die Umwandlung der Struktur der Produktion.

Die Ausarbeitung eines – den neuen Umständen entsprechenden – Wachstumsprozesses bedeutete eine beachtenswerte Herausforderung für die ungarische Wirtschaftspolitik. Es mag vielleicht paradox klingen, aber die für Ungarn im wesentlichen ungünstigen Veränderungen auf dem Weltmarkt können langfristig insofern auch positive Auswirkungen haben, daß sie zu einer beachtenswerten Überprüfung der Wirtschaftspolitik und des Wirtschaftslenkungssystems geführt haben.

Der Ausgangspunkt ist hierbei eine neuartige Wachstumsphilosophie, die die Anpassung an die Gegebenheiten des Weltmarktes erleichtern soll.

Darum ist insbesondere in der für die ungarische Volkswirtschaft gegenwärtig kennzeichnenden intensiven Entwicklungsphase die während einer ganzen Periode dominierende quantitative Anschauung überholt.

Das zu Lasten des Gleichgewichts der Außenwirtschaft beschleunigte Wirtschaftswachstum verschärft daher offensichtlich die durch die verschlechterten internationalen Austauschverhältnisse und die Absatzschwierigkeiten auf dem Weltmarkt entstandenen Probleme. Der Zusammenhang zwischen Wachstum und Gleichgewicht macht sich

besonders scharf in einem außenhandelsempfindlichen Land wie Ungarn bemerkbar, wo der entscheidende Anteil der Produkte der bedeutendsten Branchen exportiert werden muß, weil die Deckung des Bedarfes der Bevölkerung sowie der Produzenten in erheblichem Maße von den Einfuhren abhängt.

In Ungarn vollzieht sich nämlich erfahrungsgemäß eine jährliche 3–4 prozentige Zunahme des Nationaleinkommens derart, daß jeder Prozent des Wachstums die westlichen, d. h. in freikonvertierbarer Währung verrechneten Einfuhren, um 1,3–1,5 Prozent steigert. Wenn aber das jährliche Wachstum des Nationaleinkommens 5–6 Prozent beträgt, entfällt auf jeden einprozentigen Zuwachs eine mehr als zweiprozentige Einfuhrerhöhung.

Es ist daher offensichtlich, daß mit der Beschleunigung des Entwicklungstempos auch die unproportionale Beschleunigung der Einfuhren aus Ländern mit freikonvertierbarer Währung verbunden war und die Ausfuhren damit nicht Schritt halten konnten. In diesem Zusammenhang erscheint es zweckmäßig, darauf hinzuweisen, daß 1979 eine der Faktoren der 40–50-prozentigen Verminderung des passiven Saldos der Handelsbilanz die Tatsache war, daß das Wachstumstempo der besonders importintensiven chemischen Industrie von 11 Prozent im Vorjahr auf 3 Prozent gesunken ist.

Dies motivierte die erforderliche Verlangsamung des Wachstumstempos. Der Plan für 1979 hat bereits aus dieser Sicht auf die Umstände hingewiesen, die voraussichtlich in der ersten Hälfte der achtziger Jahre die ungarische Wirtschaftspolitik determinieren werden. Die Aufgabe besteht darin, die ungarische Volkswirtschaft auf eine solche neue Wachstumsbahn zu stellen, auf der sich – vermutlich ab Mitte der achtziger Jahre – die erneute Beschleunigung der Entwicklung bereits auf international ausgeglichener Grundlage vollziehen kann.

Bei der 25,5 prozentigen Steigerung der Ausfuhren in freikonvertierbarer Währung in den ersten drei Quartalen in 1979 haben auch solche Faktoren wie die Verlangsamung der Investitionen und somit der inländischen Nachfrage und der Abbau der Lagervorräte eine große Rolle gespielt.

Im Interesse einer Fortsetzung der Exportexpansion muß die Erzeugnisstruktur erheblich modernisiert und die internationale Wettbewerbsfähigkeit verbessert werden. Dies führt unvermeidlich zu einer erhöhten Teilnahme an der internationalen Arbeitsteilung, sowie zur Beschleunigung des Technologietransfers.

Dazu ist es aber unerläßlich, auch im Lenkungssystem der Wirtschaftstätigkeit bedeutende Veränderungen durchzuführen.

Die vor kurzem vollzogene Überprüfung des Wirtschaftslenkungssystems beruht auf den Richtlinien der 1968 eingeführten Wirtschaftsreform. Bekanntlich hat die am 1. 1. 1968 durchgeführte Reform die Selbständigkeit der ungarischen Unternehmen wesentlich erhöht und somit auch den Spielraum für Initiativen auf einzelbetrieblicher Ebene bedeutend erweitert. In Ungarn entscheiden die Unternehmen selbst über ihre Produktionsstruktur und das Sortiment ihrer Erzeugnisse und der Staat orientiert die Unternehmen vor allem mit Hilfe seines wirtschaftlichen Instrumentariums, d. h. aufgrund der Preispolitik, Steuerpolitik und Kreditpolitik.

Andererseits wurden die perspektivischen Richtlinien der Entwicklung des Preissystems erarbeitet.

Bei der Modifizierung der Wirtschaftslenkung kommt dem bei den Erzeugerpreisen im Jahre 1980 eingeführten neuen Preismechanismus besondere Bedeutung zu. Da die Rolle der Preise in hohem Maße verzerrt war, konnte der Gewinn der Unternehmen nicht den Nutzeffekt der Produktion aus makroökonomischer Sicht ausdrücken und da die Erzeugerpreise auch die Relationen des Weltmarktes nur sehr unvollkommen widerspiegelten, waren die Unternehmen oft nicht in der Lage, zu beurteilen, ob ihre unter den inländischen Preisen mit Gewinn hergestellten Erzeugnisse auch auf dem Weltmarkt vorteilhaft vermarktet werden können.

Der bisherige Mechanismus der Preisbildung führte außerdem oft dazu, daß die Unternehmen bemüht waren, die durch die unabhängig vom Weltmarktpreis getroffenen technologischen und betriebswirtschaftlichen Entscheidungen entstandenen Kosten in die Preise einzubauen.

Ab 1. 1. 1980 sind in der ungarischen Industrie die Erzeugerpreise wiederum überwiegend sogenannte kompetitive Preise.

Unter kompetitiver Preisbildung ist zu verstehen, daß der Input-Preis der Rohstoffe und Energieträger durch die Weltmarkt-Importpreise, der Output-Preis der Unternehmen dagegen durch den Weltmarkt-Exportpreis determiniert wird. Dadurch, daß der Exportpreis den Maßstab der Kompetivität darstellt, soll die Preisregelung vor allem auf die Strukturpolitik orientieren, durch die eine Ausweitung des Exportpotentials erreicht werden soll. Das bedeutet, daß ab 1980 der Gewinn der Unternehmen in wesentlich höherem Maße als bisher der Effektivität entspricht, wodurch es ermöglicht wird, bei der Beurteilung der Tätigkeit der Mikrosphäre dem Gewinn die Bedeutung zu geben, die man ihm schon ursprünglich bei der Einführung der Reform im Jahre 1968 verleihen wollte und dadurch die Interessiertheit der Unternehmen sowie der einzelnen Arbeitnehmer in höherem Maße als bisher an den Gewinn zu knüpfen.

Hierbei muß auch berücksichtigt werden, daß die Einführung der kompetitiven Preise auch die Binnenwirtschaft Ungarns in steigendem Maße mit dem Weltmarkt verknüpft.

Es wird auch damit gerechnet, daß die Einführung der neuen Erzeugerpreise zu einer wesentlichen Verbesserung der Rentabilität der Ausfuhren führt.

Schließlich wird es durch die Veränderung des Preissystems ermöglicht, sich bei der Lenkung der Volkswirtschaft in steigendem Maße auf die Interessiertheit der Unternehmen und auf die Orientierungswirkung der Wertrelationen zu stützen und das Ausmaß der administrativen Einmischung in die Führung der Unternehmen weiter zu vermindern.

Im Zusammenhang mit den eingeführten neuen Erzeugerpreisen gewinnt das Thema der Wechselkurse der ausländischen Währungen an Bedeutung. Es liegt auf der Hand, daß wenn in einer Volkswirtschaft der Preis der die Grundlage der Kalkulation bildenden Rohstoffe und Energieträger sich an den Weltmarktpreis anpaßt, dann die Rolle des Wechselkurses der ausländischen Währungen bei der Regulierung des Preisniveaus wesentlich steigt.

Es war vorgesehen, den Wechselkurs des transferablen Rubels ab 1. 1. 1980 bei 28 Forint und den des US Dollars bei 34 Forint festzulegen. Es handelt sich hier natürlich nur um den Wechselkurs des Außenhandels und nicht um den des Reiseverkehrs. Außer den Veränderungen der Preispolitik wird auch die Tatsache, daß in Zukunft eine stärkere Differenzierung der Unternehmen als bisher erfolgt, den Besten unter ihnen die Beschleunigung ihrer Entwicklung und die Steigerung ihrer Wettbewerbsfähigkeit auf dem Weltmarkt ermöglichen. Da sich die Entfaltung der Kaufkraft auf dem Binnenmarkt durch das Abbremsen der Investitionstätigkeit gleichfalls verlangsamt, wird die Denkweise der Manager dazu stimuliert, sich in stärkerem Maße auf den Weltmarkt zu orientieren und die Unternehmenskalkulation und -strategie den Gegebenheiten des Weltmarktes anzupassen.

Im Einklang mit diesen Zielsetzungen wurde Ende Juli 1979 eine im Schnitt 9prozentige Erhöhung der Konsumentenpreise durchgeführt, deren Zweck außer einer Eindämmung der kontinuierlichen Erhöhung der staatlichen Subventionen es war, auch im Bereich des Konsums gewissen strukturellen Veränderungen Impulse zu verleihen. So wurde beispielsweise bei solchen Produkten, die verhältnismäßig günstig exportiert werden können, die Subvention überdurchschnittlich herabgesetzt.

Die Weiterentwicklung des Wirtschaftslenkungssystems muß auch zu Veränderungen im Organisationssystem der Unternehmen führen.

Hierbei muß vor allem berücksichtigt werden, daß in Ungarn durch eine bedeutende Beschleunigung der Zentralisierung in der Industrie bereits im Jahre 1975 bei 50 Großunternehmen 60 Prozent des Nettowertes der Grundfonds zu finden waren. Gegenwärtig zählt man in der ungarischen Industrie insgesamt nur 712 Unternehmen und 701 Genossenschaften.

Weiterhin ist es für die Struktur der ungarischen Industrie kennzeichnend, daß nur ein Viertel der Unternehmen seine Tätigkeit an einem Standort ausübt, während zwei Drittel der Unternehmen über drei oder mehr Betriebe an verschiedenen Standorten verfügt.

Die Zusammenarbeit dieser, miteinander nur auf sehr lockere Weise verknüpften Fabrikseinheiten wird oft auch dadurch eingeschränkt, daß diese Einheiten miteinander um einen größeren Anteil an den gemeinsamen Ressourcen des Unternehmens kämpfen.

Das gegenwärtige außerordentlich zentralisierte System der Unternehmen ist aus der Sicht der Konzentrierung der Ressourcen, dem Auftreten auf dem Weltmarkt und der Durchführung einiger struktureller Veränderungen strategischen Charakters in gewisser Hinsicht vorteilhaft, während es wiederum nicht voll und ganz konform mit dem gegenwärtigen Wirtschaftslenkungssystem ist, da durch diese Struktur der Unternehmen ein Großteil der Kontakte zwischen Verkäufer und Käufer dem Wirkungskreis des Marktes entzogen wird und außerdem die Erhöhung der Elastizität und die Einstellung unrentabler Produktion bei den Großunternehmen dieses Typs meistens schwierig ist.

Bei der kritischen Prüfung und komplexen Weiterentwicklung des Wirtschaftslenkungssystems wird außerdem auch den Beziehungen der Industrie- und Außenhandelsunternehmen große Aufmerksamkeit gewidmet. In Ungarn verfügt außer den speziali-

sierten Außenhandelsunternehmen auch eine Reihe von Produktionsunternehmen über das Recht, ihre Erzeugnisse unmittelbar zu exportieren. Dadurch wurden die Kontakte dieser Unternehmen zum Weltmarkt sowie der Abschluß von Kooperationsabkommen aus institutioneller Sicht wesentlich gefördert.

Deshalb ist es auch vorgesehen, den Kreis der über ein Außenhandelsrecht verfügenden Produktionsunternehmen zu erweitern.

In der gegenwärtigen Etappe geht es aber darüber hinaus vor allem darum, eine möglichst optimale gemeinsame Plattform der Interessiertheit der Produktions- und Außenhandelsunternehmen zu finden, wobei es möglich ist, daß dieses optimale Modell in den verschiedenen Branchen unterschiedlich ist. Eins dieser Modelle ist voraussichtlich die Gründung von Gemeinschaftsunternehmen von Produktion und Außenhandel, die ab 1. 1. 1980 auch durch steuerliche Vergünstigungen gefördert wird.

Bei der Steigerung des Nutzeffekts der Wirtschaftstätigkeit kommt der Teilnahme an der sozialistischen ökonomischen Integration innerhalb des RGW eine große Bedeutung zu.

Die mit den anderen Mitgliedsstaaten des RGW abgeschlossenen langfristigen Kooperations- und Spezialisierungsabkommen ermöglichen es Ungarn, seine Anstrengungen auf einige Branchen bzw. Produkte zu konzentrieren und in diesen Bereichen auch im internationalen Maßstab wettbewerbsfähig zu bleiben oder zu werden. Deshalb ist die Ausarbeitung der langfristigen Zielprogramme, die eine neue Etappe bei der Förderung der Integration auf der Grundlage des Komplexprogrammes des RGW bedeutet, auch aus dieser Sicht beachtenswert.

Das höchste Organ des RGW hat anläßlich seiner 32. Tagung in Bukarest vom 27. bis 29. Juni 1978 die langfristigen Zielprogramme der Zusammenarbeit in der Roh- und Brennstoffwirtschaft, in der Land- und Nahrungsgüterwirtschaft sowie im Maschinenbau bestätigt und grundlegende Beschlüsse zur Entwicklung der Kernenergetik gefaßt. Bei der in Moskau vom 26. bis 28. Juni 1979 abgehaltenen 33. Ratstagung wurden zwei weitere langfristige Zielprogramme der Zusammenarbeit bei der Produktion von industriellen Konsumgütern sowie beim Ausbau des Verkehrswesens angenommen.

Diese langfristigen Zielprogramme umfassen gemeinsam betrachtet die wichtigsten Bereiche der Wirtschaft.

Im Bereich des Fernmeldewesens schalten sich die ungarischen Unternehmen beispielsweise in die Zusammenarbeit bei der Herstellung von Vorprodukten und Bestandteilen von Farbfernsehapparaten ein und haben auch einen Teil der Entwicklungs- und Herstellungstätigkeit bei den zur Fabrikation und zum Service von Farbfernsehapparaten sowie zur Ausrüstung von Fernsehzentralen notwendigen Kontroll- und Meßgeräten und Vorprodukten von Tonbandgeräten übernommen.

Bei den Haushaltgeräten plant man vor allem bei der Herstellung von Vorprodukten eine Spezialisierung, wodurch der Nutzeffekt und die Wettbewerbsfähigkeit dieser Branchen wesentlich erhöht werden können.

Da der Transitverkehr ein Viertel der Lieferungen der Eisenbahnen Ungarns ausmacht, muß Ungarn die Kapazitäten nicht nur für den eigenen Bedarf, sondern darüber

hinaus auch für den Bedarf der übrigen RGW- Mitgliedsstaaten ausbauen, die Transitlieferungen über Ungarn abwickeln. Deshalb ist es begründet und notwendig, daß bei der Durchführung des langfristigen Zielprogrammes die besondere Lage Ungarns als Transitland weitgehend berücksichtigt wird.

Außerdem kommt aus ungarischer Sicht der Zusammenarbeit bei der Versorgung der Industrie mit modernen Vorprodukten eine große Bedeutung zu. Deshalb hat man ungarischerseits vorgeschlagen, die Spezialisierung und Kooperation in diesem Bereich durch die eine moderne Massenfertigung von produktiven Halbwaren errichtet wird, als Schwerpunktaufgabe zu betrachten.

Es besteht kein Zweifel, daß der stabile und zugleich dynamische Markt der übrigen RGW-Mitgliedsländer es Ungarn ermöglichte, unter Nutzbarmachung der internationalen Arbeitsteilung, auch für den westlichen Markt wettbewerbsfähige Branchen und Produkte zu entwickeln.

Diese Behauptung wird auch durch folgende Zahlen abgestützt: Ungarn hat einen 8prozentigen Anteil am Warenaustausch innerhalb des RGW und einen annähernd 10prozentigen Anteil am Handel der Mitgliedsstaaten des RGW mit den übrigen Ländern der Welt.

Im Jahre 1978 wurden elf bilaterale bzw. multilaterale Spezialisierungs- und Kooperationsabkommen mit den übrigen RGW-Mitgliedsstaaten abgeschlossen. Es ist bemerkenswert, daß ein Drittel der ungarischen Ausfuhren in die übrigen Mitgliedsstaaten des RGW bereits aufgrund solcher langfristigen Abkommen getätigt wird. Darauf besteht die Effektivität und die internationale Wettbewerbsfähigkeit solcher ungarischer Industriezweige, wie z. B. der Omnibusbau, sowie der Bau von Hinterachsen im Bereich der Fahrzeugindustrie, das Fernmeldewesen und die Datenverarbeitung, die Tonerde- und Aluminiumindustrie, weiterhin zahlreiche Sparten der chemischen und pharmazeutischen Industrie, und auf der Grundlage dieser Abkommen werden bereits 53 Prozent der Maschinenausfuhren in die übrigen Mitgliedsstaaten des RGW getätigt.

Gleichzeitig muß auch festgestellt werden, daß die gegenwärtigen Wirtschaftsprobleme der RGW Mitgliedsstaaten ähnliche Züge aufweisen, weshalb sich Engpässe auf identischen Gebieten zeigen. Dies führte dazu, daß die Beschaffungsbedingungen der zur Ausweitung der Produktion notwendigen Grund- und Rohstoffe erschwert und die Wachstumsmöglichkeiten des Austausches wettbewerbsfähiger Produkte herabgesetzt wurden.

Aus der Sicht der Förderung der Energieträger kann man auch in Ungarn eine gewisse Renaissance der Kohle verzeichnen, die gegenwärtig in der Struktur der Energieträger einen 32 prozentigen Anteil hat. In Westungarn werden zwei neue Braunkohlengruben angelegt und nach der Öffnung zwei weiterer neuer Gruben wird die Grundlage für die zusätzliche Förderung von insgesamt 8 Millionen Tonnen Kohle geschaffen, wodurch die Belieferung eines zu errichtenden großen Wärmekraftwerkes gewährleistet sein wird.

Die Kohlenförderung kann in Ungarn durch die Öffnung neuer Gruben und die Modernisierung des Bergbaus bis zum Ende dieses Jahrhunderts verdoppelt werden, was

aber auch nur bedeutet, daß der Kohlenbergbau etwa 35 Prozent der Erhöhung des Bedarfes an Energieträgern decken kann.

In Ungarn werden jährlich etwa 7 Milliarden Kubikmeter Erdgas gefördert und die vor kurzem erfolgte Fertigstellung der 2700 Kilometer langen Erdgasleitung – die das bisher größte gemeinsame Bauvorhaben des RGW bildet – wurde es ab 1980 ermöglicht, jährlich 2,8 Milliarden Kubikmeter Erdgas aus der Sowjetunion einzuführen, womit der Anteil von Erdgas bei der Energieversorgung steigen wird.

Der Bau des ersten ungarischen Kernkraftwerks in Paks mit einer Kapazität von 1760 MW, dessen Fertigstellung für Anfang der achtziger Jahre vorgesehen ist, begann aufgrund eines 1973 mit der Sowjetunion geschlossenen Abkommens.

Der Ausbau dieser Energiequellen soll das Wachstum des gegenwärtig etwa 10 Millionen Tonnen betragenden Verbrauchs von Öl verlangsamen. Außerdem sollen die Änderungen der Erzeuger- und Konsumentenpreise ebenfalls maßgeblich dazu beitragen, daß die Unternehmen und Verbraucher Impulse für bedeutende Ersparnisse mit Energie bekommen.

Es besteht aber kein Zweifel, daß der Schwerpunkt bei den Bemühungen zur stufenweisen Verbesserung des Gleichgewichts bei der Förderung einer Exportexpansion liegen muß.

Die Sektoren der ungarischen Volkswirtschaft, die die wichtigsten Träger dieser langfristigen außenwirtschaftlichen Zielsetzungen darstellen, sind vor allem der Maschinenbau, die Landwirtschaft und die Lebensmittelindustrie. Außerdem sollen dabei auch einige Branchen der Industrie, wie die Aluminiumindustrie und die pharmazeutische Industrie ebenfalls eine gewisse Rolle spielen. Im ungarischen Maschinenbau ist in letzter Zeit eine im Zeichen der Exportexpansion stehende Dynamisierung der Entwicklung zu verzeichnen.

Im Zeitraum des fünften Fünfjahrplans (1976–80) wurden bzw. werden insgesamt 61–64 Milliarden Forint für Investitionen im Maschinenbau verwendet, wovon etwa die Hälfte der Steigerung der Ausfuhren in freikonvertierbarer Währung dienen soll. Hierfür hat die Ungarische Nationalbank den Unternehmen Exportkredite zur Verfügung gestellt und die bisherigen Erfahrungen zeigen eindeutig, daß diese Form der Exportförderung den ungarischen Unternehmen die Anpassung an die veränderte Weltwirtschaftslage erleichtert.

Außerdem wird es dadurch ermöglicht, außer den in den Volkswirtschaftsplänen festgelegten lang- und mittelfristigen Zielsetzungen auch verhältnismäßig kurzfristig solche Projekte der Unternehmensstrategie zu fördern, durch deren Durchführung die Elastizität und somit auch die internationale Wettbewerbsfähigkeit wesentlich erhöht werden kann. In diesem Zusammenhang darf auch nicht übersehen werden, daß gegenwärtig die Mehrzahl der Staaten mit Anpassungsproblemen ihrer Volkswirtschaft beschäftigt ist und dadurch ein regelrechter Anpassungswettbewerb ausgetragen wird, in dem der Zeitfaktor eine wesentliche Rolle spielt. Diese Überlegungen und die bisherigen günstigen Erfahrungen haben es veranlaßt, daß man im Zeitraum des sechsten Fünfjahrplans

(1981–85) mit einer bedeutenden Steigerung des Anteils der Exportkredite an der Investitionsfinanzierung rechnet.

Die Tungsram-Werke nehmen mit einem 4prozentigen Anteil an der Weltproduktion von Lichtquellen einen besonderen Platz im Fertigwarenexport Ungarns ein.

Als Ergebnis des zentralen Entwicklungsprogramms ist der ungarische Straßenfahrzeugbau in höherem Maße spezialisiert als seine ausländischen Partner. Während beispielsweise in Ungarn Personenkraftwagen überhaupt nicht und Lastkraftwagen auch nur in sinkendem Maße gebaut werden, wird auf Autobusse, Motore und Hinterachsen konzentriert, wodurch die ungarischen Autobusse einen 20prozentigen Anteil am Welthandel dieses Produktes haben.

Es wurde geplant, im Jahre 1980 14.000 Autobusse, 140.000 Hinterachsen und 30.000 Motore zu bauen und größenteils auszuführen.

Das für Erzeugnisse des Straßenfahrzeugbaus zuständige ungarische Außenhandelsunternehmen Mogürt hat bereits 1978 Ausfuhren in freikonvertierbarer Währung im Werte von 120 Millionen US Dollar getätigt. Gleichzeitig damit wird die Zahl von Montagebetrieben für Autobusse im Ausland vermehrt.

In letzter Zeit ist eine beachtenswerte Renaissance der über eine alte Tradition verfügenden Ausfuhren von ungarischen Eisenbahnfahrzeugen zu verzeichnen.

Die Budapester Ganz-Mávag Werke verfügen gegenwärtig in diesem Bereich bereits über größere Bestellungen als je zuvor: Allein für Eisenbahnfahrzeuge haben sie eine Bestellung im Werte von 35 Millionen US Dollar, durch die ihre Kapazität in diesem Bereich für etwa 2 Jahre ausgelastet ist.

Bei den Fertigteilen und Komponenten hat man auf der Grundlage eingehender Kalkulationen und Analysen 17 sogenannte Produktenfamilien ausgewählt, wo man eine moderne spezialisierte Produktion entwickelt, durch die nicht nur der Bedarf der ungarischen Betriebe gedeckt werden, sondern darüber hinaus auch eine selbständige Ausfuhr in freikonvertierbarer Währung getätigt werden kann und eine Grundlage für weitere Spezialisierungen und Kooperationen innerhalb des RGW geschaffen wird.

Als Ergebnis der geschilderten und einer Reihe weiterer Maßnahmen und Projekte sollen die Maschinenausfuhren in freikonvertierbarer Währung in den kommenden anderthalb Jahrzehnten auf ein Vier- bis Fünffaches erhöht werden, was etwa einem Wert von 3 Milliarden US Dollar entspricht.

Die Exportquote der ungarischen pharmazeutischen Industrie beträgt etwa 70 Prozent, wovon 60 Prozent in die anderen Mitgliedsstaaten des RGW geliefert werden. In diesem Zusammenhang ist es nennenswert, daß innerhalb des RGW der Anteil der ungarischen pharmazeutischen Industrie am Handel mit Medikamenten am bedeutendsten ist. Für 1979 werden Lieferungen im Werte von 190 Millionen Rubel geplant.

Die Ausfuhren in freikonvertierbarer Währung erreichten bereits 1977 den Wert von 100 Millionen US Dollar und erhöhten sich 1978 um 15 Prozent während man für 1979 eine weitere 8prozentige Steigerung plant.

Die ungarische Industriepolitik sieht vor, die pharmazeutische Industrie auch in Zukunft überdurchschnittlich zu entwickeln, da die Nachfrage an Medikamenten auf dem

Weltmarkt rasch wächst. Hierbei spielt außer der Erhöhung der Weltbevölkerung und des Durchschnittsalters vor allem der steigende Bedarf der Entwicklungsländer eine besonders große Rolle.

Die bereits erfolgte Gründung von Gemeinschaftsunternehmen in Indien, Pakistan und Nigerien wird diese Tendenz weiter fördern.

Außerdem ist aber die ungarische Wirtschaftspolitik auch bestrebt, das Angebot kompletter Einrichtungen in die Entwicklungsländer wesentlich zu erweitern und sich somit an die neuen Gegebenheiten des Weltmarktes anzupassen, wie z. B. die Lieferung größerer Einheiten für das Gesundheitswesen des Partnerlandes bzw. den kompletten Ausbau des gesamten Netzes des Gesundheitswesens inbegriffen die Übergabe der Kenntnisse bez. wissenschaftlicher, organisatorischer Ausbildungs- und sonstiger Dienstleistungen.

Die Ungarischen Aluminiumwerke stehen hinsichtlich der Ausfuhren in freikonvertierbarer Währung an der Spitze der ungarischen Unternehmen: Im Jahre 1978 betrug der Wert der Ausfuhren in freikonvertierbarer Währung 123 Millionen US Dollar und 1979 wird voraussichtlich die Summe von 165 Millionen US Dollar erreicht werden.

Es handelt sich hier um ein kontinuierliches Wachstum. Während im Zeitraum des vierten Fünfjahrplans (1971–75) die Exporterlöse 250 Millionen Dollar ausmachten, rechnet man für den Zeitraum des fünften Fünfjahrplans (1976–80) bereits mit 670 Millionen Dollar.

Es handelt sich aber in diesem Bereich nicht nur um bedeutende Exporterlöse in freikonvertierbarer Währung, sondern darüber hinaus auch um besonders rentable Ausfuhren, da die ungarische Aluminiumindustrie unter günstigeren Bedingungen arbeitet als dies in den meisten Staaten Europas der Fall ist. Deshalb konnte bereits 1976 der durchschnittliche Verbrauch von Aluminium pro Kopf der Bevölkerung gerechnet 13 Kilogramm erreichen – was den vergleichbaren Werten der industriell hochentwickelten Staaten entspricht – und soll bis 1980 auf 20 Kilogramm gesteigert werden.

Zu den komparativen Vorteilen der ungarischen Aluminiumindustrie tragen vor allem die Bauxitvorräte bei, die zwar im Weltmaßstab nicht sehr bedeutend sind, aber dazu reichen, noch für viele Jahrzehnte ausreichend billigen Grundstoff für die Tonerde- und Aluminiumindustrie Ungarns zu liefern.

Hierbei muß auch berücksichtigt werden, daß in Europa außer Ungarn nur drei weitere Staaten und zwar Frankreich, Jugoslawien und Griechenland über nennenswerte Bauxitvorräte verfügen, während die Tonerde- und Aluminiumfabriken der anderen Länder gezwungen sind, überwiegend durch bedeutende Frachtkosten verteuerten Bauxit aus Übersee einzuführen.

Beim Ausbau der ungarischen Aluminiumindustrie hat das bis 1985 gültige ungarisch-sowjetische Aluminiumabkommen eine wesentliche Rolle gespielt. Ungarn lieferte im Jahr 1979 auf der Grundlage dieses Abkommens 320.000 Tonnen Tonerde an die Sowjetunion und bezog dafür 160.000 Tonnen Aluminium, was voll und ganz der Quantität des aus der gelieferten Tonerde gewonnenen Aluminiums entspricht, da man aus zwei Tonnen Tonerde durchschnittlich eine Tonne Aluminium gewinnt. Diese

langfristige Zusammenarbeit hat sich als beiderseitig vorteilhaft erwiesen, da die billige Energie der sowjetischen Wasserkraftwerke die Transportkosten ausgleicht.

Außerdem liefert Ungarn seit 1970 auf der Grundlage eines langfristigen Abkommens jährlich 75.000 Tonnen Tonerde nach Österreich zur Verarbeitung in Ranshofen. Im Jahre 1979 ging in Österreich zusätzlich die Salzburger AG voll und ganz zur Verarbeitung ungarischer Tonerde über, wofür von den Ungarischen Aluminiumwerken 18.500 Tonnen Tonerde geliefert wurde.

Da sich in letzter Zeit die Weltmarktpreise für Aluminium in wesentlich höherem Maße gesteigert haben als die Strompreise, wird gegenwärtig die Herstellung von Aluminium in Ungarn bereits als rentabel betrachtet.

Ungarn hat sich dadurch komparative Vorteile erworben, daß der Preis des Stroms der ungarischen Wärmekraftwerke bereits gegenwärtig etwa dem Weltmarktsniveau entspricht und durch die neuerschlossenen Braunkohlenvorräte von gutem Heizwert sich in Zukunft ausgesprochen vorteilhafter gestalten wird als bei der überwiegenden Mehrzahl der Aluminiumproduzenten, die oft importiertes Öl zur Stromerzeugung verwenden.

Deshalb steht der Bau eines Aluminiumhochofens mit einer Jahreskapazität von 100. 000 Tonnen auf der Tagesordnung, wozu eine Investition im Werte von 12–13 Milliarden Forint benötigt wird, wodurch aber der Warenfonds für Ausfuhren in freikonvertierbarer Währung wesentlich erweitert werden könnte. Die Pläne dieses Projektes sind bereits ausgearbeitet und über die Realisierung wird auch mit ausländischen Partnern verhandelt.

Die Ungarischen Aluminiumwerke haben bereits ein beachtenswertes Kooperationsabkommen mit der amerikanischen Firma Advance Pressure Castings Corp. (APC) über den Bau einer Aluminiumgießerei im westungarischen Ajka geschlossen.

Die amerikanische Firma stellt das know-how zur Verfügung und verpflichtet sich im Rahmen eines für 12 Jahre geschlossenen Abkommens, die Gesamtproduktion der Gießerei zu vermarkten, was jährlich einer Summe von etwa 9 Millionen US Dollar entspricht.

Die ungarische Landwirtschaft und Lebensmittelindustrie verfügt über beachtliche komparative Vorteile, die zur Verwirklichung der langfristigen Zielsetzungen der Außenwirtschaft beitragen können. Ungarns Anteil am Weltexport von Lebensmitteln beträgt gegenwärtig 1,5 Prozent, rund das Doppelte seines Anteils am Welthandel. Der bedeutendste Unterschied zwischen der Warenstruktur Ungarns und der des Welthandels besteht nämlich darin, daß während der Anteil der Rohstoffe und Energieträger an der Ausfuhr Ungarns bloß 6,1 Prozent, der Welthandelsanteil jedoch das Fünffache davon ausmacht, ist der Anteil der Lebensmittel am Welthandel viel geringer als die Hälfte des Anteils an den ungarischen Ausfuhren.

In der Geflügelausfuhr beträgt der Anteil Ungarns am Welthandel 13 Prozent und es belegt – abwechselnd mit Holland – den ersten bzw. zweiten Platz in Europa. Die Fleischproduktion soll innerhalb von 15 Jahren von den gegenwärtig durchschnittlich 95 kg pro Kopf auf 130 kg ansteigen.

All dies zeigt, auf welche Gegebenheiten sich die Zielsetzung stützt, wonach die Ausfuhren der in der langfristigen Außenwirtschaftsstrategie an zweiter Stelle stehenden Lebensmittelwirtschaft in 15 Jahren auf das 3,5fache gesteigert werden sollen.

Die geschilderten Veränderungen in der Wirtschaftspolitik und im Wirtschaftslenkungssystem sollen vor allem die Entfaltung solcher Tendenzen fördern, die eine Steigerung des Nutzeffekts der Wirtschaftstätigkeit durch eine vom Weltmarkt anerkannte Erhöhung der Veredelungsspanne gewährleisten.

Es liegt auf der Hand, daß diese im Mittelpunkt der ungarischen Wirtschaftspolitik stehende Zielsetzung nur durch eine erweiterte Teilnahme an der internationalen Arbeitsteilung sowie am Technologietransfer in die Tat umgesetzt werden kann.

Deshalb kommt auch den Kooperationen mit westlichen Firmen wachsende Bedeutung zu. Hierbei kann man sich auf die bei der Erfüllung der bisher abgeschlossenen mehr als 500 Abkommen gesammelten Erfahrungen sowie auf die regelmäßige und kontinuierliche Information über die Tendenzen der ungarischen Wirtschaftspolitik sowie die Strategie der ungarischen Unternehmen stützen, mit denen man ungarischerseits bestrebt ist, den Außenwirtschaftspartnern konkrete Hinweise für ihr Marketing zu geben.

Aus dieser Sicht kommt noch der am 9. November 1979 in Budapest gegründeten Mitteleuropäischen Internationalen Bank eine gewisse Bedeutung zu.

Bei der Gründung der Bank war der Ausgangspunkt die Förderung der internationalen Arbeitsteilung und damit des wirtschaftlichen Fortschritts durch den Beitrag zur Finanzierung des Ost-West-Handels und gemeinsamer Investitionen. Die Tätigkeit der Bank wird im Anfangsstadium auf die drei folgenden Bereiche konzentriert werden:

a) Finanzierung des Handels, inbegriffen die Finanzierung der Zusammenarbeit auf Drittmärkten ungarischer Unternehmen und westlicher Firmen.

b) Die Finanzierung von Investitionen.

c) Die Förderung von joint ventures zwischen ungarischen Unternehmen und westlichen Firmen.

Dabei wird sich die Bank auf den internationalen Markt sowie auf die Mitwirkung ihrer Aktionäre stützen, deren Anlagen mehr als 250 Milliarden US Dollar ausmachen.

Es liegt auf der Hand, daß die gesetzlichen Verpflichtungen der Aktionäre zwar die Summe des Grundkapitals um 20 Millionen US Dollar beschränkt sind, der internationale Goodwill der teilnehmenden Banken es wiederum ermöglicht, auf dem internationalen Markt erfolgreich aufzutreten.

Hierbei muß man auch in Betracht ziehen, daß es bei Konsortialbanken im internationalen Maßstab allgemein üblich ist, in der Geschäftstätigkeit das Zwanzigfache der Eigenmittel durch Fremdmittel zu decken, was in diesem Fall 400 Millionen US Dollar bedeutet.

Es handelt sich hier um eine sogenannte offshore Bank, die ihre Tätigkeit auf ähnliche Weise ausübt, als wenn ihr Standort sich in einem Freihafen befinden würde.

Das bedeutet in der Praxis, daß die Bank befugt ist, alle internationalen Banktätigkeiten in freikonvertierbarer Währung auszuüben und in diesem Bereich von den ungarischen Devisenvorschriften dispensiert worden ist. Die Bank hat aber nicht das

Recht, ungarischen Unternehmen ohne das Einvernehmen der Ungarischen Nationalbank Kredite zu gewähren, da es zum Wesen der ungarischen Kreditpolitik gehört, daß sie zentralisiert ist und die Bedingungen, unter denen ungarischen Unternehmen Kredite gewährt werden können, von der Ungarischen Nationalbank festgesetzt werden. Da es sich um eine Bank handelt, deren Aufgabenbereich die Förderung großer Abschlüsse ist, wird sie auch keinen Kundendienst haben, der Anlagen von ungarischen Unternehmen oder Privatpersonen annimmt.

Somit bedeutet die Gründung der Mitteleuropäischen Internationalen Bank AG in Budapest zwar keine Änderung des Banksystems in Ungarn, zeigt aber insofern neue Züge, daß damit zum ersten Mal mit einer Mehrheit westlicher Aktionäre eine offshore Bank mit Standort in einem sozialistischen Staat gegründet wird, die dazu befugt ist, jederlei Banktätigkeit in freikonvertierbarer Währung frei auszuüben und alle Voraussetzungen hat, auf ähnliche Weise zu arbeiten wie die Banken, die ihren Standort in den internationalen Finanzzentren haben. Außerdem hat die Bank die Möglichkeit, in gewissen Bereichen mit den ungarischen Partnern in Industrie und Handel unmittelbare Kontakte aufrechtzuerhalten und ist auch in der Lage, Kapitalbeteiligungen in gemeinsamen Unternehmen zu haben oder die ausländischen Kapitalbeteiligungen in joint ventures zu verwalten.

In der Entwicklung der Wirtschaftsbeziehungen zwischen Ost und West haben die politischen Faktoren in den seit dem zweiten Weltkrieg vergangenen dreieinhalb Jahrzehnten eine bedeutsame und zeitweilig determinierende Rolle gespielt. Auf diesem Gebiet brachte die Entspannung eine beachtliche Wandlung herbei, wodurch das Embargo in den Hintergrund gelangte und man auf breitem Aktionsradius in wachsendem Maße anerkannt hat, daß die Entfaltung der Ost-West-Beziehungen wechselseitig vorteilhaft ist. Diese Erkenntnis gab den Impuls zum Ausbau des verhältnismäßig weitläufigen Netzes der bilateralen zwischenstaatlichen Rahmenabkommen, die die industrielle und technische Zusammenarbeit fördern.

Obwohl der überwiegende Anteil der wirtschaftlichen Zusammenarbeit zwischen den beiden Weltsystemen noch in traditioneller Form des Außenhandels, aufgrund von Kaufverträgen verwirklicht wird, verbreiten sich auch in der Mikrosphäre der Unternehmen die komplexen langfristigen Produktions- und Vertriebsbeziehungen.

Es ist offensichtlich, daß in der Mikrosphäre der Ausgangspunkt der Unternehmensstrategie stets mehr in der Verlegung der einzelnen Produktionsphasen und der Diversifizierung der Unternehmensaktivität besteht. Die Verlegung der Erzeugung einzelner Produkte vermag ebenfalls eine Methode der Wettmachung der auf dem Weltmarkt verzeichneten Rohstoffpreisexplosion darzustellen; hierbei ist es jedoch zweckmäßig, die europäischen Mitgliedsländer des RGW in steigendem Maße in Betracht zu ziehen, die ihren Partnern – zahlreichen alternativen Partnern gegenüber – u. a. solche komparativen Vorteile bieten können, wie die politische und gesellschaftliche Stabilität, die geographische Nähe, weiterhin die große Zahl und die hohe Qualifikation der Fachleute in den Betrieben, und schließlich die zur Adaptierung und Weiterentwicklung einzelner Fabrikate und Fabrikationsprozesse geeignete geistige Kapazität.

Die ständig intensivere Verflechtung der Volkswirtschaft der Mitgliedsstaaten des RGW mit der Weltwirtschaft ist derzeit bereits eine Tatsache. Auch die sozialistischen Staaten sind von den Anforderungen des Weltmarktes nicht unabhängig und gehen bei der Ausarbeitung ihrer Entwicklungspläne in steigendem Maße von den Voraussetzungen des Weltmarktes aus. Die weltwirtschaftlichen Wandlungen haben unter anderem beispielsweise die Bedingungen der Zusammenarbeit innerhalb des RGW modifiziert. Diese Modifizierung wird auch durch den Übergang auf das System jährlich festgelegter Preise widerspiegelt.

Die Mitgliedsländer des RGW gehen bei der Koordinierung ihrer 1981 beginnenden neuen Fünfjahrpläne sowie bei der Vorbereitung der einzelnen langfristigen Zielprogramme ebenfalls davon aus, die internationale Wettbewerbsfähigkeit durch die Steigerung des Nutzeffekts der Zusammenarbeit und unter weitgehender Berücksichtigung des Bedarfes der globalen internationalen wirtschaftlichen Zusammenarbeit zu verbessern.

МЕЖДУНАРОДНЫЕ ЭКОНОМИЧЕСКИЕ СВЯЗИ ВЕНГРИИ В НАЧАЛЕ 80-Х ГОДОВ

Г. БИРО

В три с половиной послевоенных десятилетия политические факторы играли существенную и временами решающую роль в развитии экономических отношений между Востоком и Западом. Ослабление международной напряженности внесло существенные изменения в эти отношения, ограничения отступили на задний план и все более широкие круги признали, что развитие связей между Востоком и Западом выгодно для обеих сторон. Это привело к заключению значительного количества двухсторонних межгосударственных соглашений, которые содействовали развитию промышленного и технического сотрудничества.

Хотя экономическое сотрудничество между двумя мировыми системами в основном все еще осуществляется в традиционной форме внешней торговли на основе договоров о купле и продаже, в микросфере предприятий все более широко распространяются комплексные долгосрочные связи в области производства и сбыта.

Все более интенсивное включение в мировую экономику народных хозяйств стран-членов СЭВ сегодня представляет собой уже реальный факт. Социалистические страны также не могут быть независимы от влияния мирового рынка и при разработке своих планов резвития должны во все возрастающей степени считаться с прогнозами мирового рынка. Так, изменения, происшедшие в мировой экономике изменили, например, условия сотрудничества в рамках СЭВ. Эти изменения, в частности, привели к переходу к системе ежегодного установления цен.

В координации своих новых народнохозяйственных планов на период, начинающийся с 1981 г., а также в разработке долгосрочных целевых программ страны СЭВ также исходят из необходимости повысить свою внешнеэкономическую конкурентоспособность путем повышения эффективности ситрудничества и учета требований глобального международного экономического сотрудничества.

Acta Oeconomica Vol. 24(3–4), pp. 277–288 (1980)

B. KÁDÁR

SOME STRATEGIC ASPECTS OF STRUCTURAL POLICY IN HUNGARY

In the changing world economic environment the importance of structural policies has increased for the national economies. The article shows the national economic interrelations of structural policies through the example of Hungary, with the implications for the structure of production, foreign trade, incomes policy and enterprise organization.

Increasing importance of structural policy

A world-wide acceleration of structural changes, the appearance of new products, technologies and manufacturers, the emergence of new factors of competitiveness, the unfolding of new socio-psychological processes and the shifts in international power relations all have brought forth a distinctively new period of development in the world economy in the last decade. This period raises a growing number of problems all over the world because they could not be solved in western countries by applying either market mechanisms on anticyclical policies aimed at correcting market tendencies or by using other classical instruments of state interference. It has become more and more obvious that *equilibrium and dynamics of the national economy are strongly linked with structural elements and their renewal,* and that adjustment to the new socio-economic processes of our age is not feasible without a structural policy that would take into account the permanent interdependences of national and world economy.

In a strategic sense structural policy strives after establishing proportions in the economy which directly help to implement long-term social goals. Its targets, tools and institutional framework are closely related to the system of goals and growth characteristics of the particular national state. Its basic contentual features are connected with the reproduction process; however, as history proves, structural policy reflects political and power aspects in different – often exaggerated – degree by countries and particular periods.

In Hungary as well as in other socialist countries the criteria of a *planned and well-proportioned development of the economy* derive from the relations of production and, in this sense, structural policy looks back upon a longer economic history. Like in other CMEA countries, the roots of Hungarian structural policy were strongly instrumental in making up for historical backwardness, in establishing socialist relations of production and in accomplishing socialist industrialization. Hungarian structural policy practically attained the above-mentioned targets by the mid-sixties. In the subsequent

decade, simultaneously with the accomplishment of the primary targets and with the development of the economic control system coming to the fore, there was a certain hesitation as to what the actual tasks of structural policy were supposed to be in the intensive phase of economic growth, under the circumstances of "advanced socialism".

According to frequently voiced opinions, the Hungarian structure of production and consumption, having eliminated historically developed structural distortions, might embark upon a path common to all countries, and, depending on her level of development, could actually follow the structural changes of the other countries. According to other opinions, the socialist industrialization had by then practically reshaped the macrostructure and the only task left for an industrialized Hungary was to develop further the product structure in the microsphere which was a task of the economic management of companies. Some even held the view that instead of an overall structural policy, decisions providing for a suitable structure of the Hungarian economy could be worked out by trial and error in the enterprise by considering actual cost-and-return rates.

World economic processes since the 1973 price explosion have eventually made clear that *internal and external conditions of Hungarian economic growth had changed in a structural sense,* the performances of important Hungarian branches and sub-branches had been drastically devalued – and in a few cases somewhat upgraded – by the world market. The averting of these consequences, a quick regrouping of Hungarian growth resources to branches and fields of activity standing better up to international competition have urgently called for a reappraisal *of the structural policy* and for its conceptual development. The changing criteria and requirements of growth made it clear, at the same time, that the scientific and economic-political separation of various spheres of structural changes were not too fortunate: modernization of the microstructure presumes development of the macrostructure. Also it is becoming more and more obvious that the purposefulness of the economy's structural proportions cannot be evaluated by making a fetish of either the balance aspects of some kind of techno-structuralistic attitude or the quantitative dynamic of growth or of stability postulates. By now, the Hungarian structural policy's conceptual boundaries have become distinct first of all through ensuring consistency of the development aims and an active role of economic processes.

The structure of production by branches

In a great number of countries, the political sphere may show for long periods a moderate interest in the relative development proportions of the productive sectors – especially in phases of relatively more dynamic growth. On the other hand, the importance of the structural proportions of production within the economic policy increases in historical situations when a sudden change in growth conditions may in a short time modify the development prospects of branches and sub-branches, and when the speed and efficiency of adjustment to changing circumstances directly affect both

internal and external factors of a relative political balance and, in more serious cases, may soon become a power issue.

In the sixties and seventies Hungary, having entered the road of the industrial revolution more than a century ago, stepped into an intensive stage of economic growth based on a sophisticated industry. In 1949 the share of agricultural production was still as much as 42 per cent of the total national income and 56 per cent of employment; this proportion has by now dropped to 18 per cent, while the share of the industry soared from 32 to 50 per cent in production and from 23 to 34 per cent in employment and, for the time being, more than 70 per cent of all Hungarian exports (according to SITC-grouping) are industrial products.

Within *industrial production,* now the decisive branch of the economy, engineering, has risen since 1965 from 26 to a 30 per cent share, that of the chemical industry from 8 to 16 per cent and of metallurgy from 6 to 10 per cent, while the share of the food industry has fallen from 21 to 19 per cent and that of the light industry from 24 to 16 per cent. In establishing the industrial macrostructure, prominent roles were played by the central development programmes, (the natural gas, aluminium industry, vehicle, petrochemical and computer techniques development programmes) which endeavoured to produce an up-to-date industrial structure by heavily concentrating existing financial, technological and manpower resources. As to their main indicators, the Hungarian economy's and industry's macrostructure shows a strong similarity to those of the industrialized OECD countries on much higher per capita production and income levels than Hungary.

In spite of the advanced state of its technostructures, the Hungarian economy's structure is not particularly advantageous for meeting *international market requirements,* as shown not only by differences in product mix, by less favourable input proportions and up-to-dateness of the product structure, but also by a deterioration in the terms of trade.

The soft points of the Hungarian economic structure have certainly been brought to light by changes in the last decade: most of them are rooted in structural policy. The strategy of accelerated growth and industrialization relying on import substitution (1949–1965), when distributing resources, did not pay due attention to indirect factors of long-term developments acting mostly with a considerable time-lag nor to the structural policy requirements of the international division of labour, which was found to be the source of *structural difficulties* as early as in the seventies.

The international structural changes of our times clearly illustrate that, on the one hand in a more advanced stage of industrial development the increasing – by now overwhelming – part of demand calls for services; on the other hand, various productive and non-productive services, the level of the infrastructure have all become inseparably intertwined with the effective functioning of economies in industrialized countries. Though the *neglect of the service sector by development policy* may favourably affect the rhythm of production expansion and the incremental capital–output ratios in a medium range (the dynamic growth of Japan and Turkey between 1950 and 1960 provide good

examples), yet a continued neglect may gravely hinder a quick regrouping of resources, the improvement of competitiveness and even the exploitation and development of the human factors of growth. During the quarter of a century after World War II, less than one-third of Hungarian investment resources (that is, about half of the OECD. average) was spent on the development of the infrastructure. The rate of those employed there decreased, and a very moderate migration of those employed earlier in the industry towards the service sector began only in the '70s. The fourth five-year plan (1971–1975), prepared during the introduction of the 1968 reform of the economic control and management system, forecast a faster-average development of the non-productive branches, but this is not characteristic of the current plan period (1976–1980). Now the tasks of the Hungarian structural policy, closely related to the aims of Hungary's foreign trade, living standards and technological development policies, are decidedly concentrated on eliminating the backlog of the service sector.

Another significant cause of the Hungarian economy's imbalance of a structural nature is to be found in the *choice of industrialization targets.* As a heritage of the defensive development strategy designed to substitute imports, rarely fortunate for small countries in the long run, the share of the manufacturing industry of Hungary, a country poor in raw materials, is not more than 60 per cent of the total industrial output; much less than the average of industrialized OECD countries. The manufacturing industries employ some three quarters of the total working force of all industries, while possessing hardly more than a third of all industrial fixed assests. In the last decade, a mere third of all industrial investments was allocated to the processing branches; at the same time, in connection with efforts at expanding the domestic energy basis, 35 per cent of investments between 1975 and 1980 were tied up with the expansion of the energy sector, and considerable development resources were spent on the raw material and basic material branches as well.

An undeniable fact is that the world's economic and political situation, as it evolved during the '70s, universally upgraded the strategic significance of external economic relationships, consequently the strategic and supply-security factors of economic development as well. Several countries found that it was simpler, and in certain cases paradoxically cheaper, to export technologically less sophisticated products, raw and basic materials than those in a more processed state. Another well-known aspect of the control system is that an energy strategy designed to expand production bases calls for centralization, while a technological and economical development aimed at reducing the specific consumption of raw materials and energy requires a greater number of decentralized measures. There is no doubt that centralized control and decision systems are much easier to operate in energetics, metallurgy, or mining, etc., than, for example, in the light industry or in engineering.

Even knowing the above, real or distorted, interrelations, a small country's structural policy should not take a primarily defensive course, creating an allocation of resources which would inevitably curb the development of the manufacturing industry. With respect to the choice of targets, the modernization of Hungarian structural policy

imperatively calls for a *faster development* of branches based on a relative conformity with Hungary's comparative advantages and with the requirements of world-wide technological and structural developments. Such branches are, for example electronics, the food and the pharmaceutical industries, precision engineering and the aluminium industry.

In several branches and sub-branches, beside increasing the share of product groups representing higher quality and modernity standards, the task of structural policy is the implementation of production-limiting programmes co-ordinated with the requirements of international economic cooperation.

The sectoral ordering principles of a cutback are concentrated on slowing down the development of material and energy-intensive branches, of branches relying only to a small extent on domestic raw and basic materials, or conflicting with the requirements of the division of labour with developing countries and by far not outstanding either technologically or structurally, and on the correction of excessive supply–security aspects in energy programmes.

Limitations of development carried out in accordance with the world economy's requirements may no doubt produce a "shock effect" in some subbranches and in organs representing interests other than that of the national economy. However, on the basis of international experience few will doubt that, in the long run, shock therapy exerts good influences, it diminishes troubles resulting from employment tensions, from excess consumption of raw materials and from the locking up of capital. Gradual liquidation of low-efficiency branches favourably affects the economic circulation, creates a community of interests with groups exercising decisive power in the economic policy of developing countries and creates favourable preconditions for the enlargement of foreign markets for up-to-date, export-orientated branches of vital importance for the structural remodelling of the Hungarian economy.

Structural policy and international economic relations

Resulting from the Hungarian economy's extraordinary sensitivity and vulnerability to changes in the world economy, a fundamental task of structural policy is *to adjust the proportions of the reproduction process* to the long-term processes of international development. A small country with low population and a moderate state of development, with a small national economy poor in natural resources, Hungary has never been able to reach a higher grade of autarky and economically to develop up-to-date branches of industry based on the absorptive capacity of the home market. The structural transformation of the Hungarian economy is well illustrated by the fact than between 1965 and 1979 the share of manufactured goods in the total Hungarian export soared from 54 to 73 per cent, including a rise from 36 to 62 per cent in respect of OECD countries. In other words: beginning with the last decade, Hungary has presented herself as a supplier of industrial products for not only CMEA or developing countries, but also for

industrialized western countries, and foreign trade relationships have been established first of all within the framework of the *international industrial division of labour.*

Economic cooperation with CMEA countries has been shaping the structure of the Hungarian economy for three decades. For example, half of Hungarian exports to the most important trade partner, the Soviet Union, has been transacted in the framework of seven major specialization and cooperation agreements. Practically, most of the central priority development programmes are linked to long-term cooperation agreements concluded with CMEA countries; within CMEA cooperation, *structural policy and foreign trade policy* are institutionally correlated.

More recent concerns of Hungarian structural policy have emerged from cooperation with nonsocialist countries; through a 20 per cent deterioration in the terms of trade the world market devalued the structure of Hungarian foreign trade relationships, and the same devaluation has made its effects felt in the relationships with CMEA countries. On the *import* side the structural problem is that for some 25 years accelerated Hungarian industrialization has mostly depended on substitution of imported finished products and on vertical processing of imported raw materials. Accordingly, the share of raw materials is bigger, and that of semi-finished products and machines smaller: further on, the rate of specialization is lower than in most industrialized or medium-developed small countries. Thus the increase of the relative price of raw materials and the strengthening industrialization of developing countries will continue to narrow the possibilities of an industrialization based on processing raw materials.

Less than one-fifth of Hungarian *exports* to nonsocialist countries is coming from the engineering industry, one-eighth from ferrous metallurgy and the light industry, and one-tenth from the chemical industry. A considerable part of Hungarian agricultural export is blocked by the barriers of West European agrarian protectionism and, as far as industrial products are concerned, the share of product groups with low price dynamics – due to their excess supply on international markets since the '70s – is predominant in industrial exports, and even the competition of developing countries based on low wages, cheap raw materials, trade and credit policy preferences has become keener. Provided that the present product pattern is maintained, the profitability and dynamics of Hungarian exports and reduction of the deficit in the trade with OECD countries will be less and less practicable. The practice of basing exports on the processing of raw materials and on installing components bought for convertible currencies into complete equipments, cannot be maintained in the long run even with respect to CMEA countries.

The focal point of the new Hungarian foreign trade strategy introduced in October 1977 is a structural modernization of the economy and foreign trade. Smaller emphasis on growth rates, more attention to export-oriented developments, channelling a greater part of foreign credits to export-oriented investments, an active exchange rate policy, a better adjustment of consumer prices in 1979 and of producer prices in 1980 to world market prices are all signs of a shift towards a *foreign trade-oriented structural policy.* Perhaps we do not go too far in suggesting to consider the export increment of US $500 million in 1979 and the expected further expansion of export capacities in 1980 as initial

results of machinery imported for development purposes and of structural policy incentives after 1976.

To set the course of structural policy alone is by no means sufficient: the policy's efficiency depends also on elimination of conflicts among preferences and on the intensity of efforts. Priority given to equilibrium targets, inevitable in certain periods, may easily damp the long-term restructuring process, since there are real dangers hidden in intermittent import cuts or in the maintenance of structurally outdated branches or activities for the sake of momentary export possibilities.

At present, a consistently export-oriented structural policy should consider the production of profitably saleable products – marketable even in view of lasting international development trends – as a source of economic growth. Selectivity in this context means also a restriction, much more accentuated than ever before, of companies and activities producing non-profitable, non-marketable products.

In the last decade, it was not so much the central development programmes as rather the export-developing credit policy of the National Bank of Hungary that encouraged the expansion *of Hungarian export capacities and their structural improvement.* There are still ample reserves hidden in the utilization of central development means for strengthening export orientation. International economic cooperation can likewise mediate considerable energies for regrouping. From among the vehicles of structural transformation, the establishment of a wider international cooperation, for example, in electronics, in the telecommunication, vacuum engineering, the pharmaceutical, vehicle-building and aluminium industries is justified not only by the high R & D plus capital intensity of these industries, but also by the oligopolistic organization of the international markets. In the case of the food industry, which relies on comparative natural geographical endowments, the swift capacity expansion and qualitative change call for international cooperation. Acceleration of the development of Hungarian infrastructure, too, may be extremely favourably influenced by a farther-reaching exploitation of international, interestate and company-level possibilities of cooperation, implying new initiatives. The unfolding of a foreign trade-oriented structural policy may, on the one hand bring about the necessary community of interests helping to ease the present tensions and equilibrium problems of the Hungarian economy and, on the other hand, it may permanently raise the value of Hungary as an international trading partner in the esteem of her suppliers and creditors.

The issues of export orientation and structural development are closely and in a unique way connected with Hungarian *incomes policy.* Following the changes in conditions of economic growth, in the coming years an average annual growth of about 2 per cent of the domestically disposable national income and domestic consumption may be expected. The increase and structure of domestic demand is supposed to have a less than average impact on the development dynamics and structural changes of the Hungarian economy.

The income consequences of a foreign trade-oriented development strategy are quite considerable: incomes policy stands in the forefront of structural policy. The

undeniably greater risks of export development, the higher qualitative and modernity requirements towards the production of competitive products, the stressed importance of the time factor, heavier burdens on marketing activity etc. demand considerably bigger efforts and abilities from companies producing for export and from their staff. Foreign trade orientation is inseparable from a performance-guided scale of values and from a *differentiated incomes policy,* since it calls for an efficiency-rated stimulation of branches, sub-branches, companies, working teams and individuals being able to produce competitive products. The modernity, comprehensiveness and "humaneness" of the structural policy can be ensured now just by exploiting the driving forces of purposeful human activity as they develop in a given period, in a given society.

The 1980 reform of the price system will hopefully create more advantageous conditions for the further development of company profit regulations in this sense.

A more direct political impact is exercised by personal incomes policy where the requirements of foreign trade orientation are not felt yet. Wage policy has been characterized also during the last decade by an increasing levelling. Beside wage political levelling, the dynamics of state-financed or largely subsidized social allocations have exceeded that of the wage level, and the share of allocations unrelated to performance has come close to one-third of the total state-regulated incomes. This practice cannot continue if only because of the budget deficit, and from the aspect of foreign trade orientation it is simply undesirable. The task of structural policy is to draw the line between *wage policy and social policy* and to enforce the requirements of differentiated incentives.

Organizational implications of structural policy

The principles of the socialist countries' economic policies rooted in the history of theory look upon the expansion and increased concentration of production and capital, the growing size of plants and companies as an objective historical process. The organizational aspects of Hungarian structural policy have considerably been influenced, beside theoretical sources, by international lessons of economic growth and by the inherent interrelations between control systems, development strategy and economic structure.

From the point of view of *organization,* the world-economic growth offered rather unambiguous clues over a long historical period. In late-comer countries, a unique economic organizational polarization took place; a lasting coexistence of small establishments born under the circumstances of traditional backwardness and of large companies established in the wake of industrialization and the founding of up-to-date branches of industry. Within this coexistence, the vehicles of structural progress and economic growth were undoubtedly the large companies. The growth experiences of industrialized market economies, too, indicated that the growing size of economic organizations implied greater financial power and higher management standards, permitting to achieve the "critical mass" of scientific research capacities and to improve market positions. The expansion of

multinational companies, the strengthening presence of power elements within the economic processes (strategic upgrading of the state, trade unions and of external economic relations), affect bigger organizations less disadvantageously. Also the Soviet Union, serving as an example of how to establish the socialist economy's organizational system, was characterized by big organizations if only because of the sheer size of her economy.

The system of central *plan directives* of the socialist economic control is closely related to the diminishing number of plan-bound companies, to the ceaseless enlargement of the size of big organizations carrying out production, distribution, research and development tasks. In a period of accelerated development of the heavy industry, especially during the build-up of metallurgy, heavy chemical industry, vehicle industry, all highly sensitive to the economies of scale, the size of economic organizations certainly tends to grow. Theoretical principles, international experience, the control system, structural features and expectations towards large-scale industry's influence on social structures and consciousness have all jointly been instrumental in prompting Hungary – being in the process of a historically late industrialization of a socialist nature and displaying high sensitivity to foreign economic changes – to consider a continual enlargement of organizational sizes as a vital notion of a socialist organization structure and its development as a basic task over a long period.

The process of increasing organizational sizes, reflected in employment figures, is well demonstrated by the facts that while around the turn of the century one-third of those employed in the manufacturing industry worked in Hungary in companies employing more than 500 people, the corresponding figures were 58 per cent in 1950, 80 per cent in 1965, and 84 per cent in 1975, indicating an extremely high organizational concentration. The growing company sizes were followed only later by the growing size of factories and establishments. In the ten years before World War II, 35 per cent of those employed in the manufacturing industry worked in factories with a staff above 500, and that percentage rose only to 50 per cent by 1975, which is not an exceptional organizational concentration at all by international comparison.

Both the Hungarian economic literature and economic policy have only recently emphasized that the expediency of the economy's organizational structure can be qualified only on the basis of the prevailing production structure by branches and sub-branches, as well as of the development stage and the control system. A great number of international examples shows that – as distinct from industries producing intermediary products, with a weaker dependence on inputs and requiring fewer cooperating partners – the dynamics and competitiveness of engineering branches in great "need of economic environment" require the cooperation of numerous small and middle-size companies specializing in partial processes, since a large-scale company (relying on the advantages of mass production and distribution) cannot undertake partial processes except by splitting up its forces and organizational advantages.

The organizational structure receives impulses also from the side of *demand.* With rising incomes, demand becomes more differentiated and more exacting as to quality.

Hungarian experiences of the last decade have shown that there is a definite correlation between the growth of organizational sizes, concentration and the increase in the number of deficit articles, which are usually products of comparatively low individual value, less attractive and less profitable for large-scale production. There is a similar gradual shift in demand towards products satisfying individual needs and towards services. With respect to foreign trade, the faster-than-average growth of Hungarian import of components and parts (one of the causes of the foreign-trade imbalance and of a comparatively less significant import of equipments) can largely be explained by the lack of small and medium-size companies to cooperate with. One of the ways to exploit comparative advantages related to Hungarian manpower is to build up for export an international cooperation of smaller plants specializing in partial processes.

Control through plan directives, the lack or weakness of market contacts among companies strengthens the centralization and concentration of companies. Development of a control system exploiting market relationships to a greater extent, expansion of the scope of indirect economic instruments have to contribute to the widening of the division of labour between companies, to a certain decentralization of companies, to multiplication of smaller companies with idependent economic management.

A comparatively new symptom in several western countries and in Hungary is a quickly growing *second* (black or grey) *economy,* consisting of partly illegal or semi-legal elements and so far lying beyond the economic regulatory reach of the government. In western countries the symptom is obviously related to the loosening of discipline (tax morale, for example) and of the scale of values. It is also connected with the polarized organizational structure and with the activity of large state-owned or private companies finding it difficult to cope with the requirements of the new period in world economy (this is particularly the case in Italy and in other Latin-European countries).

In Hungary, the spread of the "second economy" partly reflects the specific and deliberate endeavours of the Hungarian structural policy to mobilize the growth reserves hidden in *small-scale and family production* influenced by the socialist economy (like household farming in agriculture). At the same time, the second economy's gaining ground reflects the inadequacies of the present organizational and control system, i.e. the fact that an early and exaggerated centralization leads to symptoms of a deficit economy. In our days, the second economy has had more than marginal importance both in western countries and in Hungary, its share varying according to economy sectors and population groups. Essentially it is a kind of answer based on objective economic interrelations to the smaller or greater deformations of large enterprise organizations, to the weaknesses of their management.

Thus international and national economic experiences collected in the last decade require from several aspects a conscious exploitation of growth reserves hidden in small-scale organizations, and not simply toleration of their spontaneous development.

The Hungarian structural policy will face manysided challenges in the years to come; it has to fight with structural problems resulting from the restructuring of the

world economy and from the further development of the control system of the Hungarian economy and has to accept the inevitable risks and sacrifices entailed by pioneering solutions.

Bibliography

1. DRECIN, J.–TAR, J.: Investment experience during the 1976–80 five year plan in Hungary. Acta Oeconomica, Vol. 21, No. 3 (1978) pp. 211–223
2. EHRLICH, É.–SZILÁGYI, GY.: International comparison of the Hungarian infrastructure (1960–1974). Acta Oeconomica, Vol. 24, Nos 1–2, pp. 187–207
3. ERDEI, GY.: *A gazdasági szerkezet és az egyensúlyhiány elméleti kérdése* (Some theoretical problems of economic equilibrium and structure.) Közgazdasági Szemle, 1979. No. 12, pp. 1409–1424
4. FALUSNÉ SZIKRA, K.: *A bérkülönbségek néhány kérdése* (Some problems of differences in wages.) Társadalmi Szemle, 1980, No. 3, pp. 43–54
5. GOLDPERGER, I.: *A gazdaságirányítás és a tervezés feladatai a termelési szerkezet fejlesztésében* (Tasks of economic management and planning in the development of production pattern.) Társadalmi Szemle, 1979. No. 12, pp. 25–36
6. HUSZÁR, I.–SURÁNYI, B.: *Emberi tényező és struktúraalakítás* (The human factor and structural transformation.) Közgazdasági Szemle, 1980, No. 2, pp. 156–170
7. KÁDÁR, B.: *Szerkezeti változások a világgazdaságban* (Structural changes in world economy.) Budapest, 1979. Közgazdasági és Jogi Könyvkiadó. 384 p.
8. KÁDÁR, B.: Major specialization tendencies of Hungarian exports to the West. Acta Oeconomica, Vol. 20, Nos 1–2 (1978) pp. 147–169
9. KÁDÁR, B.: Problems of international restructuring of industry. Acta Oeconomica, Vol. 16, Nos 3–4 (1976) pp. 249–266
10. NYILAS, A.–RÁBA, A.: Some features of the Hungarian economy in the late 1970s. Acta Oeconomica, Vol. 22, Nos 3–4 (1979) pp. 389–398
11. RÉVÉSZ, G.: Enterprise and plant size. Structure of the Hungarian industry. Acta Oeconomica, Vol. 22, Nos 1–2, pp. 47–68
12. ROMÁN, Z.: *Gondolatok gazdaságpolitikánk elemzéséhez* (Some thoughts on the analyses of our economic policy.) Közgazdasági Szemle, 1979, Nos 7–8, pp. 778–792
13. SZÁNTÓ, B.: *A termelés szerkezetének korszerűsítése* (Modernization of production structure from the aspect of the science policy.) Gazdaság, 1979, No. 4, pp. 83–102
14. SZEKÉR, GY.: *Iparpolitikánk és a világgazdasági változások* (Hungarian industrial policy and changes in world economy.) Társadalmi Szemle, 1980. No. 2, pp. 12–30
15. VARGA, GY.: *Termelési szerkezet és exportpolitika* (Production pattern and export policy.) Gazdaság, 1977, No. 4, pp. 30–49
16. VARGA, GY.: Enterprise size pattern in the Hungarian industry. Acta Oeconomica, Vol. 20, No. 3 (1978) pp. 229–246

НЕКОТОРЫЕ СТРАТЕГИЧЕСКИЕ АСПЕКТЫ СТРУКТУРНОЙ ПОЛИТИКИ В ВЕНГРИИ

Б. КАДАР

За прошедшее десятилетие опыт экономического роста ряда стран, в том числе и Венгрии, показал, что проблемы экономической динамики и равновесия все более имеют структурную природу. В Венгрии тоже возросло значение структурной политики, сегодня ее содержание (в отличие от неопределенных толкований ее раньше) определяется как обеспечение согласованности целей стратегии развития и активной роли экономических процессов.

Хотя брошенный венгерскому экономическому развитию вызов со стороны мировой экономики проявился в внешнеэкономической сфере, ответ на него должна дать ускоренная структурная модернизация всей экономики и общества. Среди актуальных проблем венгерской структурной политики стоит ликвидация отсталости сектора услуг. Ориентированное на экспорт развитие структуры промышленности, совершенствование структуры продукции делают целесообразным более уравновешенный подход к вопросу о т. н. надежности снабжения, а также создание механизмов свертывания определенных производств. Актуальным требованием при проведении в жизнь венгерской экономической стратегии является политика доходов в соответствии с выработкой, рационализация экономической организации, размеров предприятий, ликвидация явлений товарного дефицита, нарушений равновесия и медленного приспособления, связанных с организационными факторами.

Acta Oeconomica Vol. 24(3–4), pp. 289–302 (1980)

W. MEISSNER

STRUCTURAL POLICY IN MARKET ECONOMIES

The study presents the possibilities of government influence on sectoral (branch) structure in western market economies through structural (industrial) policy. The common and different features of structural policies are illustrated using the examples of four western industrial countries (Federal Republic of Germany, Great Britain, France and Sweden). Next the instruments of structural policies used in the OECD countries are discussed. Two special problems are treated in some detail: coordination of structural policies within the EEC and policies for research and technological advance. Finally the author gives a short critique of the objectives and scope of action of government structural policy by relying on the example of the Federal Republic of Germany.

Structural policy is unnecessary in market economies: market and competition care for the best possible allocation of resources and for the best regional and sectoral pattern of production. Structural policy is impossible in economic systems relying mainly on private ownership of the means of production: in such systems the state, as carrier of structural policies, is merely the executive organ of the interests of capital without any own scope of movement. Such negative judgement of structural policy follows from two very different positions of systems policy. (Ordnungspolitik.)* But ordo-liberalism and state monopoly capitalism agree in their opinion that structural policy is harmful. It ever more disrupts the market mechanism and competition in trying to correct mistaken economic developments whose causes – it is said – are rooted precisely in the measures of state economic policy.** The objection from the other side claims that structural policy, as a transfer of resources from the state to private enterprises, strengthens the positions of capital and further restricts the scope of action of the state.

It seems no easy task to argue for the purposefulness of structural policy in market economies. Nor is it clear whether this task would be easier if one relied on the facts of widely practised structural policies in market systems. There are, namely, wide differences among the individual countries as regards both the appraisal and the practical formation of structural policy. Yet this will be the point of departure of this study. A

*A school of neo-liberal economic thinkers oriented towards certain state intervention in order to conserve the ideal type of market society. – The idea is central in the Freiburg school. (W. Röpke; Eucken)

**The most recent collection of arguments against structural policy can be found in the informative treatise of H. *Besters* [1]. The book is a good example for the fact that though an extreme position facilitates argumentation – the author rejects even anti-cyclical stabilization policy – it is no more convincing on this account.

brief survey of structural policies in four western industrial countries will lead to a comparison of differences and common features. Next the various instruments of structural policies and their different uses in the economies of the OECD countries will be treated. After that two special problems will be tackled: integration of structural policies in the framework of the EEC and research and technological policies. The study will end with a brief summary. Throughout regional structural policy plays a subordinated role. Partly because it is less debated from the aspect of Ordnungs-policy and partly because it is closely linked with sectoral structural policy on which I am going to concentrate in what follows.

Sectoral structural policies in four Western-European countries

First we have to agree on the notion of *sectoral structural policy.* By this those public measures are meant which are intended to influence the structure, productivity and international competitivity of an industry. That is, industrial policy as understood in the English-speaking countries. If the goals set are in agreement in the different countries, it is small wonder that the measures widely differ. They depend, namely, on the participation of the state, on the importance of the public enterprises, on the degree of concentration in the industrial sectors and, last but not least, on the different concepts about the role of the state in shaping or even planning the economy.

In the Federal Republic of Germany there are two basic economic policy laws in force: the law against restriction of competition (GWB) from 1957 and the law on the promotion of stability and growth of the economy (StWG) from 1967. Government influence differentiated by sectors is alien to both laws. In agreement with the basic policy orientation of the FRG these legal measures are aimed more at influencing frameworks as the order of the market and total demand. The dichotomy of economic theory into micro- and macroeconomics repeats itself in the double economic policy approach: the microeconomic-oriented competition policy should care for the operative capacity of the markets; while the macroeconomic-oriented StWG allows the governing of global economic demand. Of course, there have always been measures aimed at particular sectors as in subsidy and taxation policies. But, at the same time, they were carried out with bad conscience from the aspect of Ordnungs-policy. The actual expansion of sectoral economic policies was always accompanied by an indication that, as a matter of fact, suppression of such activities would be desirable.

Then, in the early seventies there was an open discussion about the expediency of sectoral structural policy. It was conducted under the title "Channeling of investments." [1, 2] It was a lively discussion, frequently conducted by the participants with strong commitment to Ordnungs-policy and it very often ended in the blind alley of market *versus* plan (sometimes: freedom or coercion). In the meantime the dust has settled; particularly under the influence of the long-lasting unemployment since the mid-seventies, having no doubt also structural reasons, a more pragmatic approach to the necessity

of and limits to a complementary selective stabilization policy has broken through. [3] Nevertheless the market processes continue to play the main role in structural changes. Although some industries are particularly furthered (particularly by promoting research, e.g. data processing) or supported (with subsidies, e.g. ship building), there exists no comprehensive concept about the desirable development of sectoral structure. It is aimed at a better insight into this development process. In 1976 the federal government commissioned five economic research institutes to work out guidelines for a structural report. The proposals were submitted at the end of 1977 and were rather different [4]. In the meantime, the institutes are working on the structural reports which – unlike the half-year diagnoses of the institutes about the business situation, – are not collated with each other but are produced in competition simultaneously and also contain forecasts for the individual sectors. The federal government has forestalled the fears that the improvement of structural information aimed at would be a starting point for comprehensive structural planning by stating: "Better knowledge of the structural shifts relevant for the whole economy should serve for creating the conditions for reducing the frictions in structural transformation and for improving the efficiency of the market mechanism. The report on structure thus serves to strengthen the system of market economy." [5]

The situation is quite different in *France.* French "planification", a kind of indicative planning comprises sectoral targets which are collated between the state and the economy. To implement them, administrative processes, selective subsidy and credit policies are used. In this the allocation of special state funds and the nationalized banking system are of particular importance. On the other hand, the share of the state in public investments is lower than in all the other EEC countries and thus the impact on the structure of investment is smaller [6]. If, up to the fifth plan (1965–70), the French structural policy made the impression that it was an integrated and collated part of a comprehensive plan of overall economic indicators, in the literature it is now stressed that the setting of objectives and the assigning of instruments have become increasingly independent in the individual sectors and are less and less considered as a tool for implementing integrated ideas in the framework of an overall plan [7]. This observation is of importance if we wish to find common features in the structural policies of market economies. But let us have first a glance at the industrial policies in Great Britain and Sweden [8].

Conditions for economic planning in a particular country are determined by the size and importance of the public sector, the degree of external economic interdependence, and the ownership relations regarding the means of production. In *Sweden* the public sector is important, the national economy is highly dependent on the international market, in the primary and secondary sectors it is determined by private ownership of the means of production, involving individual decisions on production and investment. Under such conditions it is difficult to set firm targets for production and for the use of resources and to implement them through direct control. Instead, it is attempted to influence economic development through general measures in the fields of fiscal, monetary, trade and industrial policies. The size of the public sector favours this kind of

indirect influence on the private sector of the economy. The economic framework-planning in Sweden has always had the character of orientation only. The policy of the welfare state concentrated to a greater extent on the field of distribution and refrained from direct interference with private production. Thus, global economic planning in Sweden does not aim at the individual economic units of decision (enterprises, households), but at shaping the framework and the date for private economic decisions. Fundamentally, it is endeavoured to shape this indirect control in such a manner that avoids a selective hampering or favouring of definite branches or enterprises. There is no central plan for private investments or for their sectoral allocation. Influencing business policies takes place in Sweden with the instruments of fiscal policy and through the credit market which is relatively strictly regulated by the state and in which the general state rent fund (ATP-fund) has a dominating role. A particular feature is the investment reserve fund, whose rules state that the private investor obtains tax allowances in case he makes investments at a date favourable from the aspect of stabilization policy or at a place desirable from regional policy aspects. At any rate, in recent years the investment reserve fund has been used also for structural policy purposes, insofar as at times the dates and conditions were set with regard to specific branches.

In *Great Britain* the development has been varied. This holds particularly for the nationalization and subsequent reprivatization of certain sectors of production. But also for the abolition of overall economic planning. Shonfield points out that after the war the instrumental conditions for economic planning were better in Great Britain than in any major West European country. Until their leaving the government in 1951 the Labour Party used this armory rather for short-term economic control than for long-term planning. Then the Conservative Party, upon seizing the government, based its economic policy on the market mechanism. Though in the early sixties there was at any rate a turn: "Excessive adoration of the market" (Shonfield) gave place to active readiness for long-term planning. The Labour government of 1964–70 again shaped economic policies according to a recipe consisting of a combination of Keynesian demand management, progressive taxation and social policy. Those who advocate in England today an intervention on the side of supply, thus a directive intervention in private production and investment, point out that the national economic framework plan could not be implemented with the limited Keynesian instruments. The difficulties caused by the demand-oriented conservative policy in 1970–74 serve as further argument for taking more direct measures in production and investment in the meso-economic sectors of concentrated private capital, which no longer responds to the indirect control of macrovariables.

The shift in the point of intervention of economic policy is justified by the high and growing concentration of the industrial sector, which together with the expressly multinational character of the British industry allows only a restricted indirect influencing relying on the market mechanism. Thus in 1970 the 100 biggest enterprises contributed more than 50 per cent of the total industrial output; in 1950 this was only 20 per cent. At the same time, the production of British enterprises abroad is twice as

high as their exports. The same proportion is 0.4 : 1 for the Federal Republic and for Japan.

The necessary and intended stimulation of investments has to have a clearly export-oriented and import-substituting emphasis, even protectionistic measures are not excluded in order to promote this industrial policy. This orientation towards external economy is understandable once we keep in mind the unfavourable pattern of trade of Great Britain. According to the estimation of the OECD the income elasticity of world demand for British export goods was 0.57; while the income elasticity of British demand for imported goods lies above unity. If this cannot be changed by a corresponding investment policy, the consequences for the growth potential of the British economy relative to world economic development should be clear. One thing is certain: the targets of British industrial policy have a strong protectionistic bias. The neo-mercantilistic direction of the planned control of industry and investments may lead to a "disruption of competition" which is not tolerated by the Treaty of Rome. The government influence on private investment decisions may get into conflict with the rules and spirit of the EEC treaties, which are based on the workings of private decisions and functioning powers of the market. I shall still return to this problem.

In this outline of sectoral structural policies in four western countries it is first of all the differences that are conspicuous. This cannot surprise us in view of the basic positions taken in these countries towards the economic role of the state, the varying participation of the state in public investments and public industries. The scale reaches from relations characterized by federalism and expressly Ordnungs-policy consciousness in the Federal Republic of Germany to the central state planning of a framework in France which looks back upon a long tradition of étatism. In between we find the rather pragmatic procedures of Sweden supported by high social consensus and the situation in England that has a particular image because of the sharp reorientations in case of changes in government and the difficult international competitive situation of the British industry.

Nevertheless, the common features are preponderant.* There exists no structural *planning* in these countries, neither in the sense that the whole industrial sector would be fitted into a plan conception, nor in the sense that the structure of this sector would be purposefully changed according to some guideline comprising all branches. The actual situation is that selected industrial sectors determined by *structural policy* are supported or promoted. Those industries are supported in which the market-governed structural change causes difficulties (maintenance through subsidy policy). And such industries are promoted in which the market process pushes this structural change forward too slowly and where the signals and benefits are insufficient for the necessary development of the so-called future or growth industries (promoting through research and technological

*"... it is often difficult to establish a clear correspondence between the explicitness with which industrial policy objectives are formulated and the degree to which governments carry out policies or actions having a direct or indirect impact on industry". [9]

policies). As a common characteristic one may say that these are more or less strong complements of the market process as regards both the instruments and the guiding principles of sectoral policy.

At any rate, in the first years after the war the structural policy may be said to have had a definite planning component. The purpose was to rapidly reconstruct the domestic industries, particularly the basic materials industries* and to develop import substituting production to save scarce foreign exchange. But when fast growth, increasing liberalization of foreign trade relations and quick technological changes made their appearance, the goals of structural policy changed [10]:

– promotion of the efficiency of industrial sectors through technological innovation, improvement of management and raising the mobility of labour (Sweden);

– structural adjustment in the industrial sector through channelling resources towards the highly productive branches, specialization in products and the adjustment of assortment to the changed pattern of demand;

– supports given for this structural adjustment in order to mitigate the problems of employment and regional imbalances;

– reduction of the external effects of industrial production through more economical use of natural resources and limitation of environmental pollution.

Summarily, the following features of the present structural policies in western market economies can be identified:

1. Structural policy has rather a reactive than a planning or shaping character. It reacts on definite or assumed deficiencies of the market which resist a sufficiently fast structural change.

2. It may work counter the target of raising efficiency striven after if the endangered branches are too long supported for regional or social reasons. But this may also happen if developments in the technologically pioneering sectors are supported beyond the starting phase to an extent which does not allow that these sectors should stand the test of competition. The international "competition in supports" may strengthen this tendency.

3. The generally observable increase in sector-specific (or even project-specific) structural policies makes it necessary, and at the same time more difficult, to embed them into an overall industrial policy concept or even into an overall economic framework plan. This holds independently of the fact whether such integration is considered desirable (France) or gives rise to concern because it might change the market-complementing role of structural policy (Fed. Rep. of Germany).

*Cf. the allocation of funds under the Marshall plan and the transfer of resources through the Investment Aid Law in the Federal Republic of Germany.

The instruments of structural policy

If one defines the goals set by structural policy as complementing the market, the instruments designed for its implementation may be regarded, as a rule, to conform to the market. This means that investors – beside being offered consultations and prognostic market information through special institutions – are given financial stimulation to trigger decisions which bring their private profitability computations in harmony with the objectives of structural policy. We have here, therefore, a transfer of resources from the public sector to the private enterprising sector. The guiding nature of this transfer is to be found in that the improvement of enterprising profitability should produce the desired investments or that allocation of the funds is linked to more or less precise conditions.

Thus

– self-financing is improved indirectly by tax measures

– funds are directly allocated in order to cover the losses of adjustment or the risks of development.

The tax measures refer in the first place to modes of depreciation allowances. Accelerated depreciation allowance works as a credit on taxes and raises investing power. The drawbacks of this procedure are obvious: it works only if there are at all taxable profits. If it does work it may act towards conserving the old structure. And, finally, profits may be used in ways other than conceived by structural policy. A kind of this instrument of guidance is the creation of investment reserve funds (e.g. in Sweden). In spite of the fact that they were brought about with the aim of pursuing an overall anti-cyclical policy, they may be used to implement regional or sectoral targets if the conditions of allocation are adequately formulated.

Because of the limited guiding ability of tax measures towards structural policy targets, direct financial stimulation is of greater importance. Direct subsidies, or supports (repayable or not), rebates on interest or public guaranties facilitate a market-conform financing. The strong use of these instruments experienced in the western industrial countries [11] and their more selective use may be considered as indications that the "directive contents" of sectoral structural policies has increased.

The Table* attached surveys the wide use of taxation and financial instruments in the structural policies of OECD countries. A distinction is made between promoting investments in the industrial sector in general (I) and the rather selective support of investments for facilitating structural transformation within the industrial sector (II). The objection might justly be raised that the mentioning of mere fiscal interventions in the field of industrial policy is a strong restriction of the factors affecting industrial structure. Also those interventions should be added which the state exercises as customer and investor. Then there are also other fields of politics which have an obvious influence on the structure of the so-called secondary sector, first of all the policy on competition, but surely also the policies regarding the labour market and foreign trade. But in this respect

*Excerpt of Table III. in [11]

Table 1

Fiscal and financial instruments of structural policies in the OECD countries

Goals \ Instruments:	Fiscal instruments			Financial instruments			
				Credit facilities, loans			
				direct		interest sub-sidies	guaranty
	Accelerated depreciation	Investment reserves	Subsidies	at commercial rates	at reduced rates		
I. Promotion of productive investment							
1. Extension of capacity	B–CDN–DK–E SF–GR–I–J– NZ–GB–S	DK–ESF–NZ P–S	D–B–NZ– GB–S	AUS–CDN– NZ P–S	D–AUS– E–NZ P–GB	AUS–B–SF NZ–GB	D–AUS–B CDN–NZ–S
2. Job creation	B–CDN–E–GR GB–S	SF–S	D–B–SF– CB–S–CDN	AUS–NZ–S	D–AUS– E–GB	AUS–B–SF NZ–GB	D–AUS–B NZ
3. Introduction of new products and production processes	D–AUS–CDN E–J–GB–S E–J–GB–S	P	D–AUS– CDN NZ–J–GB–S	AUS–CDN– SF NZ–P	D–AUS–B– E–I J–N–P–GB	SF–NZ	AUS–CDN DK–J–NZ
II. Structural adaptation							
4. Diversification	D–B–J	S	D–AUS–B CDN–N	AUS–CDN– SF N–P–GB	D–AUS–I– P–	B	D–AUS–B CDN–N
5. Modernization, rationalization	D–B–CDN–E SF–I	DK–E	D–AUS–B CDN–N–S	AUS–CDN–SF N–P–GB	D–AUS–E I–P	B–CDN–SF	D–AUS– B–CDN– DK–J–N–S

Countries: B = Belgium, CDN = Canada, D = West Germany, DK = Denmark, E = Spain, SF = Finland, GR = Greece, I = Italy, J = Japan, NZ = New Zealand, GB = Great Britain, S = Sweden, P = Portugal, AUS = Australia, N = Netherlands

there are so strong differences specific to countries that their inclusion in this brief introductory paper would far exceed its framework. In addition, their inclusion would hardly change the result of this section. The instruments of the structural policies followed in the western market economies are so formulated that they should correct and complement but not suspend the market mechanism. In the closing paragraph I shall return to the importance of this statement.

Integration of structural policies in the EEC

We are going to tackle now two particular policies: their coordination in the framework of the EEC, which becomes the more urgent as the scope and differentiation of national structural policy measures are growing. And then problems which follow from the necessarily economical use of natural resources and from the fast technological change. Here belongs also the structural policy aspect of environmental policy whose importance is no longer challenged in the western industrial countries.

The attempt at pushing the European economic integration beyond the monetary sphere should be judged with caution. The Werner-plan was short-lived. The success of the present European Monetary System has still to stand the test. No doubt the different structural problems and thus the different structural policies are working against a fast integration. Above we have stated that the fitting in of structural policies is done similarly in the European countries as an instrument complementing the market and not as one serving economic planning. Also the harmonization of the instruments as depreciation rates, subsidies and tax burdens does not seem to present unsolvable problems in the medium run. They are to be found much more in the structural problems involved according to which three groups of countries can be distinguished, in which there are thus similar tasks for sectoral industrial policies. [12]

– Countries with a low level of productivity, high investment demands (Great Britain, Ireland, Italy). Inflationary effects and the unavoidable reactions of partners in trade prohibit to replace industrial policy continually by the instrument of exchange rate.

– Countries with a relatively high level of productivity and small demand for investments because of employment policy reasons, but having considerable structural adjustment problems (Belgium, France, Luxemburg, Denmark).

– Countries with high level of productivity, small demand for investments because of employment policy reasons and relatively few sectoral structural problems (Fed. Rep. of Germany, Netherlands).

Besides, national particularities play a big role which come to expression also in the different ideas about the role of the state in shaping the economic process. "The French "administrationalism", to which the reorganized French planning may be essentially traced back; the British "anti-continentalism" of which the oil-chauvinism and the fright from the Brussels bureaucracy have grown out; the Italian political pragmatism and the delicate balance of parties – which no doubt have both an influence on the mutual

penetration of administration and public enterprise; the West German federalism which, together with the traditional economic liberalism (to which belongs the independence of the central bank) provided the basis for the phobia from planning and the preference for global guidance on central state level; the trade-policy opening towards the world economy of the smaller coastal states of the Netherlands and Denmark; the Belgian national dualism with its pressure, having become effective in the meantime, towards regionalization and "proportionality" in all state activities; the not yet concluded conquering of the Irish hunger trauma which led to attempts at industrialization at any cost; all these are examples for national rigidities and forced behaviour. Although they have nothing to do directly with sectoral structural policies, yet they decisively influence the basic attitudes which define directly also the national industrial policies and the role assigned in this respect to the European Economic Community." [13]

Thus, the contrasts can be found less in the implementation of the instruments of structural policy, but rather in the approach to the concentration of enterprises and to the policy towards competition, to the extent of subsidies and to the role of public enterprises. But, to end this report with an optimistic note, we have to point out certain phenomena of convergence between the farthest positions (France and Germany). Thus French planification has increasingly assumed the character of infrastructural planning, which provides a framework for investment activities, which are left increasingly to the market mechanism. On the other hand, there are strong tendencies in the Federal Republic of Germany to consider structural transformation not as exclusive affairs of decentralized private enterprise decisions. The demands of the Social Democratic Party and the trade unions for greater transparency and influencing the private major investment projects concur here with the recognition of an earlier liberal economic minister: "The recent past has shown and the future will further confirm that demand for structural policy activities is growing." [14]

If the variant of industrial policy aimed at the conservation of structure, intending to cushion the undesirable regional and social consequences of a fast structural change is understandably subject to criticism from the aspect of economic efficiency, the technological policy aimed at innovating the structure may expect widespread agreement. Even the German Council of Economic Experts which always stresses the potentials of the market mechanism assigns technological policy a task in correcting the deficiencies and defects of the market. [15]

The risks of private investments in research and development are naturally high. If the state points out a direction of development (e.g. ordnance production) or declares it as particularly important (e.g. aeroplane production, data processing) the expectation arises that a part of the risks entailed by development will not be borne by the private investors themselves.

But even apart from such sector-specific cases it may be stated that the urgency of structural changes to be furthered through technological policy has increased.

– It is necessary to shift to a structure of production that is a smaller burden on the environment and to production processes that protect the environment. If one considers

that the costs of environmental protection lie in the western countries in 1980 at about 1–2 per cent of GNP, [16] it may be seen that behind it there are structural shifts of considerable extent. [17]

– It is obvious that also production processes economizing on raw materials and energy have become more important. This holds both for possible problems of volume and for deterioration in the terms of trade.

– In connection with this there are changes in the division of labour among the countries (north–south problem) which are already perceivable and which have been demanded in the framework of the so-called new world economic order. There are chances for the industrial countries – and it is also necessary for them – in turning increasingly towards production with higher value added, that is, which uses less raw materials and is labour intensive.

– In the West European countries the situation is aggravated by the fact that in the meantime they have attained, together with the USA, the peak of technical progress. Thus there is no way to take over and imitate the technological developments of the USA. Steps towards technological innovation have become necessary.

If in the beginning the furthering of innovation serves the strengthening of the industrial sector in general, insofar as public resources are directed thereto, this instrument can also be used to influence the structure within the sector. To see clearly the forms of furthering and their mode of action, it is advisable to distinguish [18], the support of R and D which occurs on the input side of the R. and D process from technological policy which promotes the output of these processes, innovation itself, insofar as it favours the spreading and marketability of the new technologies.

Support of R and D which far precedes the possible production, concerns the financing of research institutions (higher education, public research institutes, academies, scientific societies) on the one hand and a global promotion (through advantageous tax rates or subsidies to R and D outlays) of corresponding activities in enterprises on the other hand. It is not suited for influencing the structure within the industrial sector. For this, namely, output-oriented forms are used furthering newly developed technologies up to the state of production and even until they are ripe for the market. They are to be found both as project-centred forms or – lying between global support and project-centred support – in supporting certain restricted areas or technologies.

It should be clear that with the forms of research and technological policies also a decision has been taken on the relationship between market mechanism and structural policy. As a matter of fact, the debate about this variant of structural policy – while there is general agreement on its basic expediency – concerns above all the weighting of the alternatives of global or project-centred support. If, however, the R and D policy is justified mainly by the deficiencies of the market mechanism in overcoming the accelerated structural changes, it is small wonder that the stronger sector- or even project-specific support has obtained growing importance in the western market economies with this kind of structural policy. [19]

Summary

In the structural report of the Federal Republic of Germany on the year 1970 it reads: "In an economy with full employment, growth and structural change are closely interlinked. The federal government promotes and facilitates structural change and technical progress, thus the structural policy of the federal government is mainly growth policy. Of course also social policy and social objectives are determinant. With this policy the federal government wishes

- to raise living standards at present and in the future,
- to increase the performance of the German economy,
- to improve the social and technological infrastructure,
- to secure and expand the social benefits of the state,
- to put the German economy in a state to be able to help the young and partly industrialized states in their development.

The federal government wants to strengthen our free order of economy and society in the competition with all highly developed industrial nations.." [20]

This is a program of great portent, indeed. Its essential points may be also found in the results of our survey of the sectoral structural policies in western national economies.

1. Structural change should be basically attained through the market and competition. Structural policy is justified and has a subsidiary role where the market mechanism shows functional deficiencies.
2. Future-oriented structural adjustment to the domestic and international demand and, particularly, to new technologies are declared goals of structural policy. This is increasingly justified with the sharpening international competition among industrial countries, (GFR: elimination of the overvaluation of the German Mark through flexible exchange rates), and recently also with the industrializing developing nations.
3. Although the support of economically depressed sectors is, as a rule, rejected, because of regional and social reasons the policy of maintaining structures with subsidies still plays a great role. [21]
4. Goals of societal policy (e.g. in the GFR: humanization of work) have a rather small importance relative to their weight in programs.

No doubt, the economic policy of the state – having undertaken already important tasks through Keynesian global demand management – is highly responsible for structural development in the market economies. It can hardly renounce its important role in stabilizing the developed capitalist systems, which are characterized by increasing concentration of private decisions on production and investment and thus by a considerable influencing of the controlling function of competition.

The logic of structural policy follows the development trend of capitalist national economies which is essentially determined by the power of the economy. It is rather an instrument for rationalizing the system and not one for implementing social policy goals.

But, since it is assumed to have both possibilities, one can predict with some certainty that it will continue to remain a subject of vivid debates, particularly from the aspect of developing and reforming the capitalist economic system.

References

1. BESTERS, H.: *Neue Wirtschaftspolitik durch Angebotslenkung.* Baden-Baden, 1979.
2. MEISSNER, W.: *Investitionslenkung.* Frankfurt, 1974. as well as the references in (1).
3. MEISSNER, W.: *Selektive Stabilitätspolitik: Die Ergänzung von Marktmechanismus und Globalsteuerung.* in: LASKI–MATZNER–NOVOTNY (eds), *Beiträge zur Diskussion und Kritik der neoklassischen Ökonomie, Festschrift für K. W. Rothschild und J. Steindl,* Berlin–Heidelberg–New York, 1979. p. 165
4. Cf. the survey in GLAUBITZ, J. und MARTH, K. H.: *Strukturberichterstattung.* WSI – Mitteilungen, No. 30/1966, pp. 714–735
5. Bundestags-Drucksache 8/1971, No. 38
6. FRANZMEYER, F.: *Industrielle Strukturprobleme und sektorale Strukturpolitik in der Europäischen Gemeinschaft.* Deutsches Institut für Wirtschaftsforschung, Sonderheft 130/1979, Berlin 1979. Table 23, 61
7. HAYWARD, J. and WATSON, M. (eds): *Planning, politics and public policy.* Cambridge, 1975, particularly the studies by BONNAUD J. J. and YOUNG, S.
8. MEISSNER, W.: *Investitionslenkung in Schweden und Grossbritannien.* in: FLEISCHLE, G.–KRÜPER, M. (eds): *Investitionslenkung – Überwindung order Ergänzung der Marktwirtschaft?* Frankfurt, 1975. p. 149
9. OECD: *The aims and instruments of industrial policy. A comparative study.* Paris 1975. p. 11
10. Cf. (9) p. 14
11. OECD: *Selected industrial policy instruments.* Paris, 1978. pp. 32-, 78- and 132
12. Cf. (6) pp. 42–43
13. Ibid. pp. 101–102
14. FRIDERICHS, H.: *Mut zum Markt.* Stuttgart, 1974. p. 21
15. Cf. particularly SVR, Vol. 1976/77, No. 311
16. Cf. the data in OECD: *Economic implications of pollution control: a general assessment.* Paris, 1974. Tables II and VI
17. MEISSNER, W. and HÖDL, E.: *Positive ökonomische Aspekte des Umweltschutzes.* Umweltbundesamt Berichte 3/77, Berlin, 1977. p. 113
18. Cf. (1) pp. 164–165
19. Cf. for details (9) Chapter V and (11) Chapter 4
20. *Strukturbericht 1970 des Bundesministers für Wirtschaft, vom 2. 6. 1970.* p. 7
21. GAHLEN, B.: *Strukturpolitik in der Marktwirtschaft.* Wirtschaftsdienst 1978/I. p. 24

СТРУКТУРНАЯ ПОЛИТИКА В СИСТЕМЕ РЫНОЧНОЙ ЭКОНОМИКИ

В. МЕЙСНЕР

Структурная политика означает государственное вмешательство в отраслевую структуру народного хозяйства. В западных рыночных хозяйствах (например, в ФРГ, Великобритании, Франции, Швеции) структурного планирования не существует. Здесь не разрабатываются плановые концепции относительно промышленной сферы в целом, а также не проводится изменений ее структуры в соответствии с планом. Поддержка или развитие определенных отраслей промышленности осуществляются прежде всего с помощью структурной политики. Поддержка оказывается таким отраслям, в которых структурные изменения, происходящие под воздействием рынка, причиняют определенные трудности (политика субсидий). Развиваются такие отрасли, структурные изменения которых под воздействием рыночного процесса проходят медленно и которые имеют будущее или способствуют экономическому росту (развитие с помощью технологической и научной политики). Во всех случаях речь идет лишь о большей или меньшей степени дополнения рыночного процесса, и таком, который затрагивает средства отраслевой структурной политики и цели управления. Целью структурной политики, таким образом, является дополнение воздействия рынка. Инструменты ее проведения, как правило, совпадают с рынком. Это иллюстрируется на примере стран ОЭСР. Помимо консультаций и информаций (прогнозов) о состоянии рынка, инвеститорам в некоторых странах предоставляют материальные стимулы, чтобы они приняли решения, совпадающие с целями структурной политики. Одновременно с помощью косвенных методов — через налогообложение — облегчается самофинансирование, а также непосредственно выделяются средства для покрытия связанного с перестройкой материального ущерба и риска. Связанные с интеграцией структурной политики трудности внутри ЕЭС касаются не столько применения средств структурной политики, сколько определяются концентрацией предприятий и конкурентной политикой, размерами субсидий и ролью нечастных предприятий. Во всяком случае между противоположными позициями ФРГ и Франции имеется тенденция к определенному сближению.

В конечном итоге можно констатировать: структурные изменения могут и должны идти с помощью рынка и конкуренции. Структурная политика дополняет их в тех случаях, когда функций рыночного механизма недостаточно. Провозглашенной целью структурной политики является содействие проведению направленных в будущее изменений, в особенности введения новых технологий. Это во все большей степени определяется обострением промышленной конкуренции между промышленно развитыми странами, а в последнее время и между промышленными странами и проводящими индустриализацию развивающимися странами. Таким образом, с народнохозяйственной точки зрения нежелательна поддержка экономически слабых секторов. Однако ввиду региональных и социальных причин политика сохранения структуры играет большую роль. Общественно-политические цели — в их программном значении — имеют меньшую важность.

Сегодня государственная экономическая политика — которая уже решила важные задачи с помощью кейнсовского всеобщего налогообложения — в большей степени несет ответственность и за структурные изменения рыночных хозяйств. Она выполняет важную стабилизационную роль в развитых капиталистических системах, для которых характерны возрастающая концентрация частных производственных и инвестиционных решений, а также опасность рыночного и конкурентного механизма.

Acta Oeconomica Vol. 24(3–4), pp. 303–319 (1980)

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HUNGARIAN FOOD ECONOMY AT THE BEGINNING OF THE 1980s

In an inaugural lecture by the author at the Hungarian Academy of Sciences on which this paper is based the development and topical issues of the Hungarian food economy are analyzed. The basic principles governing the sectoral policy did not change but new challenges have to cope with. He warns that the protracted development of the food economy would impede on crossing the boundary that lies between the medium and advanced stages of the industrialization of agriculture on the one hand and emphasizes the importance of achieving a higher efficiency on the other. The importance of an adequate technical, industrial and educational background of the development of the sector is stressed. A further question is the harmony between the development of large estates and small-scale production and the strengthening of specialization and cooperation among the former ones.

The role of agricultural and food production in Hungary

In countries where the domestic food supply is covered by imports, agricultural and food production have quite a different function in the national economy than in self-supplying or exporting countries, such as Hungary. In the former the foreign exchange needed for food imports is produced by other sectors of the national economy or is covered by foreign credits, while in the latter the situation is the reverse: the resources produced by agricultural and food exports are used for economic and social development. Hungary belongs to the latter.

In medium-developed countries in which conditions are favourable, one of the basic elements of economic stability is agricultural and food production, i.e. the profitable agrarian production. This is understandable. As long as in Hungary people buy food for Ft 0.20 out of every forint spent on consumption, they will surely react sensitively on every change affecting items densive for their consumption and even their living standards. The bearing on internal politics need not be separately stressed.

Similarly, as long as agriculture and food production have a considerable share in Hungarian exports, trade will be balanced in years of good harvests, while in years of bad weather smaller exports or increased imports will affect unfavourably the balance of foreign trade. This is borne out by experience, both over a long period and in these last years.

Table 2 shows clearly the role of the Hungarian food economy in foreign trade.

It is true that the motor of economic development is not agriculture but industry in all of the industrializing and industrialized countries. It is, however, remarkable that in

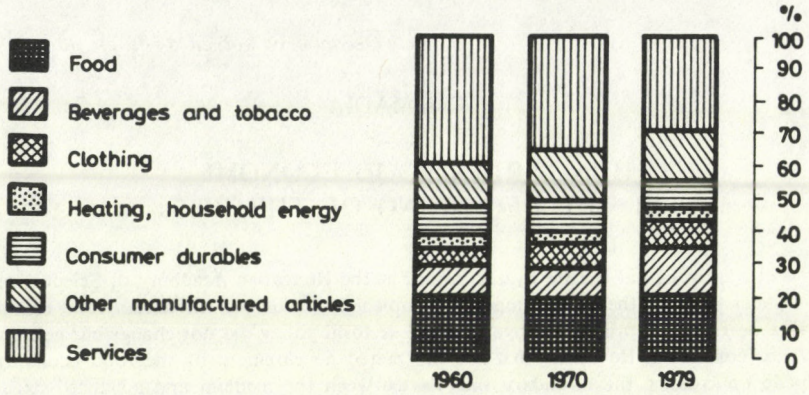

Fig. 1. Composition of consumption

Table 1
Per head consumption of food and nutriments

	1970	1975	1979
Meat total (kg)	60.4	71.2	73
Milk and dairy product[a] (kg)	109.6	126.6	157
Eggs (pc)	247	274	324
Fats, total (kg)	27.7	29.1	30
of which: butter (kg)	2.1	1.7	2
cooking-oil, margarine (kg)	2.8	4.6	6
Flour (kg)	124.1	117.9	118
Rice (kg)	4.1	4.3	4.4
Potato (kg)	75.1	66.8	60
Sugar (kg)	33.5	39.4	36
Coffee (kg)	164.5	261.4	270
Tea (dkg)	7.2	8.1	9
Wine (litre)	37.7	34.2	35
Beer (litre)	59.4	72.3	86
Spirits[b] (litre)	5.4	7.2	9
Tobacco (kg)	2.2	2.3	2.2
	Daily nutriment consumption		
Calories	3,098	3,242	3,250
Kilojoule (kJ)	12,971	13,574	13,600
Protein (gramme)	97.9	100.7	103.5
Fat (gramme)	115.5	127.7	133.0
Carbohydrates (gramme)	419.2	425.1	411.0

a) without butter
b) converted into 50 proof spirit

Source: Hungarian Statistical Pochetbook 1980

Table 2
Composition of Hungarian foreign trade by groups of countries in 1979
(percentual distribution)

Denomination	Socialist countries	Non-socialist countries	Total
		Imports	
Primary energies, electric energy	23.6	4.8	14.8
Materials, semi-finished products, parts	36.1	59.0	46.8
Machines, vehicles, other investment goods	26.4	17.0	22.0
Consumer goods	10.8	5.2	8.2
Food industrial materials, livestock food	3.1	14.0	8.2
Of which: agricultural products, livestock	0.4	6.4	3.2
food industrial products	2.7	7.6	5.0
Total	100.0	100.0	100.0
		Exports	
Primary energies, electric energy	1.5	6.9	3.8
Materials, semi-finished products, parts	25.7	38.3	31.1
Machines, vehicles other investment goods	39.8	11.1	27.6
Consumer goods	14.5	19.5	16.6
Food industrial materials, livestock food	18.5	24.2	20.9
Of which: agricultural products, livestock	7.7	8.2	7.9
food industrial products	10.8	16.0	13.0
Total	100.0	100.0	100.0

Source: Hungarian Statistical Pocketbook, 1980

the most advanced industrial countries agriculture as well as food production are also the most advanced and of the highest standards. (E.g. the most important export sector of the USA is agriculture.) It is proved by several examples that an advanced industry can be supported but by an advanced agriculture, otherwise food supply engages too much of the resources for a faster economic development.

In countries with a medium-developed economy – as is Hungary – the food economy is one of the important sources of acceleration of economic growth and of a faster rate of industrialization. And this source may be the more abundant, the more up-to-date the agricultural and food production is.

The slower the modernization of agriculture and the food industry, the later it will be possible to emerge of the phase of medium industrial development level and enter that

of advanced industrial society. Modernization of the food economy may accelerate progress, for it expands the resources.

This is necessarily characteristic of a medium-developed industrial society, unless industrial development can rely on the brotherly help of people, or – just the contrary – it is supported by colonization, or by inexhaustible resources of raw materials. This rule will, in principle, assert itself as long as the industry does not reach a level at which it will cover its own development sources. Once it has reached that level, the whole development rate, incl. that of agriculture, will be determined entirely by industry. This, however, does not render the exploitation of our favourable agricultural potentials unnecessary, not even in the distant future. Obviously, in such cases industrial exports ought to aim at boosting the whole Hungarian exports, and not at replacing competitive agricultural and food exports.

What is to be learnt from the preceding?

The most important fact is that the role of agricultural and food production in the Hungarian economy has not diminished but grown and will continue growing in the 1980s. This is supported by the fact that food has become, similarly to oil and other primary energies, a strategic article. In spite of market fluctuations and the discriminatory and protectionist measures of a few countries or groups of countries the importance of Hungarian food exports in the trade with western countries has not decreased but grown. Along with rising living standards demand for food is growing also in socialist countries, in which its purchase is counterbalanced by important raw materials, semi-finished manufactures and convertible foreign exchange. Under such circumstances increased exploitation of the favourable conditions of agricultural and food production is a lasting element of realistic economic policy in Hungary.

Yet it would be wrong to draw the conclusion that we oppose a fast-rate industrialization with a kind of agrarian development, or, in a longer perspective, we base our economic development concept on the food economy instead on modern large-scale industry. To replace the "industrial perspective" by any kind of "agrarian perspective" either in the near future or in long-term development completely lacks reality. As the wheels of time cannot be turned back, economic development cannot be forced to take a different course, either, not even in countries having the best conditions for food production.

The only historically feasible way of rising out of economic backwardness is that of industrialization. It is in the same sense that fast modernization of the food economy is reasonable.

However, it follows from the whole development of the Hungarian economy so far, that we should not put off into the distant future what we ought to have done already. *The building up of an up-to-date food economy is an urgent task of today and of the very near future.* This necessity is not dictated by agrarian development as an end in itself, but, relying on a realistic assessment of our possibilities, exactly by the importance of an intensive industrialization and of a faster and more balanced economic growth. That is to say, it is not against, or instead of industrial development that the food economy has to

be modernized, but in its interest, and as an organic part of reasonable industrialization: and not in the distant future but, depending on our resources, as soon as possible.

The foreign economic conditions that changed in the mid-1970s affect the whole economic life of Hungary. The agrarian sphere is no exception. What is more, since two-thirds of the increment of agricultural production are exported, changing external conditions can be even less ignored in agrarian development. From this further tasks arise, which I shall treat in detail later on.

Industrialization of agriculture and efficiency

This group of questions is of key importance as regards both continuity and changes. The programme of agricultural industrialization was found in Hungary in scientific research and in literature already in the late 1950s, i.e. before the massive organization of cooperatives between 1959–1961. In the beginning this formulation caused a great storm but, as a result of the disputes, it became accepted in political-economic circles by the late 1960s.

Industrialization of agriculture has the following important components.

First: making general use of the latest technological, chemical, and biological results, which is related to the rising cultural standards and expertise of the workers. This is characterized by economists by stating that agricultural work becomes a kind of industrial work.

Second: joining into this process, agriculture will carry mass production of commodities just as industry does. The dimensions of enterprise production grow, its concentration and specialization accelerate. The organization of production and of enterprises is modernized, in harmony with concentrated mass production.

Third: an important characteristic of industrializing agriculture is also the strengthening of cooperation and integration. In the microsphere this appears as vertical expansion of activities within the enterprise, and as inter-enterprise cooperation; in the macrosphere it appears as the emergence of the food economy and of the agro-industrial complex.

Results of the industrialization of agriculture in Hungary are tangible. While between 1961 and 1965 the total agricultural production grew by yearly 1.4 per cent as compared to the average of the preceding five years, it grew by 3 per cent between 1966 and 1970, and by 3.5 per cent between 1971 and 1975, and in the period of 1976 to 1980 it is expected to grow by about 3 per cent. Data of the World Bank show that in the 1960s the Netherlands ranked first and Hungary second on the world list of food production growth.

With a few exceptions, in most agricultural branches yields also grew considerably. Our results achieved in wheat and corn growing are considered internationally as being among the best. The exploitation of the most important natural resource, of soil, has much improved, and similarly also that of labour. Twenty years ago an agricultural

Table 3
Main indicators of agricultural production

Denomination	1938	1950	1960	1970	1975	1978
Total gross output (%)	113	100	120	146	183	201
of which: plant cultivation (%)	121	100	121	135	177	186
livestock raising (%)	101	100	118	162	193	221
National income produced (%)	106	100	102	98	110	111
Wheat (1000 tons)	2688	2085	1768	2723	4005	5678
Corn (1000 tons)	2662	1820	3543	4072	7088	6581
Sugar beet (1000 tons)	969	1640	3370	2175	4089	4192
Vegetables (1000 tons)	739	1009	1364	1517	1632	1945
Fruit (1000 tons)	310	587	737	1308	1355	1392
Grapes (1000 tons)	495	611	491	743	813	786
Beef-cattle (1000 tons)	751	893	1070	1343	1848	1957
Milk (million litres)	1525	1403	1899	1807	1920	2266
Egg (million pieces)	844	955	1848	3280	4001	4748

Sources: Agricultural Statistical Pocketbook 1979
Hungarian Statistical Pocketbook 1980

worker produced food for only 5 or 6 persons, now he does so for 11 or 12, and at an incomparably higher level of supply, while agricultural and food exports have also multiplied.

Was the above-described process merely a simple quantitative development? Not at all. A considerable increase of per hectare yields, a sudden rise of output per worker, increasing output of commodities, a considerably better food supply to the population, and multiplying exports indicate, at the same time, qualitative changes. All that is based upon the permanent characteristic of industrializing agriculture that draught power and manual labour are being replaced by mechanical power, which reduces the consumption of agriculture from its own production. The energy and material needs of industrializing agriculture are increasingly satisfied by other sectors of the national economy. Therefore, its resources used earlier for that purpose can be now applied to commodity production. And the improvement of fertility as a result of the capital invested into the land, the higher biological capacities of plants and animals, their better utilization, and the much more efficient work of the manpower equipped with more up-to-date means of production have not yet been mentioned as important qualitative indicators.

Yet both data and experience show that the national income (net material product) produced in agriculture grows but very slowly in Hungary. The capital efficiency lags much behind the utilization of land and labour at the present stage of industrialization.

We obtain a relatively low production value per unit of capital and even its growth is moderate, what is more, growth alternates periodically with decline. And income data

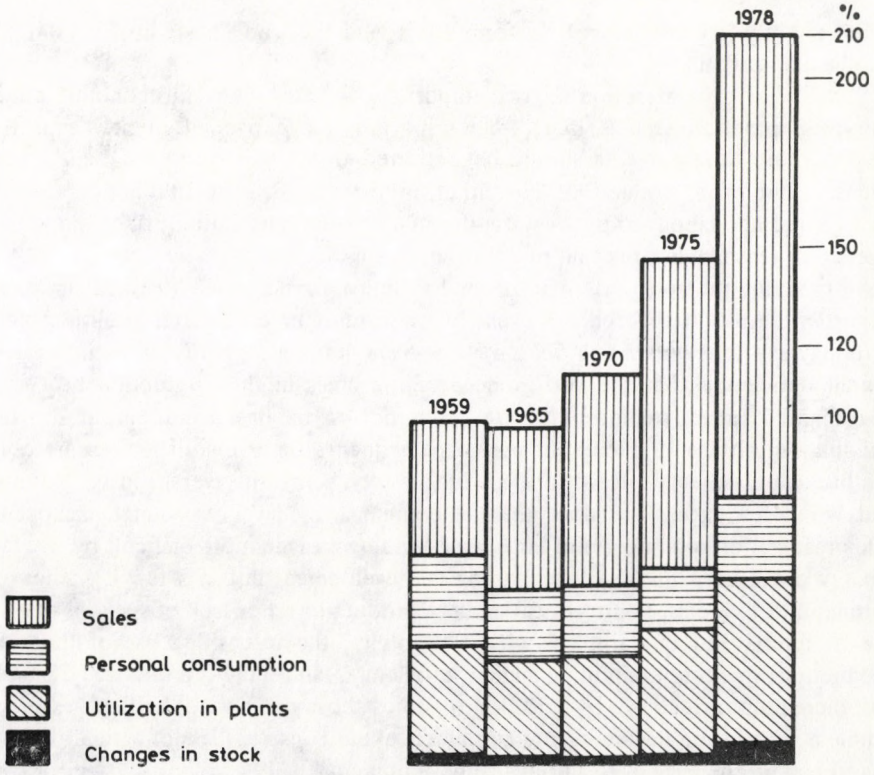

Fig. 2. Utilization of agricultural products (per cent)

per unit of capital show expressly a low-level utilization, and are of a diminishing tendency in quite a considerable number of large-scale farms.

Hungarian research workers called attention to this fact as early as in the late 1960s. Thus, the improvement of capital efficiency has not recently become topical in agriculture, but has been for long a permanent element of the Hungarian agrarian development and agrarian policy. Its main point has been formulated in that we do not only need more food, but at the same time profitably produced surpluses for supply to the population as well as for exports. Therefore, our purpose is not merely to increase average yields, but to increase them profitably.

Yet the improvement of capital efficiency as a long-term objective, is rather difficult to translate into enterprise practice. Time goes by, and circumstances change. Under the new circumstances developing in recent years (such as the scarcity of materials and means of industrial origin used in agriculture, as well as the high rise in their prices; the limited possibilities of investments on the home and export markets, etc.)

efficiency requirements must be reformulated, and the whole system of regulators must be adjusted to them.

All that calls attention to two important complex tasks in economic policy and enterprise practice. One is that, when capacities are expanded or new capacities are created those developments should be preferred which will ensure efficiency, competitiveness, and mass production. The other important task is profitable operation, which puts capital and labour to the best use through an economical use of fixed and circulating assets, and reasonable work and plant organization.

In laying the up-to-date material and technical foundations of Hungarian agriculture important results have been achieved, but it cannot be considered at all as completed. "We may say that *only a few fields of large-scale farming are really up-to-date* . . . It is an overall deficiency that the performance of machines in the production process is not co-ordinated (adequate machines are often not to be had), and partial shortages of buildings, machines, or circulating assets are frequent. Increasing difficulties are caused by the backward state of infrastructure, which is even below the average in agricultural areas and, with a few exceptions, does not even come near the level of productive capacities . . . The organization of a successful large-scale farming is made more difficult by the fact that *biology* could keep pace with technological development but in a few branches (e.g. the cultivation of cereals, poultry-meat and egg production). For lack of species making good use of inputs and in harmony with technology, the intensified use of the means of production does not entail a higher efficiency, and may even have transitorily a cost-increasing effect . . . In addition to the above-mentioned difficulties, it was a problem that in the beginning the competence and consciousness of agricultural workers lagged behind the pace of technological development." [1]

It has also to be taken into account that the new means partly serve to replace the loss of land and labour, as well as the old means gradually going out of production. Thus we cannot expect every investment to result in expansion. It is, however, justly expected that only profitable investments and developments – including technology – should be implemented. Industrialization of agriculture must not be limited to an increased number of new buildings, machines, means and chemicals, or to a mechanical transplantation of "modern" techniques and technology found in other countries. "Modernization" accompanied by worsening efficiency has been proved to be of doubtful value in life.

All that raises, of course, also the problem of the *industrial background.* Traditional agriculture, relying upon manual and draught power mainly, had little demand for materials and means of industrial origin. In modern agriculture, however, *the industry manufacturing means of production is an initiator of and active factor in technological development.* The efficiency of food processing depends also on its standards. The industry of a small country cannot, of course, undertake to manufacture all means and materials wanted in agriculture. Yet it can confidently take up manufacturing the most important ones, particularly if the agricultural market of other countries can be counted upon as well.

Agriculture and food processing raise not only quantitative demands towards the industry, manufacturing means of production, but increasing qualitative demands as well.

It is a *fundamental requirement* that the quality of industrial means and materials should be impeccable and their standards high. Their mass application in a wide sphere will be possible if the control and operation of machines, and the utilization technology of the various materials are simple and easy to learn.

The *other important requirement is high productivity* of the industry, manufacturing means of production. In principle, the means of production of industrial origin used in agriculture must be more efficient than the labour and tools which they replace. Therefore, their use must be concomitant with increasing yields, or (in case of raw material processing), with obtaining more useful materials.

There are countries where agriculture uses much more means of production of industrial origin than in Hungary, and yet the material inputs of agriculture do not take up such a great portion of the gross output value than in our country. This may only be the result of the facts that, *first,* agriculture works more efficiently, *second,* industry works more productively and manufactures more efficient means of production, *third,* economic policy is pursued, attributing due weight to the financial consequences of this process in the system of regulators of agriculture and in the formation of enterprise incomes. It appears that in Hungarian agriculture there is still much to do in all three fields in order to resolve the contradiction between industrialization and efficiency.

Better utilization of existing capacities is promoted also through *the stimulation of the traditional large-scale, household and small-scale production.* The purpose and meaning is that the traditional large-scale production, in many cases relying upon manual labour, and the output of household farming plots and gardens should not decrease to a greater extent than what can be made up for by the modern large-scale production. And, in a better case, the new large-scale farming capacity should not only replace the loss of production in household farming, but also contribute to the enlargement of production and supply.

Organizational forms of management

The enterprise structure of agriculture and the food industry presents a varied picture in Hungary. Its basic organizational forms are the following: state enterprise (state farm, combine), cooperative farms, and small farms (household plots and complementary plots). Secondary forms of organization are trusts (national centre of state farms), associations – including agro-industrial unions –, and joint enterprises. [2]

Under the conditions given in Hungary this variety of organizational forms is justified. In the existing organizational framework most of our tasks can be solved. The most important thing is to stabilize the basic forms of enterprise and, parallel with it, thorough and gradual development and the testing of new organizational forms. Development of the enterprise structure is not a temporary programme, but a careful and consistent work in which the *main requirement is to improve efficiency,* while organiza-

Table 4
Number and average area of large-scale agricultural farms

Denomination	1961	1970	1975	1979
Number of farms at the end of the year:				
State farms, combines	271	184	150	131
Common farms of agricultural cooperatives	4204	2441	1598	1350
Household-plot farms of agricultural cooperatives (in 1000)*	994	892	800	767
Agricultural associations of cooperatives total	38**	99	72	43
total number of associations	84**	453	526	595
Agricultural specialized cooperatives	453***	243	144	70
Average area of farms (hectare)				
State farms, combines	3740	5548	6602	7598
Common farms of agricultural cooperatives	1100	1985	3161	3903

*Number of families. The number of household farming plots is somewhat smaller, for there are more families not having a household farm than there are families having two, since every member is entitled to have one

**1965 figure

***Cooperative groups and special cooperatives

tional stability and development are to support this. Particularly great attention must be paid to the coordinated development of large-scale and small-scale production, to the promotion of the growth of output, to concentration and specialization of enterprise production, and to enhancing enterprise cooperation (cooperation and integration).

Cooperative farms play an important role in agriculture (Table 4). Agricultural producers' cooperatives in Hungary are not just a type of large-scale farming, but the *primary and determinant form of the socialist agricultural enterprise.* Cooperatives fulfil their obligations toward society, while the socialist state guarantees their independence in a legal framework, helping and controlling them in their activities. The state asserts social interests in cooperatives by using the methods of socialist planned economy, economic influence and regulation, state supervision and control. Public authorities do not intervene into the farming activities of cooperatives i.e. do not manage instead of them. The independence of cooperatives is asserted – as is that of state enterprises – within the system of socialist planned economy, in which, however, the priority of national level decisions and plans over those of the cooperatives (enterprises) is guaranteed.

State enterprises and cooperatives possess equal rights: their relationship is based upon mutual advantages and risks. State enterprises have authority over the cooperatives. Since further progress of the advanced socialist society does not necessitate a radical change in socialist ownership, but the strengthening and further development of state and

cooperative ownership, cooperatives will continue developing in conformity with their social and economic role also in the future.

In Hungary *large-scale agricultural farming is organically linked to small-scale farming.* In the first period of development of large-scale farms, in the 1950s, mainly the household farming of cooperatives was mentioned: science and agrarian policy indicated its necessity – following the example of socialist countries – in that the institution of household farming would facilitate it for the peasants to join the cooperatives, i.e. their transition to large-scale farming. Since household plot farming provided grounds for the individual activities accustomed to in earlier times, this was apt to resolve gradually the insistence on individual farming, and the drawing of cooperative members into large-scale farming.

Contrary to the practice and theory accepted in socialist countries, in the period of organizing cooperatives in 1959–1961, in Hungarian agrarian development household farming has become a form of small-scale farming indispensable for supplying the population and well utilizing peasant capacities. Agrarian policy has always considered household farming as an organic part of socialist agricultural production. After a certain indecision in the mid-1970s this conception and practice have further strengthened in the last 5–6 years. Its main point is that socialist agricultural production relies both on large-scale and small-scale production and, though large-scale farms have the bigger share, small farms also play an indispensable role. This is explained by several reasons. The most important one is that up-to-date and profitable large-scale agricultural farming can be developed but gradually, coordinated with material and personal conditions. Therefore, small farms are indispensable in supply, in the employment and incomes of the population, and in the profitable utilization of productive capacities. It follows that there is only one feasible way: *socialist enterprise must integrate small-scale production.* This is all the more important, as statistical investigations of the 1970s have shown, that the sphere of household farming extends much beyond that of household plots and cooperatives and of specialized cooperatives. Small-scale farming affects a very wide circle of wage-earners and pensioners and influences the living conditions of large groups of society, and to an increasing extent those of workers and employees outside agriculture. Hungarian agricultural policy has drawn the consequences for the development of agricultural production.

In the 1970s large-scale *enterprise amalgamations* took place in Hungarian agriculture. Between 1970 and 1979 the number of state farms fell from 184 to 131, and their average area grew from 5548 to 7598 hectares. The number of cooperative farms fell from 2441 to 1350, while their average area increased from 1985 to 3903 hectares. Territorial concentration was not followed by a similar rate of concentration and specialization of production, though the framework was undoubtedly created with the amalgamations. These were in most cases coupled with territorial reorganization of production, establishment of big fields and plantations, and even with a certain degree of specialization.

Table 5
Most important data of food industrial trusts in 1978

	Number of enterprises	Number of establishments	Production value thousand and mill. Ft*	Staff number (yearly average, heads)
Liverstock Trade and Meat Industry Trust	23	56	31.5	34.430
Poultry Meat Processing Enterprises' Trust	9	26	7.1	10.893
Dairy Industry Trust	17	97	15.6	18,731
Canned Food Industry Trust	16	73	11.6	26.628
Corn Trust	21	296	20.1	22.305
Sugar Industry Trust	12	13	8.3	11.226
Distilling Industry Trust	6	64	3.8	5.858
Wide-Growing Enterprises' Trust	7	205	6.0	9.924
Brewing Enterprises' Trust	7	25	4.1	8.815
Tobacco Industry Trust	8	44	5.1	6.490

Number of industrial establishments including the research institutes
*Only the gross output value of enterprises classified in the food industrial sector, at current prices

The way to be followed in the coming years is to develop, within the established framework of large-scale production, a more reasonable production structure (promoting economical production), better adjusted to natural resources and better utilizing local potentials. The main point of development is not simplification of the production structure by all means, *but that farms should start producing profitably the products that correspond best to their given conditions.* In the course of developing diversified production structure it is useful to give priority to products that can be profitably exported for convertible currency, for in this way home supply and exports can grow parallelly.

In the Hungarian food industry trusts and national enterprises are functioning, with the former predominating.

The trust is a widely applied organizational form of enterprise economy and management. Trusts are, on the one side, medium-level control organs, on the other side, such enterprises centres whose relationship to the subordinate trust enterprises – functioning as independent legal entities – is hierarchical, also relies on material incentives. The most important objection to their functioning is that they centralize most of the spheres of authority and enterprise functions, the independence of their enterprises is to a great extent formal, enterprise profit is fully or in a few cases in most part centralized and redistributed. In a number of cases this is not done with a view to developments serving common interest, but leads to levelling; it is aimed at helping those working with lower

efficiency, thereby it does not encourage enterprise initiative and the taking of risks, but leads to complacency. For these reasons the necessity arises to modernize the trust organization, which may be done in several ways. *One feasible way* is to end over-centralization, to increase considerably the trust enterprises' independence, to abolish useless restrictions and to eliminate bureaucratic and formal methods. Another *practicable way* is organizational decentralization, giving full independence to enterprises and factory units (liquidation of the trust), or to some of the enterprises. This is possible in such cases in which sectoral control is practically a minimum, centralization does not entail any considerable advantages, and the management of enterprises does not require close coordination. A *third way* would be the division of trust functions (management and control), and the foundation of national centres to attend to clearly delimited control tasks. Such solution – as is the National Centre of State Farms – is considered practicable if the number of member companies is great, their interdependence strong, and national coordination clearly entails advantages.

Enterprise cooperation and integration in Hungary

Enterprise cooperation and integration are concepts increasingly in fashion in Hungary, while in their interpretation there is much uncertainty.

Cooperation is a coordinated arrangement and intensification of production and economic relationships built upon the mutual interests of economically independent participants. *Integration* is a higher degree of cooperation. Its main point is that the participating enterprises do not only coordinate their activity or part of it according to mutual interests, but subordinate it, partly or mostly, to the integrating partner or to a jointly established organ. That is why it can be said that integration means much closer interdependence, relationship and bound than cooperation, for it amounts, practically, to *the control of definite activities of independent (organizationally separated) economic units firmly kept in hand, that is, their integration into one chain.* Integrated activities or decisions get out of the hands of the participants and are transferred to the integrator, or the organ charged with the task, which will control and organize their execution, though in agreement with them.

In the framework of an integration the individual elements of the activity are closely linked to one another. Such linkage may involve partial or full abandonment of independence of the production units with a view to better cooperation. Yet integration in economic life is not simply a sub- or superordination, but a cooperation based upon mutual interests, mutual advantages and mutual risks.

Horizontal and vertical cooperation and integration are often intertwined in practice. Both have, as well as their intertwining, wide variations. E.g. in contractual relationships concerning sales – which usually take the form of cooperation – integration relationships also appear. Integration usually evolves in separate organizational frameworks, that is to say, the development of integration entails changes in organizational

forms, and *the appearance of new inter-enterprise and enterprise organizations.* Therefore, a very close interaction is found between strengthening integration and enterprise development, which leads in practice to a wide variety of integrational forms.

The strengthening of cooperation and integration is found both within and among enterprises. In the sphere within the enterprise a remarkable new feature of agrarian development over the past twenty years is the appearance *of industrial activity.*

In the Hungarian large-scale agricultural farms the range of production is narrowing as compared with the universal peasant production, while vertically it is expanding, since farms getting specialized try to take up the industrial activities that are vertically related to the profile chosen. Such changes are favourable from the aspect of society as well as from that of the enterprises. Vertical development

– yields, first of all, more commodities, contributes to widening the range of commodities, among other things to better food supply;

– it helps to eliminate shortages entailed by large-scale industrial centralization, and to a certain extent it replaces the activities of the missing small- and medium-sized enterprises;

– development of internal cooperation and organization of industrial services supporting agricultural production enable a more up-to-date production, promote the development of the forces of production and a better utilization of the yearly worktime of workers;

– the incomes and, consequently, the accumulation resources of farms are growing, and, as a result, state subsidies granted because of adverse conditions have diminished and have even been stopped in several farms;

– enterprise development makes great progress, and cooperation relationships, remarkable also from the aspect of specialization of production, are widening.

Vertical expansion of agricultural activities is useful in several directions: linked, on the one hand, to services (building, machine repair, fodder supply, chemical processing), on the other hand to food processing, and, last but not least, to developing industrial activities not related to agriculture but wanted in the national economy. The territorial sizes of farms allow such expansion, or, if not, limits can be extended through the cooperation of several enterprises.

The advantages inherent in concentration, specialization and cooperation of production are not limited to processes within the enterprise. Today the entire functioning of large-scale agricultural farms is interwoven with inter-enterprise relationships. One important field of this is the *system of contractual relationships* between large-scale agricultural farms, procuring companies and the food industry, in which the features of integration are getting more prominent. The substance of this process is that, going beyond the traditional trade relationships, the contractual system is increasingly filled with a content characteristic of simple associations, that is to say, the trade relationships grow into an economic cooperation relying upon mutual advantages, responsibility and risk-taking.

In the early 1960s, when socialist large-scale farms became preponderant, *associations* appeared in Hungarian agriculture. In the beginning these were simple societies and joint enterprises, which made up first of all for the lack of an industrial background of agriculture, or for its deficiencies. Later, in the early 1970s, industrial production systems appeared, the functioning of which had a highly favourable effect on the whole agrarian development and resulted in an upswing of production in the fundamental sectors. In the late 1970s four *agro-industrial* unions were formed for the purpose of experimenting.

Economic cooperation thus shows varied forms in Hungarian agriculture. It is particularly important that *the wide variety of forms should continue to exist in the future* and develop in accordance with economic realities. It is, namely, not the form but the content of cooperation and its economic result that count. And the most important requirement of it is *an economical expansion of production,* and the improvement of efficiency, not least through the advantages of specialization and coordination to be augmented by associations (intensified relationships).

It is very important *to preserve the economic independence of the cooperators and to guarantee their material incentive.* This is the main motive power of joining the forces of enterprises. Economic cooperation does not tolerate administrative methods. In a cooperation *the fragmented and generally scarce development resources of farms can be put to a better use.* However, cooperation must be of much wider scope than the implementation and operation of common investments. *Coordination* realized in the framework of associations is efficient if it comprises the entire production and even management of the member farms, taking care that the centres of associations should not become a control apparatus (breaking down plans).

Improvement of the work of associations of sectoral character (e.g. production systems), and the development of their activities will continue to be one of the most important ways of strengthening cooperation. Better exploitation of the regional conditions, and the advantages of a coordination, covering the activities of member farms, make it justified to organize and operate also *regional associations.* These may be, depending on the special lines of the participants, agricultural as well as agro-industrial associations. It is, however, important that the regional bond should not lead to regional exclusiveness, for that would not be in harmony with the open character of associations.

In Hungary so far associations among cooperatives and within agriculture have been prevailing. Therefore, it is very important to develop cooperation between agricultural and industrial enterprises. The latter, i.e. the agro-industrial character of the associations can be strengthened by founding joint industrial enterprises of large-scale agricultural farms, and by joining existing industrial enterprises to the associations. The former version is the more frequent, while the latter has occurred so far in the agro-industrial unions, and it is rather formal in practice. The real solution would be if food industrial enterprises did not participate in the agro-industrial unions as member companies of trusts, but as independent enterprises. This may be achieved through a further development of the existing trust organization.

References

1. ZSUFFA, E.–MRS. ZSUFFA, E.: *Változó körülmények, növekvő követelmények a mezőgazdaságban* (Changing circumstances, increasing demands in agriculture.) Közgazdasági Szemle, 1980. No. 5
2. CSIZMADIA, E.–SZÉKELY, M.: *Vállalati gazdálkodás és gazdasági irányítás a mezőgazdaságban* (Enterprise economy and economic management in agriculture.) Budapest, 1978. Mezőgazdasági Könyvkiadó. pp. 15–33

ВЕНГЕРСКОЕ ПРОДОВОЛЬСТВЕННОЕ ХОЗЯЙСТВО НА ПОРОГЕ 1980-Х ГОДОВ

Э. ЧИЗМАДИЯ

Из каждого форинта, расходуемого населением Венгрии на нужды потребления, почти 50 филлеров идет на продовольственные продукты, кофе, чай. Поэтому понятно, что с точки зрения внутренней политики равномерное снабжение продовольственными товарами имеет очень большое значение. По мере повышения уровня жизни значение производства продовольствия и снабжения им еще более возрастет.

Продукция пищевой промышленности и сельского хозяйства составляет 21% венгерского экспорта. В экспорте в несоциалистические страны эта доля составляет 24%, а в венгерском экспорте в западноевропейские капиталистические страны — 32—34%. Это свидетельствует о том, что в Венгрии сельское хозяйство и пищевая промышленность играют очень важную роль в увеличении валютных ресурсов экономического развития.

Более эффективное использование благоприятных возможностей сельскохозяйственного и продовольственного производства является прочным элементом реалистической экономической политики в Венгрии. К тому же, подобно нефти и другим энергоносителям, продовольствие также стало стратегическим товаром на мировом рынке.

В обеспечении современной материально-технической базы и повышении производства в венгерском сельском хозяйстве были достигнуты значительные результаты со времени завершения его социалистического преобразования (1961 г.). Товарное производство возросло более чем в два раза, что было обусловлено значительным повышением урожайности, в то время как площадь сельскохозяйственных угодий сократилась на 20%, а численность занятой в сельском хозяйстве рабочей силы сократилась на половину.

Существенное увеличение сельскохозяйственного производства и товарного производства сопровождалось значительным повышением производительности труда. Однако экономическая эффективность основных средств возрастала лишь весьма медленно. Поэтому ключевой вопрос последующих лет в венгерском хозяйстве — это повышение эффективности основных средств. Важной составной частью этого вопроса является экономичность капитального строительства и эксплуатации оборудования в крупных хозяйствах, а также повышение производительности промышленности, выпускающей средства производства.

В достижениях венгерского сельского хозяйства большую роль играет повышение культурного и профессионального уровня рабочей силы, усиление материального и морального стимулирования работников сельского хозяйства, значительное повышение их уровня жизни. В немалой степени этим достижениям способствовало согласование производства общественных, приусадебных и других мелких хозяйств, их одновременное развитие, индустриализация производства крупных хозяйств, его усиленная специализация, далее, укрепление сотрудничества между сельским

хозяйством и обрабатывающей промышленностью, а внутри сельского хозяйства — между сельскохозяйственными кооперативами, а также между сельскохозяйственными кооперативами и государственными хозяйствами.

В Венгрии имеются разнообразные формы кооперирования и интеграции между предприятиями. В последнее десятилетие наиболее быстро развивались индустриальные системы производства, которые в настоящее время имеются уже во всех отраслях сельскохозяйственного производства. Основным мотивом кооперирования и интеграции между предприятиями в венгерском сельском хозяйстве и пищевой промышленности является сохранение самостоятельности предприятий, обеспечение в рамках сотрудничества материальной заинтересованности участников. Основное же требование развития кооперирования и интеграции — это рентабельное расширение производства и повышение его экономической эффективности.

Acta Oeconomica Vol. 24(3–4), pp. 321–340 (1980)

I. SCHWEITZER

CENTRAL DECISIONS – ENTERPRISE EFFORTS

ENGINEERING INDUSTRY DEVELOPMENT PROGRAMMES IN HUNGARY IN THE EARLY 1960s

The study lists the case studies drawn up on the central development programmes of the engineering industry and the effect of the programmes on enterprises from 1958 up to about the beginning of the 1968 reform of the economic mechanism. It was at the beginning of this period that the practice of assigning special priority to one or another industrial branch (and within it to a few leading products) developed in Hungary, which later on took the form of central development programmes and has survived in that form. The case studies may help to a better understanding of the interrelations between central decisions and enterprise behaviour – for the future as well as in general.

In the late 1950s and early 1960s the activities of the CMEA – then only a few years old – took a sudden upswing. Negotiations on large-scale specialization were started in several sectors, yet nowhere so extensively as in engineering. These new phenomena manifest in the relations among CMEA countries became intertwined with new objectives. The latter were reflected first of all by Soviet economic plans. The main directions were the following: to increase considerably, and at a fast rate, food and manufacture supply to the population; to expand, in this context, the manufacturing of consumer articles as well as agricultural production (among other things, by breaking virgin soil areas); to increase the whole of industrial production so as to catch up with the United States in the foreseeable future, first in respect of the volume of the main products and later also in per head production. The CMEA countries agreed with this policy, aimed at accelerating development and laying greater stress on raising the standard of living than before. They were ready to coordinate their efforts better in order to achieve the aims, in such a way that the development rate of countries at different levels of industrialization and with different conditions should head for the equalization of economic development levels. At first the uniting of forces through "common planning" was often mentioned as the perspective of relationships beyond coordination. Yet this has never found unanimous support and later it was driven totally into the background for a long time.

Engineering – the "heart" of industry – was, of course, clearly assigned for an important role in the achievement of these aims. The distribution (redistribution) of production tasks among countries as well as the conclusion of specialization agreements were meant to expand production in the engineering industry, to increase production concentration and to improve efficiency; and, in countries with a lower development level of engineering to promote development. The specialization agreements were concluded in

a way that the various products (final products) of the various production branches of engineering were distributed among the countries interested. For example, according to the agreements, in telecommunication techniques, the manufacturing of radio sets, the manufacturing of television sets, and the manufacturing of professional equipment, etc. would have been each in the production line of different countries. Similarly, in the vehicle-building industry each country would have specialized in manufacturing a certain type of vehicle. The fact was not observed in the agreements that it is usually a condition of efficient production of the final products in engineering that certain common components and parts should be produced in volumes larger than those of final products: they were concerned only with distributing production of the final products.

In Hungary the large-scale development plans of the "special priority" industrial branches started about that time or were just on the upswing, and later the central development programmes in engineering were linked up with this specialization process.

In the development of the Hungarian engineering industry the large-scale development programmes of the different production sectors followed each other as specified here-under.

Vehicle building	Diesel programme from 1954 Public road vehicle programme from 1964
Machine tool industry	Priority sector of special importance from 1958
Precision engineering	Priority sector of special importance from 1958
Telecommunication equipments	Priority sector of special importance from 1958
Machine building for the food industry	Large-scale development plans about 1960

In my study I shall recall the history of these programmes. I first attempted to describe them in a research report made in 1970 for the Institute for Economic and Market Research, and at that time already several outstanding analyses to rely on were at my disposal. (Let me mention among them the works of Ákos *Balassa* [1], Pál *Péter* and József *Villányi,* some ot them published, some not.) The number of analyses has grown further since, indicating that examination of attempts at structural transformation – based upon central plans for engineering in physical units – has, unfortunately, not yet lost its topicality. Otherwise, in the above-listed industrial sectors more than one central programme continued further – with new phases or under new names, with different or just modified objectives – and some are still going on. That is, the programmes have not been finished, just transformed. However, we shall follow their history only up to about 1968.

The Diesel programme

This programme goes back to about 1954–55. That was when the first agreement was concluded to the effect that, supported by a large-scale development, Hungary should supply up-to-date multiple unit trains (railcars) to the Soviet Union and later to other socialist countries as well. The programme could refer to certain production traditions: Ganz–Jendrassik motor trains – of world market standards before World War II – were already supplied to the Soviet Union in reparations. These became outdated, however, by the 1950s. The Jendrassik engine did not come up to standards either in hauling capacity or in useful life. Therefore, it was clear when formulating the programme that new design was necessary, or, the purchase of a licence. Choice fell on home development: the first phase of the programme was the technical design of the new engine 17/24. This took place in 1954–1955.

Serial production started already in 1957. The first Diesel engines and motor trains equipped with the new type of engine were exported to Egypt in 1958 and later on they were supplied continually to the Soviet Union and Poland. All that was done without having adequately tested the new engines first (at a test stand and in normal railway service). (With a view to satisfying the most important requirement, i.e. lasting operational safety, western factories operate their new constructions usually for at least 3–4 years before marketing them.) The hastened exports of the untested vehicles entailed the consequence that all the engines built into the Egyptian exports had to be exchanged for western parts. The vehicles delivered to Poland and the Soviet Union were for a long time out of operation because of broken parts and other grave defects. In 1960–1961 the guarantee costs of repairs amounted almost to 20 per cent of the value of the vehicles. What could be the cause of this grave situation? Why could not an adequate engine be produced? The direct and specific reasons were formulated in the experts' reports of the time as follows.

1. "Elaboration of the engine construction was entrusted to young and inexperienced engineers who, in their efforts at up-to-dateness, disregarded the higher safety requirements of railways."

2. "At the time of working out the construction of these engines import saving and introducing cheap substituting types of steel were strict requirements. Therefore materials were used in the first series which were not permissible with railway engines."

3. "The new construction – as every modern solution in general – wished to attain higher performance with a lower weight and lighter structures. This made greater demands than before on the exact composition of the materials used, and in respect of the homogeneity of deliveries, and involved greater stress on the parts in respect of heat, pressure, friction, etc. An up-to-date design would have necessitated thus a more up-to-date technology, which, however, could not be attained, in fact, technological discipline deteriorated much as compared with the situation before World War II." It was caused, among other things, by the large-scale migration of workers, the "fetishism" of quantity plans and the regularly recurring "rush-work" at the end of every quarter and every year.

4. The question of specialization and cooperation was raised sharply, too. "In every western motor type there are regularly recurring parts which the engine factories buy from other manufacturers (bearings, pistons, injector system, regulator, refuelling devices, shock-absorbers, filters, crankshaft, fittings, smithery). The enterprises specializing in manufacturing parts have a vast professional experience in their own field; when a new motor type is being developed, they can give special advice to the factories, etc. In this way the manufacturing of parts goes parallel with and even precedes the modernization demands of the engine constructions. The products of specialized part manufacturers are internationally known (e.g. injector system – Bosch (GFR), CAV (England); piston – Specialloid (England), Mahle (GFR); skid bearings-Clyco Metall (GFR), Glacier (England), etc.)."

"Not so in Hungary. First, some of the above-mentioned parts are manufactured by the Ganz-Mávag factory itself (the piston and bushing, the injector system and the regulator – the two latter ones shared with the Factory of Small Motors and Machines – finishing of crankshaft). But even in cases in which parts are manufactured elsewhere, research and development in the cooperating enterprises come practically to nil. These factories are served also intellectually by Ganz-Mávag. This entails fragmentation of the development and designing activities at the said factory, though its efforts ought to be concentrated on developing the new type of engine. Of course, verticality harms also the development of the parts themselves, since it does not take place in specialized factories, lacks the necessary technological knowledge, and is done with handicraft methods."

In 1963 Ganz-Mávag started to elaborate a new engine (the 18/19). For the transitory period an amended version of the defective construction 17/24 was developed. Not much later, however, negotiations on the purchase of a western licence started at last.

Thus, as for the licence, the autarkic approach was defeated after about ten years. This did not change, however, the need of an international production cooperation, although its importance was already obvious. This is proved by the fact that it was at that time that in his analysis of the Diesel programme Pál *Péter*, of the Institute for Economic and Market Research compiled the example which was later published by academician Imre *Vajda* [2], and which is worth citing today in Hungary, in this period of disputes about the "background industries". According to the said example, the components of the HP2000 Diesel-eletric locomotive bought from Nohab of Sweden in the 1960s were of the following origin:

Diesel engine	General Motors, USA
Traction electric engine	Thrigs, Denmark, under General Motors licence
Railway wheel sets	Steel Peach and Co. Ltd., England
Brakes	Knorr, GFR
Oil boiler	Vapor Intern. Corp., USA
Fittings	General Motors, USA

Speed-gear	Switzerland
Pressure-gauge	GFR
Gear-train	General Motors, USA

In addition to the above-said, a great number of Swedish cooperating partners supplied parts.

Machine tool programme

Referring to certain favourable phenomena in the Hungarian machine tool industry in the years 1958–1960 (introduction of new kinds and types of machines, increase in the volume of production and exports) this industry – as one of the so-called labour-intensive sectors – was qualified in the plans as a sector with promising perspectives. These conceptions did not take into account that there was not enough demand for the range offered by Hungarian production, not even with the new kinds of machines developed between 1958 and 1960 (universal grinding machines, planers, turret lathes) and the new types (high-precision lathes, programme-controlled milling machines, radial drilling machines), and particularly not by the Soviet Union, the most important customer. The new types developed were practically modernized and more complicated versions of earlier universal machines. The same range was offered by the rest of the CMEA countries, and their production, with a reduced rate of investment, began to be ample even in the Soviet Union. The idea was that, at an accelerated rate of development, the Hungarian machine tool industry would be able to exchange a large part of its range of products, and to develop the manufacturing of the kinds of machines missing from the offer of the CMEA countries and complying with Soviet demands. The Soviet Union wanted technically advanced, automated and special machines and production lines of high productivity (high-precision grinding machines, milling machines, jig-borers, automatic turning lathes).

Following a series of discussions started in 1958, the CMEA passed a decision in 1962 according to which the Standing Committee for Engineering assigned Hungary the manufacturing of 16 machines to be developed. Of the 16 machines the mass production of 10 machine tools was to be started in the plan period of 1961–1965. In fact, however, only 5 went into production, with more or less delay.

The Hungarian machine building industry again undertook a development task well beyond its capacity.

According to plans, the structure of machine tool production was to change in the five years between 1960 and 1965 (based upon the division of finished production) as follows.

The unreality of the task followed first of all from the fact that the basic types from which the required ones could have been developed were missing. The method of specialization was not fortunate from the technical aspect, either. The kinds of machines were distributed among the countries, though the types of various sizes and functions of

Table 1
Envisaged changes in the product pattern of machine tools building from 1960 to 1965

Kinds of machines	1960	1965
General machine tools	88.0	38.5
Increased- and high-precision machines	1.5	21.1
Special single-purpose machines and production lines	6.3	27.1
Other progressive machines	4.2	13.3
Total	100.0	100.0

identical kinds of machines are independent of each other. Under such circumstances the 16 different machines could not have gone into production within the short term envisaged, even with a much larger development capacity. Technical designers, investment companies, and manufacturing capacities were unprepared for executing the task. A difficult period began in the machine tools industry. The development, started with a wide range and short terms, brought disappointing results in spite of great efforts. This was further aggravated by the highly autarkic approach of industrial development efforts. Licence purchase, or "productive" imports were not even mentioned in the plans. Constructions of leading technological standards ought to have been developed, relying upon our own forces, when cooperation relations did not exist even among home companies, when on the home market not even the fundamental standard machine elements were to be had. "Handicraft" methods were spreading, and the research of subjects long solved in foreign countries became self-evident.

A study of Ágnes *Vértes, Mrs. Bodó* based upon the investigation of Technoimpex gave a picture of the new constructions in 1964. [3] The data refer to turning lathes of 8 different types, 4 turret lathes, 12 grinding machines, 9 milling machines, 5 drilling machines and 5 other constructions. The picture was as follows.

The production of all the envisaged types of turning lathes started before 1964. (Four of them with one or two years' delay relative to the envisaged term.) Two of the four types of turret lathes were completed, the other two were not. On those completed, experts made the following comments: automatic turret lathe RT–40 – "too expensive construction". Programme-controlled, improved turret lathe RT–80P – "Defective and too expensive construction, also infringes on a western patent." As for the other two constructions, the turret lathe RAM–32 was to go into production in 1965, but "from 1963 works on the construction were stopped". A five-year delay was expected with the programme-controlled turret lathe RTA–160 (to be finished by 1966) but, according to the comment: "The prototype is unacceptable – it is over-complicated."

Of the twelve high-precision grinding machines nine ought to have been completed by 1963 according to plans, but, in fact, not a single new type could go into production.

Quotations from the comments: universal grinding machine KKU–250 (3-year delay) – "The new construction completed in 1963 is defective." The same comment is made on three further types (plane grinders KSUN–250 and KSFN–250, optical grinder KOP–160). Gear-grinding machine FK–250 – "The prototype has been completed in time, but infringes on a western patent."

The situation was more favourable with the milling and drilling machines. There we find only a single grave remark: with the universal milling machine MU–250 – "Ulteriorly (upon the basis of exports), defects in construction became apparent." Further, the comments throw light in three cases upon another special reason for the delay in starting production: with reference to the electric spark metal-cutting machine Erosimat Super – "The prototype is finished, manufacturer is not assigned;" cardan balancing machine BKE – "No manufacturer;" automatic piece-cutter DR–540 – "prototype finished in time, manufacturer assigned only in 1964". These comments show that enterprises did not try hard getting the right to manufacture the new constructions.

The fact is explained in an interesting way by the example of the automatic engine working machine line. In this case the new construction was based upon previous experience. Namely, prior to the manufacturing of the machine line for the Soviet Union, Csepel Machine Tool Works had already manufactured two machine lines, though of smaller dimensions, for the home market. The units had been earlier manufactured by the Csepel Works; they were practically improved specific versions of their universal machine tools. The most difficult task was presented, theoretically, by the coupling of the units, and finding the key to their automatic operation (the more so as this is in fact not in the line of the machine tools industry). This has been done successfully. In practice, the main problem in designing the construction was at the start that the machine line was not specified on the list of quotas, though different constructions are needed for different purposes. Designing would have been made easier by data not only on the exact purpose of the machine, but also on the place and conditions of intended operation, and on the quality of the work-pieces to be produced by the machine line. Yet, pieces of information needed for the manufacturer were delayed, and later proved to be inexact: the future place of operation changed, as did the quality of material, which gave grounds for complaints about defects attributed to the construction. Thus the Csepel Machine Tool Works maintained continuous contact with the customer during the planning and manufacturing of the machine line. This relationship was maintained even after delivery of the machine line, with a view to getting acquainted with the experience gained in operation, and to the smooth process of preventive maintenance, parts supply and repair. All that cost the Csepel Works great efforts.

The efforts did not prove profitable from the economic and material aspects. As for the production of the first machine lines, progress and the costs arising could be foreseen but roughly. There were a great many problems of construction and of purchase encountered in the process. All that led to underfulfilment, which then had the consequence that the premia and profit shares of the workers were reduced in many cases as the designing and manufacturing of the automatic machine line progressed, despite the

fact that the worker collective accomplished more difficult tasks than in earlier years. It was not first of all those engaged in designing or manufacturing the machine line who suffered financial disadvantages – they received special rewards –, but the other members of the factory collective. This led to fluctuation – particularly among the technical staff. Therefore, already in 1963, the Csepel Trust judged the work of the factory and allotted financial rewards not upon the basis of plan fulfilment and of the usual indices of production, productivity and manufacturing cost, but by relying upon the opinion of an expert committee. All that provides experience why enterprises did not strive after the manufacturing of products worked out upon the basis of some large-scale development conception.

Precision engineering and telecommunication programmes

Precision engineering and telecommunication equipments were industries given special priorities alreadv in the period of the second three-year plan (1958–1960). The basic principle in attaching special importance to these industries was to drive the structure of engineering toward labour-intensiveness.

In Hungarian precision engineering geodetic and other optical instruments had perhaps the longest manufacturing tradition. However, this group of products was not considered to have much perspective in the programmes. (In spite of this, by the end of the 1961–1965 five-year plan period exports of these instruments had largely grown, and their share as well, while other plans were not realized.)

The conception of giving special priority to precision engineering was coupled with ideas about increasing product concentration. The principle of the conception was, also because of the limited development resources, that exports should be raised only through the indispensable technological development work, and where possible, by the few kinds of instruments that could be produced using the documentation received from the Soviet Union. In collating the long-term plans, the following two tendencies were discussed:

1. Hungary was to supply the automation equipment for the distribution system of mineral oil and natural gas to the European member countries of the CMEA (the so-called Glavgas-programme).

2. Hungary was to undertake to cover the considerable demand for medical instruments of the Leningrad Economic District.

On the whole, according to the programme, Hungarian instrument deliveries to the Soviet Union would have doubled every five years by 1980.

The targets of the "Glavgas-programme" grew huge because the Soviet Union planned to equip also her home distribution system of oil and gas pipelines with Hungarian automatic instruments. It soon turned out, however, that no adequate Soviet documentation was available. Yet the partner expected an advanced construction and the delivery of a large volume within a short term. The Hungarian industry could not come up to expectations. In failing to fulfil the obligations it may have also had a role that, about 1964, in the course of discussions concerned with the collation of plans for the 3rd

five-year plan period (1966–1970) the Soviet Union reduced her demand for instruments to one-third of that originally envisaged in the long-term plan, which made a certain correction necessary in the Hungarian precision engineering development conceptions.

Hungarian participation in the *medical instrument programme* may be traced back to the 1950s when, following a visit of a Soviet health delegation, which was pleased with what they saw, the Soviet partner handed over the documentation of a number of such health equipments which she did not want to continue manufacturing herself. After expansion of capacities and the settling of a few initial problems of adaptation deliveries started and for a time kept considerably increasing. Later, however, they come to a halt and then began to fall, which caused difficulties even in the full use of capacities. In the reduction of Soviet import demands several factors played a role. The technical standards of Hungarian supplies were stagnating; further development of the types worked out originally by the Soviet party was delayed – in want of experience and traditions – though it engaged quite a large research and development capacity. In spite of expectations, parallel production developed in a few socialist countries, and finally the Soviet production itself developed. The latter fact meant that Hungarian supplies became of a complementary character, which promised also for the future only stagnating export possibilities.

In the late 1950s development of *telecommunication equipments* was pushed very much to the foreground in Hungary, partly because as a labour-intensive industry it offered a good perspective for the industrial development of Hungary, poor in natural resources. Certain efforts at export development met with Soviet intentions of enlarging imports. Soviet demands referred to a few products, had special technological requirements according to Soviet documentation and necessitated large-scale mass production. Such concentrated efforts at boosting supplies caused several unforeseeable problems. Adaptation of the technological documentation raised already great demands towards the relatively small Hungarian research and development staff, and there were not enough forces left for the necessary further technological development. (In foreign countries 6–8 per cent of the staff in the telecommunication equipment industry are engineers, while in Hungary the same hardly exceeds 2 per cent.) Development of the large capacities wanted for the envisaged production tied up the material development resources of the industry also later on.

Yet the basic cause of the telecommunication development's lagging behind the targets was, from the beginning, the problem of *parts*.

Products of the telecommunication industry consist of a large number of small machine elements which can be standardized, and produced in large masses – which is the only economic way of producing them. Their specialized production is the basic condition of cheapness as well as good quality. The Hungarian industry could obtain ready-made elements to build into its own products only from the western markets offering unlimited quantities and varieties. In vain did the specific technological characteristics of Soviet documentations set a limit at the beginning, as did the pressure

for economy with convertible currencies all the time – western imports were still growing fast.

In the context of developing telecommunication equipments the opinion must be taken into consideration that in the beginning the Soviet Union was in a position – owing to its large demand made on socialist countries – to exert a specialization activity by merely distributing its demands. And yet parallel final product manufacturing capacities were built out in several countries (GDR, Poland, Czechoslovakia, Hungary) without an adequate base of parts. Similarly, the large Soviet demand would have well allowed the uniting of research capacities and common research and development work. This, however, did not happen.

After the building out and expansion of final product manufacturing capacities – which took place with a delay – (e.g. expansion of the Telecommunication Works BHG, manufacturing telephone exchanges, was 3 years late), the problem of parts became even more serious. Because of the delay of investments and for some other reasons the envisaged quotas of the second five-year plan (1961–1965) were fulfilled only partially. It was owing to this fact that the Soviet Union considerably increased her imports from other countries and, at the 1964 plan-collation negotiations, she reduced her targets of Hungarian supplies for 1966–1970 to half of the long-term demands indicated earlier. Such reduction caused difficulties in fully utilizing the final product manufacturing capacities built up in the meantime. This was so particularly with the telephone exchange manufacturing capacities; it is true, however, that telephone exchange exports were not profitable anyway, because of depressed prices.

In the Hungarian telecommunication equipment industry it was a specially stressed objective to transform the production structure with a view to manufacturing large equipments to meet Soviet demands in the second five-year plan period (1961–1965). This transformation largely took place. Yet specialization in manufacturing a few large equipments to meet Soviet demands in the second five-year plan period (1961–1965). This Hungarian exports to socialist countries engendered, from the beginning, the need for western imports.

Manufacture of equipments for food industry

In the mid-1950s important measures were taken in the Soviet Union for the development of agriculture and the manufacturing of consumer articles. Modernization and expansion began on a large scale. In this process, mainly in modernization, an important role was assigned to imports. The priority development of food processing equipments in Hungary was related to the Soviet demand. It soon turned out, however, that Hungarian production was unable to fulfil this demand, the efforts of enterprises notwithstanding.

Hungarian deliveries showed a very characteristic curve between 1958 and 1968 – with much more remarkable changes than that of the whole Soviet food processing machine imports. Hungarian food processing machine supplies were increasing at a rate

well above the average during the first period of upswing, then they stagnated from 1960 on, and fell much more abruptly than the average in the period of decline.

In the meantime the structure of the Hungarian supplies had changed a lot. At the beginning of the period it was believed of this industry – on account of the manufacture of small quantities of food processing machines and equipments (milling machines, slaughterhouses, etc.), traditional in Hungary but outdated technically – that it will allow a considerable development of exports owing to its traditions. At the same time, the considerable initial increase of Soviet demand and deliveries to the Soviet Union, and the long-term plan collations discussed in those years, gave rise to hopes in Hungary, for the growth of deliveries. At the five-year plan negotiations of 1964, however, the change in the situation had to be taken into consideration: in comparison with the targets accepted at the long-term plan negotiations the Soviet Union reduced her demand by about one-third. At the beginning of the period 1966–1970 the targets were below the factual figures of 1965, what is more, they hardly surpassed them by 1970.

This serious decline was due partly to the quality standards of the machines delivered and to what lay behind the fact: the grave problems in Hungary in the building of food processing machines.

Hungarian industry, certain traditions notwithstanding, was not prepared in 1957 for a sudden initial upswing of deliveries. Besides, neither production, nor development followed a previously planned direction, but it was tried to satisfy the existing large demand of the Soviet market in the shortest possible time and in certain cases much too hastily.

Satisfaction of the actual demands was a rather great burden on the manufacturing and developing capacities – it was not possible to look farther forward. Expansion of exports was based for a long time on using certain "waste-capacities", e.g. the unused agricultural machine repair shops.

Therefore, in the beginning it was the unexpected large demands that caused difficulties to the Hungarian food processing machine building. Later it was the extensive changes and fluctuations in the internal composition of the orders, i.e. of the groups of products required. One or another group of products reached, after a sudden upswing, extremely large quantities, and then fell back and sometimes even disappeared from the list of goods. Such "meteor" was (relying upon the Statistical Yearbook of Foreign Trade) the complete mill deliveries in 1960, the green peas processing line and the poultry processing machine line in 1964.

This "stop-go" of Hungarian deliveries must be explained by the outdated constructions, the objections against quality, and unreliability. Hungarian products were not a match for the western deliveries growing at an accelerated rate. This accounts for the fact that in this group of products the entire Hungarian exports to the Soviet Union have been stagnating since 1960, and within it now one equipment then another one showed greater weight. Objections were justified particularly in regard of meat processing machines and poultry processing equipments. The former was apparent in the failure to reach the planned growth of deliveries, the latter in their sudden stop. Increasing

competition is indicated by the fact that e.g. deliveries of Hungarian slaughterhouse equipments ceased because the Soviet Union shifted her purchases to Sweden.

Thus the decline in the Hungarian food processing machine deliveries from 1961 to the trough in 1966 was due mainly to the outdated construction of the Hungarian products and of the product pattern. After 1966 the structure of Hungarian supplies transformed considerably thanks to new and more successful constructions. Yet a few difficulties soon became apparent with the new and more up-to-date product pattern. For example, Soviet demand was increasing for some of the new products, but these needed a great amount of western imports of parts. The shift in the structure of Hungarian food processing machine deliveries towards intensive western imports looked like being an unfavourable tendency.

There is another problem that is general with the supply of complete equipments and factories. In industries with large capacities and a wide range of goods dynamical exports can be effected only in case of well established relationships between subcontractors and general contractors. This, however, was not and still is not characteristic of the Hungarian industry. At that time, such relationships hardly existed. This involved the risk that again such factories and enterprises would make attempt at manufacturing products requiring large vertical links that could not be suited for it on account of their size and capital. Finally, intensification of these difficulties had its part in that the planned dynamic expansion of exports failed to come about, exports were confined to a few machine lines, and their volume became slowly stabilized.

Public road vehicle programme

The beginnings of the large-scale upswing of the Hungarian public road vehicle programme is to be traced back to the first specialization attempt of the CMEA about 1956. In those series of negotiations almost exclusively final products were being distributed among the countries. It was in this way that Hungary was assigned the manufacturing of buses. The most important customer, i.e. the Soviet Union stuck (and still does) to the agreements on the distribution of the special lines of manufacture: she started to increase her imports of buses from Hungary. In the course of the long-term plan collation discussions (up to 1980) it was the Hungarian party that submitted an extremely large-scale development proposal: she wished to supply 10–12 thousand buses in 1980. According to this proposal, the supply of the Soviet Union with buses would have become one of the special functions of the Hungarian industry: Hungary would have become the bus manufacturing factory of the Soviet Union: it could be almost said that buses would have become the "monoculture" of the Hungarian machine building industry. As for the Soviet Union, she was not averse to such large-scale development, yet the long-term plan negotiations of the time finally did not lead to agreements and contracts of such considerable importance. At the plan consultations concerned with the five-year trade agreements of 1966–70 (about 1964) the Soviet Union announced much

lower needs than before – at the time of the long-term (20-year) plan negotiations – in several groups of engineering products highly important from the aspect of Hungarian exports. An example for it is the bus, but, in this case the change in demand drove the exaggerated expectations of earlier times back to realities. In 1965 an agreement was signed on the delivery of buses, according to which 4000 buses were to be supplied in 1970 and 7000 in 1975. The Soviet Union agreed not to develop considerably her own bus manufacturing industry.

Even so, the undertaking of this obligation necessitated a very important development programme. On the basis of plans of supplies to other socialist (and developing) countries and of home demands the production of 7000 buses was envisaged for 1970.

This volume ensured a high-ranking position among the largest bus manufacturers of the world. The volume of output was, in a few important countries, as follows:

Table 2
Yearly volume of buses manufactured in a few countries

	1956	1966
France	1.929	1.862
Germany (Fed. Rep.)	3.596	8.524
Italy	2.453	2.747
U.K.	10.500	24.231
Japan	6.052	20.886
USA	4.064	15.900
Sweden	–	2.300
Soviet Union	10.425	35.507
Czechoslovakia	1.215	1.381
Poland	645	3.557

Source: [4]

Every country in this Table has a considerably larger industrial capacity than Hungary, yet in five out of the ten the volume of buses manufactured was smaller than that planned in Hungary.

The question arose immediately, whether such volume of bus manufacture could be fitted organically and efficiently into a smaller economy; whether this would not be counteracted from the very start by the vertical and horizontal structural disproportions emerging.

As regards external conditions, it was obvious that buses were not among the most dynamically spreading engineering products. Its international trade was represented mainly by the exports of the capitalist countries shown in *Table 2.* In 1956 exports amounted to 54.6 per cent of output, in 1966 only to 33.8 per cent. That is, the

Table 3
Number of population per bus in a few countries
(head/pc)

	1956	1965
Bulgaria	6.856	3.240
Czechoslovakia	5.735	3.112
Hungary	4.417	2.303
Poland	15.670	2.435
GDR	8.500	3.497
Romania	9.490	8.552
Soviet Union	8.000	3.480
Yugoslavia	8.287	2.607
France	1.493	1.072
GFR	2.404	1.551
Italy	2.742	2.079
Great Britain	700	535
Sweden	900	736
Japan	2.738	933

Source: [4]

autarkic tendency had markedly grown. The distribution of western exports by countries was revealing: the share of western exports to the developing countries reached 83–84 per cent. The trade among advanced capitalist countries (particularly in Europe) consisted almost exclusively of parts made in cooperation.

All that would have been enough to draw the conclusion in regard of the bus programme, that no large exports could be realized to the west: the bus would be, finally, a one-market export product. What about the demand of socialist countries? In that case, too, the demand of the Soviet market was dominating. Those demands seemed to be well grounded and realistic. In the infrastructural development programme of the Soviet Union the development of public road transport has been an important part, and in the imports of vehicles the share of public road vehicles is still dynamically growing. In comparison with other countries, particularly with advanced western capitalist countries, a considerable lag had to be made up for. This could be well judged from the number of population per bus (See *Table 3*).

The lag made it clear that the absorptive capacity of the Soviet market was great. In spite of a fast improvement of supply, saturation of the market did not seem imminent, and is still not perceptible, since the data do not make it clear whether an absolute saturation exists at all. Sweden e.g., in spite of her highly favourable supply indicator, started manufacturing her own buses, and Great Britain, having the highest indicator already in 1956, increased her bus stock considerably up to 1965. It was clear, too, that demand and production volume would get stabilized at a certain level also in the future,

because of tear and wear and obsolescence, as well as sorting out and replacements; thus staying in the market would depend, also with this product, on its up-to-dateness.

The question was rather, whether such Hungarian export volume was advantageous directly from the aspect of the load bearing capacity of engineering, and indirectly from that of the composition of Hungarian machine exports, for such boosting of the bus exports was feasible only at the price of reduction or stagnation of other engineering exports.

It was clear from the beginning that the building up of such large bus manufacturing industry had serious economic conditions. The first among them was to fight all autarkic intentions from designing the construction through to the process of manufacturing, to relieve the designing and manufacturing capacity by not holding the entire manufacturing vertical process in our hands, but bringing the Hungarian manufacturing industry nearer to an assembling industry supported by wide international cooperation. Such experience could be drawn from the Diesel programme.

Though the habits of Hungarian industry had to be fought just as the constraints – in this field particularly strong – on the international division of labour among socialist countries, conditions were more favourable than at the time of the Diesel programme. Within a relatively short time the licence of the engine – of central importance from the aspect of demand – could be purchased. An agreement was signed to the effect that fuel injectors, cardan shafts, servo-pumps, mechanical speed-gears, plane bearings, front axles, hydromechanical speed-gears, cold-starters, telescopic shock absorbers and other productive parts would be imported from the Soviet Union, Poland, and Yugoslavia. According to plans, this was to be done in cooperation: the Hungarian party was to export engine-case casts, pistons, rear axles, dynamoes, servo-steering wheels and engines to the Soviet Union, Poland, the GDR and Yugoslavia. In this way, by building up international cooperation related to the bus manufacturing programme, Hungary attempted an exemplary and encouraging action in the whole socialist community. Of course, under the given conditions organization of the cooperation entailed in fact extra burdens and extra problems, involving some failures, too, but this could be expected already when signing the agreements on the delivery of the finished buses and formulating the programme.

Difficulties arose because of the delay of certain Polish cooperation deliveries (cardan shafts), as well as in the delivery of a few parts to be supplied by the Soviet Union (front axles, etc.). In this respect, the initial adaptation of the Hungarian manufacturer as "general contractor" could not be called irreproachable, either. Manufacturing in cooperation necessitates a careful consideration of the partner's potentialities already when designing the constructions. This was initially not observed by the designers. It was wrong to demand of the partner and, particularly – of the Soviet partner, considering her size – that she should start with a new manufacture, even perhaps with a new investment, because of a few changes in technical construction not even of a primary importance. Cooperation involves mutual adjustment.

In the manufacturing of public road vehicles profitability of the size of the series is determined first of all by the number of engines manufactured of the same type. The manufacturing of about 15,000 engines is to be considered a good series. From this point of view the 6–7000 buses manufactured with engines of the same type in Hungary in 1968 may be even considered few. The biggest public road vehicle manufacturers try to overcome the problem – beside cooperation in manufacturing engines – first of all by widening the range of final products, i.e. by the joint manufacturing of lorries, special cars and buses as complementary products. Thus such expansion of the range of products would have been one of the consequences of the public road vehicle programme. This would, however, necessitated such large-scale expansion of the investment programme that was not possible at all.

It has to be taken into consideration as well, that the development programme of bus manufacturing did not cover the full series of sizes, but for a long time only large buses and a few types. It was assumed that types with large seating capacity would be manufactured only in Hungary among the socialist countries, and, these would be bought by all of these countries. This final product-specialization would have necessitated that the range of home supply should be widened mostly by imports, otherwise Hungary's supply might lag far behind the countries to which Hungary exports. There was, in fact, a considerable shortage in home supply after starting the bus programme. It must be remarked, too, that a specialization of this type was obviously in contradiction with the general international tendency related also to technological reasons that production for the home market, i.e. self-sufficiency, was growing also in the well supplied and most advanced capitalist countries, and it was based upon imports from the international component market and the creation of not too big or expensive assembling capacities.

It belongs to the affair of public road vehicle manufacturing that at the time of the 1956 attempt at specialization *dumpers* were also put on the Hungarian production line. Hungary developed first the manufacturing of small dumpers of 3.5 m^3 capacity. From that time on contradiction between demand and supply became regular: the socialist partners, among them the Soviet Union, demanded large-capacity dumpers, or, more exactly, the production and delivery of a more complete series of sizes. The manufacturing and delivery of the small dumpers proved to be profitable. There were some, though, who disputed the justification even of the 3.5 m^3 dumper, saying that for such small-capacity transport the up-to-date tipping lorries were much better suited. In Western Europe the manufacturing of this small dumper was stopped entirely in 1960–1961. Referring to the obsoleteness of the product, the GDR stopped buying this type from the mid-1960s, and about 1962–1963 the Soviet Union also reduced her imports announcing at the same time that she would stop her demand in the perspective. Therefore, the third five-year plan covering the years 1966–1970 provided for a large-scale reduction of production: from 1500 pieces that far produced to 500 pieces in 1970. Not much later, however, the situation changed again – we cannot give account of the reasons – at the 1964 plan negotiations, contrary to expectations, it was possible to agree with the Soviet Union on the expansion of the supply of the 3.5 m^3 dumpers.

In the course of the negotiations on specialization as well as later, on various occasions of plan negotiation and even in agreements, Hungary undertook to start to produce and supply 6 m^3 dumpers. That she failed to comply provides the most characteristic illustrations of the industrial policy problems of Hungary. From the technical point of view the task was a leap forward: the 6.3 m^3 dumper is hardly comparable to the 3.5 m^3 dumper: production experience and the components developed were hardly usable at all (four-wheel drive instead of two-wheel-drive, more complicated speed-gear and differential gear as well as a hydraulic tipping mechanism, more durable tyres of greater load-bearing capacity, and servo-steering are required.) In the development of the construction started in 1957 an autarkic approach prevailed: there was no way of acquiring a foreign licence or parts. On the other side, the "transplantation" of the sample piece purchased without a know-how involved a lot of uncertainties.

Finally, the first version: the so-called "foregoer-dumper" Rába 106 did not prove to be exportable, because of the defects of the main units and in spite of a lot of previous amendments, so that in the end its production was stopped in 1964. Before this, however, there had been long disputes about who should be the manufacturer. After finishing the prototype, the Red Star Tractor Factory stood down because of the planned increase of tractor production (1958). After that the Heavy Machine Tool Factory of Diósgyőr got the order, and then the Csepel Motor Works, but in vain. Finally, the Hungarian Waggon and Machine Factory started production unwillingly (upon ministerial order) in June 1961. Obviously, it was against the interest of the enterprises to include in their line of production this product of a rather uncertain future, and to undertake all the efforts and risks involved. Then came, however (almost inevitably) a new problem: lack of time and last-minute rush following hasty undertakings. Owing to the pressure of the export publicity and of the promises made in the agreements of the Foreign Trading Company Mogürt, the Hungarian Waggon and Machine Factory was not in a position to make its own experimental pieces: it had to start, relying directly upon the prototypes manufactured earlier at the Red Star Factory, to produce the zero series and to prepare at the same time the first serial production (with a term of delivery at the end of 1962). Targets were 150 6 m^3 dumpers for 1963, 500 for 1964, and 700 for 1965. The delivery obligation to the Soviet Union laid down in the long-term agreement was 250 pieces for 1964 and 350 pieces for 1965.

After the Hungarian Waggon and Machine Factory gave up production in 1964 since the first series had proved to be unexportable, referring to foreign trade interests decision was made to make further efforts. By 1965 the Vehicle Development Institute had revised the construction. At that time a few, not too expensive, imported parts were built into the construction (mostly special rubber ware). Technological problems were still to be expected. However, the obligation was entered into. In the Soviet–Hungarian long-term agreement covering the years 1966–1970 the exports of the 6.3 m^3 dumpers were specified as follows: 2 pieces in 1967, 200 pieces in 1968, 500 in 1969, and 700 in 1970. The term of delivery of 1968 for the serial production proved once more to be too short, the more so as in 1965 again a new factory was assigned to manufacture the

dumper: the Machine Factory of Gödöllő, as general contractor. Later this Factory was amalgamated into the Red Star Tractor Factory, so that the much tossed about affair of manufacturing dumpers went back to the "tender".

A few common features

I do not intend to draw all the topical lessons from these stories, but shall point out only a few common features of theirs.

First: a final product-approach was characteristic of all the development projects described above. This is particularly disadvantageous in engineering, i.e. in an industry expressly of an assembling nature. Namely, the efficiency of production depends by far not merely on a favourable size of series of the final product, but at least as much on a favourable size of series of the components, parts and production elements, the optimum of which may be very far from the value advantageous for the final products. That is one of the reasons why it is worth manufacturing components, parts and production elements at different enterprises, which may become specialists, offer an excellent quality as well as a large range adjusted to requirements, and may develop their products independently.

Second: in these central programmes, rather peculiarly, such highly cooperation-intensive final products were usually chosen as would have required the manufacturing or imports of a great many partial units, parts and production elements. As against this, a large part of the programmes had reflected, for a long time, an autarkic approach. And, when increasing difficulties rendered the impossibility of autarky obvious, it turned out that the problem of components was hard to solve even through participation in the international division of labour. There was nowhere to import from: in the CMEA no such supply existed, and western imports were prevented by the fact that the export price receipts of the final products were not convertible. The almost full development of the home production of components created, beside overburdening the investment account of the national economy, structures within the industry that were necessarily distorted, and uneconomic proportions which impaired the efficiency of production.

Third: the specialization agreements of the CMEA and, directly, the import needs of the Soviet Union for products selected for development led to plans for manufacturing vast quantities. Since, however, production was going on in certain cases also in branches not selected for development, and suppression was alien to the whole economic system anyway, the programmes led finally to an overdevelopment of the entire engineering industry. The products were driving out one another, and not on account of the profitability of production, but as a consequence of central development, production and commercial plans and agreements specified in physical units of measurement. Yet the quality, technological standards and reliability of the new products were not such as could have served for an export cover of the imports needed by the national economy.

Fourth: quite frequently, the enterprises participating in the programmes assumed tasks that were a technical leap in comparison with the given technological standards of

the industry, without anybody having tried first to find out how many conditions would have to exceptionally coincide to enable the fulfilment of such tasks. This led in several cases to failure of the enterprise; and sometimes became the source "only" of quality problems.

Fifth: a similarly overall difficulty was presented by the terms of a too short delivery in view of the dimensions and novelty of the task assumed, as well as of the gestation period customary in investment and development practice. Delays became permanent.

Finally (sixth): there is also a wider common feature which we must hold to be the basic cause of the wilful actions outlined above: developments were based not in a single case on the sovereign decision of autonomous enterprises. The plans were based upon central (CMEA level, or Soviet) initiatives relating to products defined in physical units of measurement. Detailed targets and the stages of implementation were laid down as a result of the "bargain" between central conceptions (of the control organs) and of the undertakings of enterprises. The seriousness of the undertakings of the enterprises was determined – even with their best intentions – by the fact that decision-making, as well as risk and responsibility were shared between the centre and the enterprises. Therefore, the latter were justified in expecting that delays, the transgression of cost estimates, low efficiency, and, if necessary, even a total failure would be handled with indulgence on the part of the control organs, since they were themselves just as much to blame. Although, as we have seen, such expectations were not in all cases fulfilled, the seriousness of the plans was in accordance with them, with all the above described consequences.

References

1. BALASSA, Á.: *A gépipar szerkezete és a nemzetközi együttműködés* (The structure of engineering industry and international cooperation.) Közgazdasági Szemle. 1964. No. 11
2. VAJDA, I.: *A világkereskedelem fejlődésének legújabb jelenségei és hatásuk a magyar gazdaságszerkezeti modellre.* (The latest phenomena in world trade and their effect on the model of Hungarian economic structure.) Közgazdasági Szemle. 1966/6. pp. 665–666
3. MRS.BODÓ VÉRTES, Á.: *Magyarország szerszámgép-exportja növelésének lehetőségei* (The possibilities of increasing the machine tool exports in Hungary.) Market Research Institute. 1964. (manuscript)
4. GERGELY, J.: *A közúti járműgyártás fejlesztésének programja* (Development program of the production of road vehicle.) Közgazdasági Szemle. 1968. No. 12

ЦЕНТРАЛИЗОВАННЫЕ РЕШЕНИЯ И УСИЛИЯ ПРЕДПРИЯТИЙ (ПРОГРАММЫ РАЗВИТИЯ МАШИНОСТРОЕНИЯ В ВЕНГРИИ В НАЧАЛЕ 60-Х ГОДОВ)

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В работе дается анализ особенностей программ, разработанных на основе установленных в централизованном порядке целей, на примере истории некоторых важных мероприятий по развитию венгерского машиностроения (дизельная программа, станкостроительная программа, транспортная программа и т. д.). В выполнении программ развития имелись большие недостатки (запаздывание, неудачные технические решения, отставание в количестве и т. д.), не была удовлетворительной и эффективность. Недостатки могут быть объяснены непосредственно тем, что решения по развитию ориентировались лишь на конечный продукт и не учитывали в должной степени недостаток производственной базы по производству узлов и деталей, большую потребность машиностроения в кооперировании, необходимость международных закупок лицензий и кооперирования. Планы как по срокам, так и по запланированному количеству продукции были чрезмерно напряженными.

Более глубокой причиной этих явлений было то, что эти программы разрабатывались по методу натурального выбора в централизованном порядке определенного изделия или группы изделий машиностроительной промышленности в качестве объекта развития и количественных директив в отношении их будущего производства. В отличие от этой «стратегической» цели, такие имеющие первоочередное значение для эффективности условия, как кооперационные связи, оптимальные вертикальные (производство узлов и деталей) и горизонтальные (производство аналогичной продукции) пропорции производства, рассматривались как частные вопросы, которые должны решаться в ходе осуществления программы. По мнению автора, этот недостаток заложен в самом методе. Автор считает, что машиностроение не является такой отраслью, в которой эффективные кооперационные связи между предприятиями и рентабельные пропорции производства могут создаваться посредством централизованных решений. Для этого необходимо, чтобы предприятия самостоятельно принимали решения и несли определенную долю риска.

Acta Oeconomica Vol. 24(3–4), pp. 341–356 (1980)

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GOVERNMENT BUREAUCRACY: A SURVEY IN POSITIVE AND NORMATIVE THEORY*

The first part of this paper sums up and comments upon a number of theories on the performance of public administration from the point of view of efficency. Thus the approach is essentially economic. It stresses the monopoly-property as well as rational behaviour on behalf of the bureaucrats. Low productivity and short-run welfare losses are emphasized.

After reviewing some devices to increase efficiency, the second part introduces the Zero-Base-Budgeting approach as a device lately developed for bureaucratic decision-making bodies. The authors are convinced that a number of faults put forth in the first part of their paper could be avoided by this new approach.

Introduction

Nowadays, a multitude of economic activities are carried out by bureaucratic organizations. Among them, public administration has become of considerable importance as it is involved in organizing the supply of an increasing number of goods and services. It was not before the mid-sixties, however, that *economists* did contribute to the question of *how* public administration actually accomplishes its tasks. Except for some forerunners,** up to that time economists reached back on well developed sociological theories on bureaucracy when they turned to the question of how actually bureaucratic organizations worked.***

While *positive theory was lagging behind,* the *development of planning* for non market-decisions was well established already by the mid-sixties. This rests upon several reasons among which the following two prove to be important:

I. requirements of war administration and post-war administration led to a strong preference for planning. This can be illustrated by the development of the so-called Planning-Programming-Budgeting-System in the U.S. Department of Defence under Secretary McNamara during the 'cold war-period', when the U.S. Government aimed at organizing the country's defence system more efficiently;

*This is a revised version of a lecture given by Professor *Weber* at the University of Pécs (Hungary) in October 1979. We thank W. W. *Pommerehne* for helpful criticism on an earlier draft of the paper. Special thanks are due to Miss J. *Grey* for assistance in translation and correction of the English version.

**_Simon's_ book on administrative behaviour (1945).

***The reader is reminded of Max *Weber*.

II. another reason still stems from the fact that the state was not among the main topics of the leading paradigm in economics, namely neoclassical reasoning.

Since, however, there was (and is, of course) a continuous increase in the public sector's share of GNP and since the planning tools and systems partially failed, it became worth-while for economists to develop their own theories on bureaucracy. The mainstream of effort in this subject can be seen in extending the application of common tools of economic analysis: the most frequently used tools in theorizing about bureaucracies are *the theory of the firm and the theory of individual rational decision-making.* The latter relates to bureaucrats rather than bureaus.* The resulting methodological extension of neoclassical theory to the public sector and, therefrom to the public administration can be labelled "new political economy"; so as to distinguish this approach from the "classical" use of the term, which stressed the interdependence of economic and political affairs.**

The aim of this paper is twofold: *In the first place* some of the problems and deficiencies connected with the working of large bureaucratically organized systems (like public administrations) are reviewed and discussed. *In the second place* a number of devices will be listed which are held to be apt to increase both efficiency and effectiveness of public administration. Special emphasis will be put on Zero-Base-Budgeting as a fairly new device for planning within government bureaucracy.

The procedure will be as follows: first the methodological point of departure will be outlined against alternative approaches; then the framework of politico-economic models, containing public administration as a subsystem, will be discussed as well as the more common approach of bilateral monopoly. Some models which alternatively fit into these two frameworks will be reviewed. Emphasis will be laid on motivational factors in influencing bureaucratic behaviour. A paragraph on control of administration's actions (by parliament as well as the public) will conclude the part on positive theories. The second part of the paper contains a list of devices to increase administrative effectiveness and efficiency.*** Hereafter emphasis is laid on a discussion of the so-called PPBS (the above-mentioned 'Programming-Planning-Budgeting-System') and the more recent method of Zero-Base-Budgeting (ZBB for short.)

Definitions and methodology

In what follows, *administration* will be defined as the management of executive affairs; it may also denote the group of all civil and military servants. An administrative body whose activities are organized hierarchically will be called a *bureaucracy*. An

*See [21, 35] and the third section of this paper.

**Work done under the Marxian approach seems to follow the classical meaning of the term.

***Effectiveness is defined here as the highest possible input-output ratio; by efficiency I will mean that the locus of production be a point on the production-possibility-frontier.

analogous definition is applicable to bureaucrats themselves. There are, however, other characteristics which play an important role in the definition of bureaucracy; the main features are: hierarchy, monocratic management, division of competence, specialization and the establishment of instances of control.*

As is well known, hierarchy is only one of the means of organizing social activities. Here three alternative means of coordination have to be considered. They are:

I the market or price system,

II voting, which in the present context means democracy;

III bargaining.

The common approach to the analysis of deficiencies and advantages of public administration has been to relate it both to the allocative and productive capacity of markets. This means that one is concerned with relative advantages of bureaucracy and reflects the use of neoclassical economic theory even in the analysis of so-called non-market decision-making. As far as the allocation of goods and services to be managed is concerned, some form of interlocking different means for organizing social activities will prove necessary. A more detailed explanation will be given later on this point.

The approach to be used in the subsequent sections is clearly not the only existing way of tackling "bureaucracy". A different point of departure would be to put the question *whether bureaucracies are planning tools of reigning powers*, an aspect D. *North* indirectly sketched ([22] p. 969): "The key margin of decision-making in the society today is access to government inference." Still another approach is born by the sociology of enterprises under which administration is viewed as a typical form of organization as e.g. production or sales [15].

The approach chosen, however, proves advantageous when government bureaucracy is analyzed within a politico-economic framework. This leads back to the interlocking forms of social decision-making mentioned above. There are two aspects to this problem: Although public administrative bodies are, in general, authorized to act within their scope, the assignment and control of duties will be carried out e.g. through the political institutions which are in turn guided by voting, i.e. by the public. That is to say: *a democratic process precedes* the process of hierarchically organized activities. Another form of mix of decision-making mechanisms appears in case of corruption, when the working of hierarchy is partly upset by bribes stemming from the demand of someone to alter the expected outcome of an administrative act [28]. Although in somewhat distorted form, one may recognize elements of a price system if bribery occurs.

The other aspect of interlocking of decision mechanism deals with economic justifications of the functions and the scope of public administrations. The neoclassical theory stresses, that those goods which the price system does not admit have to be provided by other means. Besides voluntary collective action, government bureaucracy is held to be apt at least to organize the supply of goods in question, e.g. by assisting the

*Note that there is a double meaning to the term bureaucracy: sometimes it is used to ridicule the working of hierarchical systems.

establishment of so-called public enterprises, or more directly in carrying out the necessary productive activities by itself, as for instance in the running of the legal system or national defence.* Within purely administrative organized activities still some differentiation can be observed: inside bureaucracy the ruling regime could be *strictly hierarchical as* well as some form of *accounting- or shadow-price guided regime* (see [30] p. 146). No such differentiation will be considered here. There will be some points related to public enterprises.

The repeated stressing of the market as the decision mechanism which is most frequently referred to, sheds some light both on the 'measuring rod' judging the performance of bureaucracy and on the direction in which the design of planning devices is carried forward – conceptually at least. – Note, however, that the use of the 'measuring rod' does not necessarily mean any belief in the *existence* of frictionless markets. It rather may be conceived as a device for evaluating *allocative efficiency.* Thus planning advices may tend to include makeshift markets; as far as *distributive justice* is concerned this has to be aimed at by other measures not to be considered here.

Theory of bureaucracy; the state of the art

As has already been mentioned above, the relationship of the administrative body to the public and to the political body, respectively, has to be treated in order to analyze possible defiencies in the working of bureaucracy. Conceptually there are two such relations which can serve as a starting point. Administration may be conceived as a *monopoly,* whose external relationships are seen in analogy to a barter economy. Frequent use of this approach is made in shaping the relationship between the representative body of the people (i.e. parliament) and administration itself. In this case there will be a *bilateral monopoly* barter.** The second mainstream of theory treats administration as part of the politico-economic system. Precisely it is defined as the *causal part of the subsystem state,* whilst parliament is the *goal-seeking unit.****

The output of the causal system – public goods broadly defined – forms inputs to the *subsystem 'economy'* which is set up of both households and enterprises. Feedback from the 'economy' to the political subsystem is formed by voting on behalf of

*These are only a few examples of publicly provided so-called *collective goods.* Central to collective goods is the notion of market failure, which, in broad terms, can be summed up in the existence of *external effects* (both economies or diseconomies) in production, trade and consumption respectively. Such effects deprive of competitive pricing, that is to say: without some aid from outside the market the optimality conditions could not be met. Let us recall that the competitive price *equates* marginal cost to marginal utilities of all individuals in the *case of a marketable good,* whereas with a *good* which must be *provided for collectively* the optimality condition becomes marginal cost = sum over all relevant marginal utilities. (See [29])

**See [21] and partly: [34]

***See [9] part 4 for a brief introduction to the modeling of politicaal-economic systems

individuals, whereby the bureaucracy's performance is assumed to influence the poll. The goal-seeking unit (that is, the political body) then will have an incentive to exert control over the causal part (administration). Thus the systems approach offers a conceptual framework especially for the analysis of lack of control (= control loss, for short) over bureaucracy on behalf of the political body. It may be noted in passing that this somewhat basic model contains a number of simplifying assumptions which are open to criticism.

One objection for example leads towards *questioning the existence of a strict distribution of functions of power* as implicitly assumed by the systems approach. One might resolve such doubts by preferring e.g. *bargaining* as the proper *modus procedendi.* This proves especially true when the cabinet is considered. This may be conceptually seen as part of administration, subject to control by parliament. Since, however, a considerable part of ministers, as a rule, recruit themselves from pressure groups or and members of parliament representing the latter, the division of power, in its strict form, seems to be endangered – especially as bureaucrats may make up a great part of all representatives (as for instance in Austria).* Another fact which is not easily captured by the simple model are *merit goods;* the notion of merit goods stresses the existence of authorized competence on behalf of public administration to implement goods deflecting from revealed preferences of the public as e.g. in vaccination campaigns.

Monopoly in turn is not restricted to the bilateral monopoly case indicated above. If *monopoly is defined* as a situation where a supplier or a customer of goods and services *has no alternative to contract with the administrative body* or part of it,** then the suppliers of factors of production (including such different things as railway carriages or specially skilled labour) will be affected quite similarly as the 'customers'. Both may suffer from *welfare losses* caused by bureaucracy. Here mainly two theoretical explanations are offered as to the origin of welfare losses:***

I. the so- called X-efficiency [16]; this concept proves important especially with public enterprises;
II. budget-maximizing and the accumulation of excess capacities [21]

X-efficiency means that administration as a whole or parts of it (bureaus) will not work on the 'production-possibility-curve'.**** The theorem on X-efficiency follows from two main assumptions, one concerning the behaviour of heads ("chief-bureaucrats", top management) and the other concerning "subordinates". The latter are seen as factors of

*Apart from this problem bureaucrats may influence the polls by their percentage of the total of votes; for an empirical examination of this hypothesis see [26].

**For open economies as well as federal nations the definition may be cast in somewhat weaker terms since there may always be an opportunity to export or to turn to another member state.

***Welfare losses in this context are expressed as realized consumer surplus: consumer surplus is defined as a gain in utility resulting from a price reduction, given the demand function for the good in question. A similar definition applies to producer surplus; note that producer surplus is realized in "cash", while consumer surplus is not.

****On a definition of the term efficiency see footnote on page 342.

production. Labour-, however, differs from other factors of production inasmuch as it shows *motivation* towards activities, that is, employees may economize on their efforts in carrying on their duties if they dislike them, etc.; they may not in the first place be interested in maximizing the bureau's objective function (somehow defined) but rather in social security and leisure.* Chief-bureaucrats on the other hand (as well as managers of administrative bodies within large firms) act according to what is called discretionary behaviour [35]. They are assumed to pursue their own interests within a margin according to the controllability of their actions. The stronger competition the lower the incentive to display discretionary behaviour. Consequently, the motivation to allocate (that is to supervise) employees optimally is very low in the case of monopolistic production as with public administration. Hence the theorem, stated above, on X-efficiency.

The assumptions of the behavior of "chief-bureaucrats" will also serve as a starting point for the explanation of what has been called *budget-maximizing* on behalf of the bureaucracy. Here again bureaucratic behavior tends to deviate from the social optimum because the chiefs attempt to achieve prestige which in turn is a function mainly of the number of employees under supervision** and – to some extent – of the importance of the bureau relative to others, etc. (Note that although in the spirit of bilateral monopoly this approach could be extended to include competition among bureaus in the struggle for budgets shares). Given these aims, bureaucrats will claim larger budgets than optimal. The resulting *excess capacities,* however, will be produced at minimal marginal cost! [21, 31]

Both hypotheses are open to criticism: The objection has been raised *against X-efficiency* that in administration *production functions can be hardly established* or – and this is even more serious – that many of the goods provided for are *optional goods.* In fact many public goods and services share the characteristics of optional goods, that is to say, they are provided provisionally, *pro futuro,* since it would bring about a delay due to technical and informational problems to establish them only when there is revealed demand: national parks, relief lines within transport networks, the system of national defense and to – some extent – the social insurance system are examples for optional goods. It is generally held that efficient provision with such goods is not easily achieved. *Against* the second hypothesis – that is *budget maximizing* – the objection has been raised that such a strategy could only prove successful with ill-informed members of parliament who are disinterested in the socially optimal working of bureaus. Another objection concerns the incentive to exercise control over bureaucrats on behalf of members of parliament because of voters' increasing tax burdens. Problems of control are dealt with in the next section.

*This hypothesis is derived from the underlying assumption that employees maximize their utility. Note however that this may even lead to bribery if there were no other arguments in the employees' utility functions such as loyalty towards the nation, or an inclination to contribute to the communities' wellbeing. Still the execution of control may be of 'some importance'!

**One can easily recognize Parkinson's Law!

From the hypotheses sketched above one may, as an intermediary result, deduce *some conclusions* as to the requirements of planning devices: *these should bring about optimal budget and resource requirements of the administrative body and they should exert incentives for the correct statements of these requirements on behalf of the bureaucrats.*

In the remainder of this section, after X-efficiency and budget-maximizing, a third pattern of bureaucratic behavior will be discussed, namely *incrementalism.* Incrementalism may be defined as a custom of bureaucrats when calculating budget requests, which rests upon expanding the 'base' by a certain percentage. A *base* can be the *budget appropriated* by parliament in the previous year or (more optimistically) the *budget requested* by the bureau in the previous year. The rate of expansion includes a stochastic component so as to allow for unexpected circumstances (which may lead both to gains or losses to the increment originally requested). The prominence of the bureau's 'base' is a sign of stability. (See [34], p. 31 for a formal treatment.) At first sight such a behavior seems to pose fewer problems as to controllability by parliament, than budget-maximizing jointly with supply at minimal marginal cost. Still this does not give an answer to the question why incrementalism seems to be the most popular way of 'budgeting' at all. (See [34] op. cit.) Clearly there can be no single answer to that question, but, among others, the following reasons are important:

I. if the representatives changed their rules of appropriation, this could be interpreted as an admission of careless decision-making in previous years;
II. incrementalism provides a method of easy calculation as well as a technical facility to evaluate the bureaus' activities;
III. as a rule, it avoids inquiries about the urgency of a bureaus' proposed activities;
IV. since it is practised repeatedly, year by year, it serves the bureau as an indicator or 'track record' for its development [24]. Yet these hypotheses are not easily checked empirically. At present the economic theory of bureaucracy – in the broad sense of an approach closely related to public choice and 'politometrics' (see [9], part 4) respectively – deservedly has made important contributions to the verification of hypothesis stated above [26].

Control of bureaucratic activities

Some comments have to be made about the theoretical treatment of the working of control. As has been mentioned earlier, such effects could suitably be studied within the above outlined system. Consider budget maximizing once more. If all bureaus display this sort of behaviour then, according to [2], the tax burden would increase as well. Consequently, the willingness to bear the tax load will decline, or, by the same token, voters will become discontent with their representatives. Ideally then representatives in parliament will display increasing control over bureaucrats in order to stay in power. But, if interlocking is considerable and therefore *bargaining* plays an important role in social

decision-making, it may well be that the majority in parliament is somewhat restricted in its actions.* However, there is some outlet for both the goal-seeking unit and the causal part so as to avoid the consequences of tax resistance: the tax system may well be designed so as to create *tax illusion* on behalf of the households and entrepreneurs. Tax illusion indicates that the voters are not able to determine their tax burden correctly; the more complex the tax system, the more the true tax burden will be underestimated.** There is no certainty, however, about the reaction of the public, since they may display *free-riding,* that is, in order to cheat government with respect to the amount of public services demanded at given 'tax-prices', revealed demand will be overstated. Consequently, when strategic behaviour is allowed for, *no unambiguous conclusions* can be drawn from the reactions of voters. Note, however, that this approach to the problem of control still rests upon the assumption that voters' preferences are formed in an atuonomous way, that is to say, they are not influenced by the political body or bureaucracy. If the assumption of autonomous preferences is abandoned, the methodological approach of individualistic neoclassical reasoning is likely to be dropped.

In concluding the part on positive theories of bureaucracy it should be stressed that not all reasons for failures in deficient performance of public administration have been dealt with in the previous sections: among others the problem of rising costs or – which amounts to the same – low gains in productivity relative to private enterprises may be mentioned. Such effects do, to a considerable part, rest upon the technology open to the 'service industry' characteristics, which are inherent to public activities. They are, however, captured to some extent at least by the devices to be treated in the second part of this paper.

Up to now the exposition referred to theoretical attemps to explain phenomena for incrementalism and X-inefficiency. Problems of parliamentary, resp. democratic control were only hinted at.*** The following description will be derived from the formulated requirements on the instruments, i.e. methods and decision-aids to efficient organization of administration, that is:****

1. to create substitutes for the provision of public goods;
2. to find incentives that eliminate certain negative effects of bureaucratic motivation, which the monopolistic character brings forth;
3. to counteract incrementalism with its strong tendencies to unreflected expenditure planning.

To start with a terse statement: Bureaucrats treat their planning and budgeting activities for the current period not as an alternative but as given data. Of course one has

*This holds true to some extent for Austria, see [1]

**See [20], p. 192.

***Compare for instance [25] and [9].

****The fact is acknowledged, that efficiency and effectivity can be overstressed – these words must be used with care. Compare [17] or [37].

to consider that many of the activities and therefore expenditures are not flexible. (One can say by experience that over 80% of public expenditure is fixed.*

The main reasons for these facts are political ones. Acknowledged minimum requirements to secure the functioning of administration, jurisdiction and legislation, as well as other expenditure obligations exist for various reasons. Finally private, public and international contracts, which bind considerable amounts of expenditures, exist.

As we can extend our theses on productivity reserves and quality reserves, "fixed" expenditures must also be examined from the aspect of incrementalism and X-inefficiency. Which organizatory means can reduce, prevent or detour this unsatisfactory state? To answer this question one has to make reference to further deficiencies of the social decision unit – besides administration's deficiencies that have been mentioned earlier either explicitly or implicitly – for instance: the high expenses of the provision of information, the contradicting mix of sovereign and economic decisions etc.

What are the acknowledged possibilities to improve administration? Here are three propositions – as they are discussed in western industrialized countries.**

1. *Increased use of the market mechanism:* that is to say that some public sector services do not need those coordination mechanisms which are being used at present. In fact, alternative ways of supplying goods – especially on the municipal level – are being tried out successfully by public administration: garbage disposal, cold storage, transportation services can be mentioned here. [25]
2. *Constriction to competition within bureaucracy.* This, too, is a way of incorporating elements of market rationality into administration. It works – at least conceptually – within a federal decentralized community, which operates without direct order from a higher centralized instance: the educational system in West Germany can be seen as a "classical" example. [7]
3. *Creation of incentives to increase productivity.* Next to the discussion about denationalization of public utilities this is the most frequently suggested proposition.*** This proposal is also closely connected to the functioning of a market. The main form of efficiency incentives offer an additional pecuniary and nonpecuniary equivalent for gains in productivity and efficiency. A bureaucrat's salary for instance could increase the more effectively his work is done (as measured by some input-output ratio).

Naturally, one cannot use a simple gratification/sanction mechanism for this course. The chances of accomplishing this idea would be nearly impossible – not only against those afflicted but also against the whole of the bureaucratic body.

Next to those political arguments a further contentional one can be stated: namely that this specific form of administration proves itself just in those fields – in which accounting is seldom applicable – like in judicial systems or with planning advisers to administrators.

*Compare for instance [8, 23].

**Compare [7] and [27].

***[4] and [10] can be recommended on the topic of administration reform in West Germany and Austria, respectively.

Two further possibilities to increase productivity can be stated: the emphasis will be laid on the second possibility – the first one will only be mentioned in passing. The first is: voluntary collective organizations [33], partly with public promotion; they perform on a collective but private base. The second way of increasing productivity goes back to the 1930's, where it was tried to find an operational and effective planning and controlling system for public administration. The Programming-Planning-Budgeting-System (PPBS) can be named as the most complete attempt to grasp this problem. The PPBS tries to integrate prospected *long-term national targets* with the *annual* fixed budget activities. Although constructed for the solving of specific problems, it contains a considerable amount of organizational provisions. Even successful applications in various industrialized countries cannot hide the fact that this concept has not been able to meet the expectations.

The feature of PPBS and its main shortcomings will be stated briefly. The main proposals of PPBS are:

1. an efficiency-oriented view,
2. the use of quantitative techniques,
3. PPBS reflects on objective criteria when estimating and selecting possible alternatives.

These targets are aimed at – after organizational preparations, of course – in the following manner:

1. preliminary stage of program planning:

"stock taking" by the planning unit to test the expediency of current activities.

2. planning phase:

structural analyses of public activities, splitting up of public activities into main targets; transformation of targets into a detailed programming structure (hierarchical scheme of activity-classifications). The subprogramms are fixed in 'program-memos', as a means of communication between the associated planning unit and management. The management and the analysts together develop the memos stepwise, which are then used as decision-aids. Note here, that target formulation and alternative planning do not have to be related monocausally, especially if complex innovations are involved.

3. Programming phase:

The offered alternatives have to be checked whether they fit into the estimated long-term-funds. The selected programms are finally "fitted" into the long-term-plan.

4. Budgeting phase:

The elements of a programm are determined by fixing the details. These request human and non-human resources.

5. Cross-Walk-Process:

The elements of the program are estimated at costs. Then the production-oriented PPBS is transformed into the administrative institutional budget. PPBS can thus be seen as an attempt to specify targets, to consider alternatives, to rationalize budgeting processes and to make involved premisses more transparent. The aim, however, to create pre-conditions for a systematic comparison of similar public expenditures has failed to

succeed. The *critics of PPBS* are divided into two groups: one group believes that PPBS would work as long as some necessary preconditions are met: such as – for instance – a compromise between politicians and pressure groups. The other group believes that the concept as a whole will not work – not because the programm-implementations are deficient, but because it is drawn up far off the reality of political processes. This reality though presents a *sufficient* condition of the working of PPBS. Other problems are: lack of data (especially when PPBS was introduced), lack of trained employees and – this is of great importance on municipal level – costs.

These facts presumably are the cause for economists recently concentrating on Zero-Base-Budgeting (ZBB). This system is simpler than PPBS, it avoids various problems, which – at least from the viewpoint of some authors [32, 34] – handicap the implementation of PPBS. Just think e.g. of the considerable *centralization* of decision units, which has to be achieved to make the system work efficiently. The first generation of Zero-Base-Budgeting in the Department of Agriculture of US-Administration in 1964 was a failure. This was mainly due to insufficient preparation and the negative motivation of some bureaucrats, although the introduction was declared to be experimental. The attempts by Texas Instrument Inc. in 1969 were more successful. This led to the successful application of the 2nd generation of the system in the government of Georgia, USA, in 1971.

Since then ZBB has continued to expand in the USA. A third generation of ZBB has been reached. It seems as if this system contained some elements capable of attacking incrementalism and X-inefficiency in a way that the intrinsic utility of bureaucrats' work is promoted, i.e. *ZBB motivates without using pecuniary* (or solely pecuniary) *ways of sanctioning and gratifying.*

In the following the procedure of ZBB and its practical relevance will be examined (compare [24] and bibliography therein). The following definition underlies further work. "Zero-Base-Budgeting is a process of allocation according to projected results. It is a highly structured and systematic process requiring each manager to justify in detail his entire budget request. The budget request is defined by activities and operations identified as decision packages which are systematically analysed and evaluated and finally ranked in the order of importance." ([24] p. 7).

This definition embodies the structure of the ZBB process. According to a given target, which is set by the top management, the lower-level operating managers work out *decision packages* – regarding their *function* in respect to the nature of output. These decision packages are transmitted to the next higher level. There a ranking of the packages is performed with the help of the operating managers. These ranked packages are forwarded to the next higher organizational unit. There they are compared with other decision packages (promoted from other lower-level managers), and newly ranked. The length of the ranking *process* depends on the size of an organization. The final *ranking* determines the resource allocation of the budget. The feedback from the executing units to the to management is completed by *reports.* This ensures control of the central targets and enables the *reallocation of resources if necessary.*

The development and the ranking of "decision packages" are of crucial importance. In this the method differs from *management by objectives* [6].

Decision packages can be defined as documents with the following features.

- Prescription of the functions the decision unit fulfils.
- Alternative activities to meet the function.*
- Sizing of the project.
- Estimation of the utility of supporting alternative activities, and possible disutilities of not doing so.
- Costs of alternative activities.
- Ranking of the offered activities.

The list encloses a periodical consideration of activities of the former period. This list is designed to conceptually overcome the extrapolation of budget requirements – a major problem mentioned earlier on in the behavioral theses on incrementalism.

The next problem to be looked at is the *ranking of decision packages* (dp) of various lower decision units. Selection is carried out jointly by a top manager *and* the operating managers. This method includes arbitrary features. Basically it is possible to rank according to cost-benefit-analysis etc. Such ranking, however, will rather handicap than objectivate the decision over various operating units. Instead of using these "objective" selection criteria, *cut-off levels* can be established. These can be defined

a) as percentages of the budget – or expenditure level or

b) in money-units.

The *cut-off levels* induce a *classification* of the ranked dp's into classes of *high priority, marginal priority* and *inframarginal priority*. This method can accomplish a decentralized selection of acceptable activities, which is important for big organizations, as it helps not to overload the top management with a vast amount of dp's.

A decision mechanism has to be stated within the consolidation levels to enable ranking. Here an appropriate system of ballot is frequently used, for example: the dp's are ranked on a scale. Either the sum of marks or the average marks a dp reaches determine its place in the final ranking, i.e. its position relative to the cut-off level. (See [24] p. 56 f.)

Naturally, this system has its deficiencies and problems. It is doubtful in particular, whether the proposed system will remedy the problems set out in the positive theory of *bureaucracy*, represented in the first part of this paper – since according to this theory bureaucrats will tend to avoid any given pattern of strictly efficient yet stringent decision-making.

Some further objections shall be mentioned: the persistence of chief bureaucrats to keep everything as it is will lead to actions delaying the implementation of new ways of decision-marking. Overburdened channels of information handling as well as problems of

*Here the intensity of completion of an activity plays an important role: the manager of a unit, for instance, can find his medical provision with a first aid kit unsatisfactory. He can rank additional staff and equipment, and mark a level to be attained.

identifying the output of administrative bodies could impair their reorganization. On the other hand, one must remember that hardly all relevant informations for decision-making are available ever *ex ante*.

This means that no detailed outputs, basic targets and organization programmes can be worked out resp. determined in detail.

The system undoubtedly offers some advantages – especially with regard to X-efficiency and incrementalism. These indicate that an attempt to use the system seems wort-while for the following reasons.

I. It may bring about strong motivation to reflect on one's own work.
II. Cooperative incentives are set between operating managers and the management *(vertical integration)*.
III. Inside information lines are generated – these promote a *horizontal integration* of all units.

When comparing advantages and disadvantages of this system the conclusion can be drawn *to use ZBB occasionally*. A regular interval of three to five years would be suitable, where the year of application could be selected randomly. This would reduce the effectiveness of delaying actions of bureaucrats which rest upon anticipation of control actions.

In conclusion one can state that the analytical effort to understand and measure the working of bureaucratic organizations with economic tools does contribute to the insights into social decision mechanisms. These gains may be marginal with respect to the stock of knowledge already accumulated by familiar disciplines with similar targets of research and with respect to the relatively short period of development of economic theorizing. Even the 'marginal' insights represent important premisses for an appropriate development of design recommendations for the social decision mechanism of administration – the problem discussed in the second part of this paper.

References

1. AUSCH, K.: *Die finanzpolitische Willensbildung.* C. A. Andreae, (ed.) Handbuch der Österreichischen Finanzwirtschaft, Innsbruck–Wien–München, 1970. pp. 23–32
2. BRETON, A. and WINTROBE, B.: *The equilibrium size of a budget-maximizing bureau: a note on Niskanen's theory of bureaucracy.* Journal of Political Economy. 83 (1975), pp. 195–201
3. CLEMENZ, G.: *Stand der Finanzplanung in Österreich. WIST-Informationen No. 37 (1977),* pp. 9–16
4. DENSO, J. et al.: *Verwaltungseffizienz und Motivation.* Göttingen, 1976.
5. DOWNS, A.: *in Inside bureaucracy.* 7th printing, Boston, 1967.
6. EICHHORN, P. and FRIEDRICH, P.: *Verwaltungsökonomie I. Baden-Baden, 1976.*
7. ENGELS, W.: *Effiziente Produktion öffentlicher Güter. Wirtschaftspolitische Blätter 5 (1976),* pp. 74–86
8. EWRINGMANN, D.: *Die Flexibilität öffentlicher Ausgaben.* Göttingen, 1975.

9. FREY, B. S.: *Moderne Politische Ökonomie.* München, 1977.
10. FRIEDRICHSMEIER, H.: *Motivation im öffentlichen Dienst.* Österreichisches Verwaltungsarchiv 13 (1978), pp. 77–89
11. GALBRAITH, J. K. *Gesellschaft im Überfluss.* München–Zürich, 1959. (Translation of "The Affluent Society")
12. JOHANSEN, L.: *The bargaining society and the inefficiency of bargaining.* Kyklos 32 (1979), pp. 497–522
13. KOHN, L.: *Probleme der Kollektivgüterallokation.* Zürich, 1974.
14. KOSTA, J.: *Das Phänomen der Bürokratie in der marxistischen Sozialwissenschaft,* (Paper prepared for the 'Ausschuss zum Vergleich der Wirtschaftssysteme'), Verein für Sozialpolitik, Arbeitstagung in Giessen 1979.
15. KÜHNE, K.: *Zur ökonomischen Theorie der Bürokratie. Helmstädter, E., (ed.), Neuere Entwicklungen in den Wirtschaftswissenschaften; Schriften des Vereins für Sozialpolitik Vol. 98, Berlin, 1978.*
16. LEIBENSTEIN, H.: *Allocative efficiency vs. X-efficiency.* The American Economic Review LVI (1966), pp. 392–415
17. LUHMANN, N.: *Kann die Verwaltung wirtschaftlich handeln?* Verwaltungsarchiv 51 (1960), pp. 97–115.
18. MAYNTZ, R. and SCHARPF, F. (eds): *Planungsorganisation,* München, 1973.
19. MELICHAR, E.: *Die österreichische Finanzverfassung.* Source: see AUSCH above.
20. MUSGRAVE, R. A.: *Finanztheorie.* Tübingen, 1969.
21. NISKANEN, W.: *Bureaucracy and representative government.* Chicago–New York, 1971.
22. NORTH, D.: *Structure and performance: the task of economic history.* Journal of Economic Literature (1978) pp. 963–978
23. NOVOTNY, E.: *Die Rolle der Finanzpolitik in der Konjunktur-Politik.* Wirtschaftspolitische Blätter 24, Heft 1 (1977), pp. 67–78
24. PATTILLO, J. W.: *Zero-base budgeting, a planning, resource allocation and control tool.* New York, 1977.
25. POMMEREHNE, W. W.: *Private versus öffentliche Müllabfuhr: Ein theoretischer und empirischer Vergleich.* Finanzarchiv 35 (1976), pp. 272–294
26. POMMEREHNE, W. W. and FREY, B. S.: *Bureaucratic behavior in democracy;* a case study. Public Finance 33 (1978), pp. 98–112
27. RECKTENWALD, H. C.: *Unwirtschaftlichkeit im Staatssektor.* Ortlieb, H. D., Molitor, B. Krone, W. (eds): Hamburger Jahrbuch für Wirtschafts- und Gesellschaftspolitik, Tübingen, 1978.
28. ROSE-ACKERMANN, S.: *The economics of corruption.* Journal of Public Economics 4 (1975), pp. 187–203
29. SAMUELSON, P. A.: *Pure theory of public expenditures and taxation.* Margolis, J. and Guitton, H. (eds): Public Economics, London–Melbourne–Toronto, 1969.
30. SCHENK, K. F.: Bürokratie und Wirtschaftsordnung. Source: see RECKTENWALD above.
31. VAN DEN DOEL, H.: *Democracy and welfare economics.* Cambridge, 1979.
32. WEBER, W. and WINDISCH, R.: PPBS: *Neue Wege in der Planung öffentlicher Ausgaben.* Dürr, E. (ed.), Neue Wege der Wirtschaftspolitik; Schriften des Vereins für Sozialpolitik Vol. 67, Berlin, 1972.
33. WEISBROD, B. A.: *Toward a theory of the voluntary nonprofit sector in a three-sector economy.* Phelps, E. (ed.), Altruism, Morality and Economic Theory, New York, 1975.
34. WILDAVSKY, A.: *Budgeting. A comparative theory of budgetary process.* Boston–Toronto, 1975.
35. WILLIAMSON, E. E.: *The economics of discretionary behavior: managerial objectives in a theory of the firm.* Englewood Cliffs, N. J. 1964.

36. WILSON, V. K. and BIXENSTINE, V. E.: *Forms of social control in two-person two choice games.* Shubik, M. (ed.), Game theory and related approaches to social behavior. New York–London–Sidney, 1964.
37. WOLF, jr., Ch.: *Economic efficiency and inefficient economics.* Journal of Post-Keynesian Economics, Vol. II. (1979), pp. 71–82

ГОСУДАРСТВЕННЫЙ АДМИНИСТРАТИВНО-УПРАВЛЕНЧЕСКИЙ АППАРАТ: АНАЛИЗ В АСПЕКТЕ ПОЗИТИВНОЙ И НОРМАТИВНОЙ ТЕОРИИ

В. ВЕБЕР—В. ВЕЙГЕЛЬ

Необходимость государственного административно-управленческого аппарата определяется функциональными потребностями: распределение значительной доли товаров и услуг ведется в настоящее время в основном с помощью государственной машины; в качестве классических причин называется национальная безопасность, внутренняя (защита правопорядка) и внешняя (оборона страны). В последнее время наряду с общественными функциями все более важной становится охрана окружающей среды.

С точки зрения экономики особенность государственной организации можно определить в том, что она представляет собой полную монополизацию, которая однако — по крайней мере, в принципе — находится под политическим контролем. Не монопольность сама по себе, а сочетание ее с рациональным поведением бюрократов, работников административно-управленческого аппарата может нанести серьезный ущерб всему народному хозяйству.

Для объяснения поведения административно-управленческого аппарата авторы считают важными два положения:

1. Т. н. эффект-X,
2. Максимализация бюджета и создание излишних мощностей.

Эффект-X означает, что ведомства или самостоятельные органы управления организуют производство не в соответствии с его собственной «кривой производственных возможностей»; для этой ситуации характерно, что из-за отсутствия конкуренции ответственные администрагивные руководители не имеют стимула к оптимальному использованию существующих производственных факторов.

Максимализация бюджета означает, что ответственные административные работники в первую очередь стремятся не к оптимальному с точки зрения общества выполнению своих обязанностей, а к обеспечению своих личных целей, престижа, к доказательству прежде всего важности выполняемой ими функции. Из-за этого они затребывают такие бюджетные средства, которые существенно больше, чем средства, действительно необходимые для получения наиболее благоприятных для общества результатов. Чрезмерные результаты производятся, однако, отнюдь не с минимальными расходами.

Поскольку органы народного представительства не осуществляют достаточно эффективного политического контроля административно-управленческого аппарата прежде всего из-за различных институциональных причин, то предложения по улучшению должны исходить в первую очередь от самих органов административного управления. Названные выше недостатки, по мнению авторов, прежде всего можно преодолеть путем, который ведет к бюджету нового типа — т. н. «бюджету на нулевой основе». Этот метод требует такого размещения средств, которое направлено на достижение предусмотренных результатов. Этот процесс должен быть организован таким образом, чтобы вынудить каждого работника административно-управленческого аппарата детально обосно-

вывать все требуемые им бюлжетные средства. Потребности в бюджетных средствах необходимо рассматривать как такие виды деятельности и действия, которые представлены, сформулированы, проанализированы, оценены и, наконец, расположены в соответствии с их значением в форме «пакетов решений». Преимущества этого метода по сравнению с другими, также приведенными в статье, методами модернизации, могут быть сформулированы в трех пунктах:

1. Он понуждает с помощью сильных мотивирующих стимулов работников административно-управленческого аппарата анализировать собственную деятельность,

2. создает стимулы для сотрудничества между производственными подразделениями и управлением (вертикальная интеграция),

3. создает такие информационные потоки внутри предприятий, которые особенно важны с точки зрения горизонтальной интеграции.

Acta Oeconomica Vol. 24(3–4), pp. 357–377 (1980)

M. LACKÓ

CUMULATING AND EASING OF TENSIONS (A SIMPLE MODEL OF THE CYCLICAL DEVELOPMENT OF INVESTMENTS IN HUNGARY)

In the article some macrolevel characteristics of the investment process in Hungary are examined. Special attention is devoted to lags in the realization of investments and in this connection to the cyclical development of aggregate investments.

The authoress firstly defines fundamental notions, necessary for describing the investment process, then presents a small macrolevel, linear model consisting of 6 equations by which she tries to describe the behaviour of planning agencies influencing investments. After having presented the model an attempt is made to demonstrate the main findings by a numerical example.

The paper is closely connected with the branch of Hungarian economic research dealing with the description and causal analysis of the evolution and fluctuations of investments.* Examination of the investment cycle in Hungary started with András *Bródy's* work. From among later studies works of Tamás *Bauer* and János *Kornai* gave direct inspiration to the writing of the present paper.***

The paper outlines a system of equations describing the reproduction of tensions in the sphere of investments and thus the cyclical character appearing in the development of aggregate investments.

Major notions

The realization of an *investment project* usually requires several years, the first expenditure is followed by successive ones, the last taking place several years after the first one was made and thus completing the investment. More *investment projects* are

*Bauer [1], [2]; Bródy [4], [5]; Faur [6]; Kornai [19], [20]; Soós [26]; Tényi, Gy. [28]; Tényi Gy.–Tarján, T. [29].

**The starting point was János Kornai's macrosimulation model. The model is a system of simultaneous equations consisting of 18 equations simulating a growth path of an economy adjusted to its own norms. In the course of simulation the model generates a trend for major characteristic indicators of the real sphere of the economy. The group participating in the elaboration of the model – János *Gács*, Zsuzsa *Kapitány* and Mária *Lackó* – made computations firstly for the Hungarian economy.

In the model yearly expenditure on investment is made up of corresponding elements of investment processes started at various dates. This structure of the investment block prompted the idea for modeling investment cycles.

started simultaneously: their totality will be called in the following *investment process.** Therefore the total of investment outlays needed by an investment process is the sum of investment outlays needed by the individual investment projects. The total demand of an investment process for outlays is denoted by $S(t)$ where "t" means the starting date of the process.

The realization in time of $S(t)$ can be described by means of the *realization coefficient* $\beta(\theta)$. $\beta(\theta)$ expresses what percentage of a given $S(t)$ – the total demand for outlays of all investment projects (the investment process) started in t – appears in year θ as expenditure.

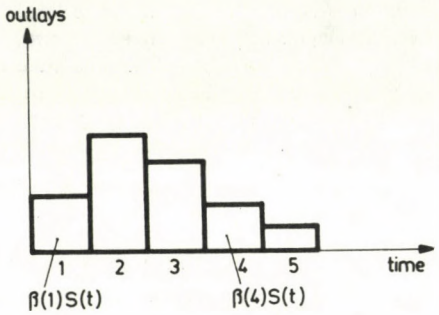

Fig. 1. Development in time of the realization of the investment process started in year t

The sum of realization coefficients

$$\sum_{\theta} \beta(\theta) = 1$$

In a given year there are several investment processes under realization. *Figure 2* shows investment processes started in years $t - 3$, $t - 2$, $t - 1$ and t, respectively, and their realization in time.

In a given year t total expenditure is $i(t)$; this concerns all processes under realization. (See the vertical by striped fields in *Figure 2.*) This notion – $i(t)$ – is in the centre of traditional analysis.

In my analysis $D(t)$ i.e. *all existing unsatisfied, delayed demands at the end of year t* will have a key-part. (See the sum of horizontally striped fields in *Figure 2.*) It necessarily results from the long gestation period of investments that future demands for

*The notion of investment process and its mathematical form were taken from János Kornai's model [20].

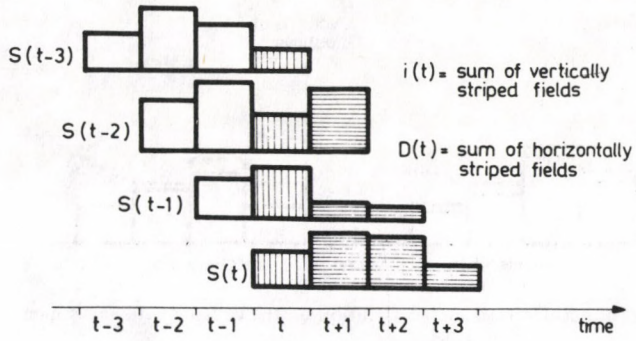

Fig. 2. Realization of investment processes started at various dates

outlays are formulated already at present. To this contributes the particularity of the system of investment decision-making in socialist countries according to which if an investment action has already been started then it will sooner or later be finished anyway, independently of any profitability consideration.

Unsatisfied, delayed demand existing at the end of the year, i.e. $D(t)$ is *regarded the inner tension indicator of the investment process.*

The *slowing down and acceleration* of investment projects, well-known phenomena in socialist countries, can be interpreted in many ways. There exists slowing down or acceleration relative to the planned realization, but they can be interpreted also in comparison to the basis of average realization coefficients.

In may paper I am going to deal with slowing down or acceleration in the latter sense, that is, in comparison to realization within average time. Accordingly, *I shall use a set of average realization coefficients, unchanged in time.*

Deceleration and acceleration modify the realization curve of individual investment processes: as a result of slowing down the curve of realization will be lower but longer, while in case of acceleration higher but shorter.

(In *Figure 3* the curve made up of average realization coefficients i plotted by a continuous line, while the curve developing on the basis of deceleration and acceleration, respectively, is plotted by a dotted line.) In a given year several investment processes are taking place, one may be slowed down, while another accelerated. Regarding their balance, an individual year may be characterized depending on whether slowing down or acceleration is predominant. What is more, according to experience the starting point is given precisely by this global slowing down and acceleration policy and this is distributed in ways differing by processes: certain processes are accelerated despite the fact that globally a slowing down is characteristic. Since a process lasts for several years, the form of the realization curve is modified many times under new "impulses" – deceleration or acceleration – in the individual years.

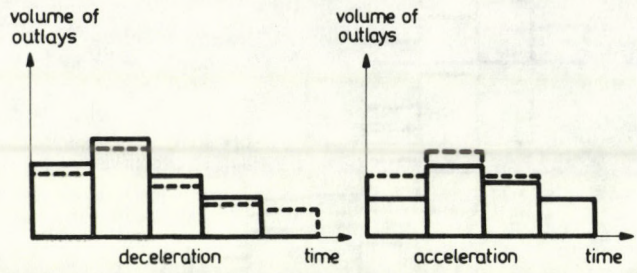

Fig. 3. Effect of deceleration and acceleration on the course of the investment process

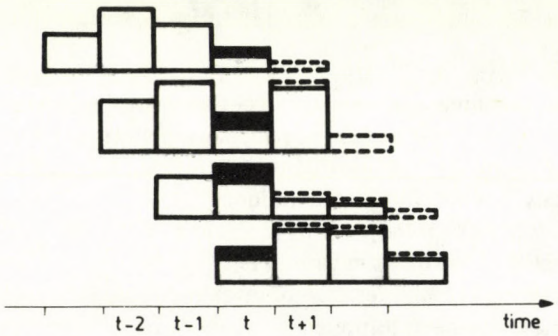

Fig. 4. Development of investment processes existing in t under the effect of deceleration ($G(t) < 0$; the sum of black fields)

In *Figure 4* the $G(t) < O$ global acceleration-deceleration value was plotted (sum of black fields) assuming that neither slowing down nor acceleration were applied prior to year t. *In case of* $G(t) > O$ *we have acceleration, in that of* $G(t) < O$ *slowing down.* It can be seen that in case of deceleration, where $G(t) < O$, the volume of investments in year t, $i(t)$ decreases and the unsatisfied, delayed demand i.e. $D(t)$ increases by the same amount, i.e. by $G(t)$. In the case $G(t) > O$, i.e. when acceleration is applied, $i(t)$ will obviously increase and $D(t)$ decrease by $G(t)$. In *Figure 4* I have tried to demonstrate as well that the effect of slowing down or acceleration applied in t spreads in time through the individual processes.

The above notions on which our model is based cover objectively existing, observable phenomena but they are not actually observed in our statistics. The only indicator similar in character to $S(t)$ is the number and planned costs of *constructions started* whose value exceeds 100,000 forints, which, however, covers only a part of investments in the national economy.

There are no statistical records at all concerning macrolevel $S(t)$, $D(t)$ and $G(t)$, while the realization coefficients $\beta(\theta)$ can only be found in unpublished working papers and even these are indicators computed on the basis of only partial surveys.

Total investment expenditure – $i(t)$ – made in year t is a time series registered statistically.

Because of the deficiencies mentioned the necessary data had to be determined with a complicated estimation procedure elaborated specially for the purpose of the present study.

The model

The planning of investments in East European countries means planning the yearly investment volume – $i(t)$. Studies by Gács–Lackó [8], Gács [7] as well as by Bauer [2] examined the behaviour of planners and the regularities to be found in the planning of the yearly investment volume.

Plans referring to the volume of investment are jointly determined by external and internal factors. If the inner tension developing in the course of the investment process, now characterized by a single factor, by unsatisfied or delayed demand, $D(t)$, increases: this *forces* planners and decision-makers to determine a greater yearly volume of investment in the plan. At the same time, increased inner tension is also an indicator of the state of a process at that time, warning planners that something has to be done in order to mitigate accumulated tensions. This results in planners *trying* to reduce the volume of investment in the plan.

The behaviour of planners and their decisions are, however, strongly influenced also by the balance of foreign trade, as it was pointed out in the afore-mentioned analyses. In the following, changes in the balance of trade will be regarded from the viewpoint of the investment process as indicators of *external tension.* Relative improvement or deterioration of the balance of trade seriously influence all processes of the national economy, thus also the annual plan of the volume of investment. Improvement of the balance induces planners to increase the plan of the yearly volume of investment, while increasing external tension characterized by a relative deterioration of the balance of trade entails a reduction of this plan target.

To realize their plans for the volume of investment planners have the following tools at their disposal.

1. From among investments originally planned only fewer ones and even among them those *requiring less expenditure* will be started or – in the opposite case – *more investments requiring greater expenditure* will be started;

2a) investment projects under realization are *slowed down or accelerated;*

b) expenditure in the first year on newly started investment projects will be set at less or more than the average.

In the following cases 2a) and 2b) will be jointly examined.

The total demand for outlays of the investments processes started in t will be denoted by $S(t)$ and called, for the sake of simplicity, *start.*

1. The reduction or increase of the volume of starts is formulated by equation

$$\Delta[S(t+1) - \tilde{S}(t+1)] = \alpha_1 \Delta[D(t) - \tilde{D}(t)] + \alpha_2 \Delta[k(t) - \tilde{k}(t)] + a_1 \qquad (1)$$

where:

$$\alpha_1 < 0; \qquad \alpha_2 > 0.$$

The equations

$$\begin{aligned} \tilde{S}(t+1) &= S_0 \delta_S^{t+1} \\ \tilde{D}(t) &= D_0 \cdot \delta_D^t \\ \tilde{k}(t) &= -K_0 - \rho \cdot t \end{aligned}$$

are given for the model: they produce the exponentially increasing *trends* of starts and unsatisfied delayed demand as well as linearly decreasing trend of the balance of foreign trade.

The increment of starts, their change from one year to another depends therefore on the date of decision on the one hand: a given increment has a different meaning in case $t = 1$ and in $t = 20$. This is expressed by the form of the left side of equation [1].

The factor $\Delta[D(t)-\tilde{D}(t)]$ indicates by how much the distance from the trend of unsatisfied delayed demand increases or decreases from one year to another, from year $t - 1$ to year t. The parameter $\alpha_1 < O$ means that if the deviation from the trend increases from $t - 1$ to t, then the distance from the trend of starts will decrease according to α_1. More simply it can be formulated also by stating that *if unsatisfied delayed demand increases excessively from $t - 1$ to t, then by $t + 1$ the volume of starts will decrease. In the reverse case, if there is only a relatively small increase of unsatisfied delayed demand from $t - 1$ to t, then by $t + 1$ starts will increase to a greater extent than then trend increment.*

The other factor taken into consideration for determination of the volume of starts is the relative change in the balance of trade. The parameter $\alpha_2 > O$ expresses *that if the balance of foreign trade deteriorates by more from $t - 1$ to t than "allowed" by the trend, then starts in $t + 1$ will be less than they should be according to the trend, while a relative improvement of the balance results in a considerable increase of starts in $t + 1$.*

Decision-makers and planners decide on the reduction of the volume of starts under the effect of the increase of various – external and internal – tensions. On the other hand, however, the easing of tensions produces an opposite tendency, the increase of starts. In both cases permanently existing and reproducing pressures, great demand for starting investments expressed at various hierarchical levels of the economy have an important part. Kornai [29] and Bauer. [2] were the first to underline and build a theory on the fact that hunger for investment is an essential feature of socialist economies. This steadily reproducing great demand is fundamental also in the development of the

investment process: increased tensions force to reduce this pressure, while the easing of tensions gives way to the pressure for more and more investments.

2. The magnitude of deceleration-acceleration is described by the equation

$$G(t+1) = \mu_1 \Delta[D(t) - \tilde{D}(t)] + \mu_2 \Delta[k(t) - \tilde{k}(t)] + a_2 \qquad (2)$$

where:

$$\mu_1 > 0; \quad \mu_2 > 0.$$

The increase of inner tension, that is, an excessive increase of unsatisfied delayed demand brings about acceleration of investments in process for the coming period. Acceleration results in the mitigation of this tension which follows by definition from the relationship between $G(t)$ and $D(t)$. (Cf. *Figure 4*) On the other hand, *increasing external tension indicated by a considerable deterioration in the balance of foreign trade will evoke just the contrary, i.e. deceleration.*

Tools brought into life by various tensions, described under 1 and 2 do not unambiguously influence the yearly volume of investment. Increasing inner tension brings about partly a reduction of starts (parameter a_1 in equation [1]), but, partly acceleration (parameter μ_1 in equation [2]): the first reduces while the second increases the yearly volume of investment.

Under the effect of the easing of inner tension, too, a similar strange situation may arise: the easing of inner tension brings about an increase in starts which raises the annual volume of investment, but, at the same time, it generates a slowing down that will precisely lower it.

The volume of investment already reflects the situation developed after the policy tools have been applied. Two components of it, namely, starts as well as acceleration–deceleration have already been dealt with. In the following expenditure on investment projects in process will be examined.

Let $i_D\ (t+1)$ mean actual expenditure effected in the year $t+1$, on investment processes started in years prior to $t+1$, that takes into consideration amending effects of previous decelerations and accelerations.

In *Figure 4* we have seen how the effects of deceleration or acceleration of a single year spreads over processes under relation. If rules of this spreading effect in reality were known, or if not, we assumed that deceleration and acceleration are evenly distributed among processes, then by means of the values $S(t), S(t-1) \ldots G(t-1) \ldots$ all modifications taking place in investment processes could be followed from year to year. However, this would require a very meticulous computation algorithm that would mean a system, not necessarily linear, made up of many variables and a great many conditions.

Therefore, in the following a much simpler, more precisely, a simplified form will be used for estimating $i_D(t+1)$, namely the equation.

$$i_D(t+1) = \sigma D(t) + a_3 \qquad (3)$$

where:

$$\sigma > 0.$$

This expresses that *if the unsatisfied delayed demand of investments in process increases, then also expenditure on them due in the year* $t + 1$ *will grow.*

Now we have all components required to determine the yearly volume of investment.

$$i(t+1) = \beta(1)S(t+1) + i_D(t+1) + G(t+1) \tag{4}$$

where: $\beta(1)S(t+1)$ = average expenditure in the first year on the investment process started in year $t + 1$. The equation

$$k(t+1) = x(t+1) - \gamma \cdot i(t+1) + a_5; \qquad \gamma > 0 \tag{5}$$

(where $x(t+1)$ = volume of goods exported in year $(t+1)$, exogeneous for the model) represents the reproduction of external tension. Namely the yearly volume of investment $- i(t+1)$ – developed on the basis of [3] is closely connected with imports.

The identity

$$D(t+1) = D(t) + S(t+1) - i(t+1) \tag{6}$$

shows reproduction of the inner tension developing in the course of the investment process, determines the unsatisfied delayed demand developing by the end of year *(t+1).*

Equations [1], [2], [3] and [4] of the model described how investment starts and the volume of investment are controlled through inner and external tension while equations [5] and [6] "produce" the tensions of the new period.

Under the effect of changes in starts tensions are unambiguously developing (see *Table 1*).

Table 1
Effect of start on tensions

Denomination	Inner tension $D(t)$	External tension $k(t)$
Increase of starts $S(t)$	increases	increases
Reduction of starts $S(t)$	decreases	decreases

The effect of deceleration and acceleration is no more so unambiguous (see *Table 2*).

Possible variants of the joint application of both tools – changes in starts and deceleration or acceleration, respectively – are included in *Table 3:* they are called strategies.

Table 2
Effect of decleration and acceleration on tensions

Denomination	Inner tension $D(t)$	External tension $k(t)$
deceleration $G(t) < 0$	increases	decreases
acceleration $G(t) > 0$	decreases	increases

Table 3
Strategies and their effects on tensions

Denomination	Inner tension $D(t)$	External tension $k(t)$
1. increase of starts, deceleration	increases, increases	increases, decreases
2. increase of starts, acceleration	increases, decreases	increases, increases
3. reduction of starts, acceleration	decreases,decreases	decreases, increases
4. reduction of starts, deceleration	decreases, increases	decreases, decreases

These strategies are applied by decision-makers and planners in the following way.

If tensions become sharper, then either strategy 3 or 4, if they ease, then either strategy 1 or 2 are "put into force". Which of the two will be applied after all in one or the other case depends on the actual value of tensions constituting the starting point, on the kind of tension which seems to be more important to reduce.

The model is, therefore, the following:

$$\Delta[S(t+1) - \tilde{S}(t+1)] = \alpha_1 \Delta[D(t) - \tilde{D}(t)] + \alpha_2 \Delta[k(t) - \tilde{k}(t)] + a_1, \qquad (1)$$

where

$$\alpha_1 < 0 \text{ and } \alpha_2 > 0$$

$$G(t+1) = \mu_1 \Delta[D(t) - \tilde{D}(t)] + \mu_2 \Delta[k(t) - \tilde{k}(t)] + a_2, \qquad (2)$$

where

$$\mu_1 > 0 \text{ and } \mu_2 > 0$$

$$i_D(t+1) = \sigma D(t) + a_3 \tag{3}$$

where

$$\sigma > 0$$

$$i(t+1) = \beta(1)S(t+1) + i_D(t+1) + G(t+1) \tag{4}$$

$$k(t+1) - x(t+1) = \gamma \cdot i(t+1) + a_5 \tag{5}$$

where

$$\gamma > 0$$

$$D(t+1) = D(t) + S(t+1) - i(t+1) \tag{6}$$

The model is a recursive one made up of six equations. Its endogeneous variables, that is, those produced by the model are the following: $S(t)$; $D(t)$; $G(t)$; $i_D(t)$; $i(t)$; $k(t)$.

The exogeneous variables given for the model are $x(t)$; $\tilde{S}(t)$; $\tilde{D}(t)$; $\tilde{k}(t)$; as well as the initial values $D(o)$, $k(o)$.

Figure 5 clearly shows the functioning of our model:

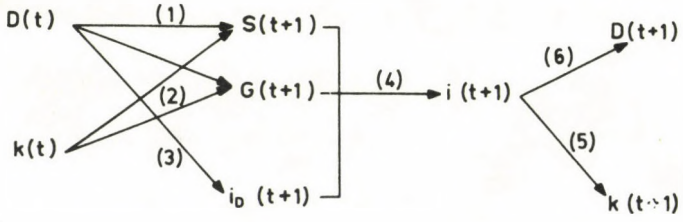

Fig. 5. Demonstration of the functioning of the model

All what has been mentioned in the foregoing give, of course, only a very simplified, rough description of investment cycles. Since the investment sphere is regarded by the model in itself and not as a part of the entire economy, some of its equations – mainly [4] – explain the given variable rather poorly, neglecting several factors. Even from among factors having an important part in the system of decisions on investments and in the development of the investment process only two – $D(t)$ and $k(t)$ – were picked out. The present article contains results of the first phase of research while a more refined formulation of the model requires further investigations.

Numerical illustration of the model

In the following the functioning of this very simple model will be presented by means of a numerical example. Since – as it has already been mentioned – there are no direct observations available concerning a considerable part of the variables, instead of

empirical data time series of the necessary variables were generated by an estimation producedure elaborated especially for this purpose.*

Since this estimation procedure is not based on standard, adopted methods in all its details, and time series obtained with its aid show a more extreme behaviour, too, than what could otherwise be supposed about reality on the basis of our previous experience, results of regression computations made with the time series obtained are not considered as quantification of the model but only as its numerical illustration.

The extreme behaviour of estimated time series appears first of all in that they contain wantonly great amplitudes because of the supposed form of the distribution of realization coefficients $\beta(\theta)$ constituting the basis of estimation.**

Once factual data and estimated time series, respectively, are available for the variables of the model, we try to make sure whether the interrelations formulated in the individual equations, sign of parameters and correlation coefficients expressing the closeness of relationship satisfy the traditional verification criteria of econometrics and do not contradict our hypothesis. Following regression computations we shall survey the process in chronological order, not separating equations from each other.

Estimation of regression parameters***

A simple estimation of regression parameters of the model was made on the basis of time series to be found in *Table 4.* (There it is indicated which are estimated time series and which are those taken from statistics. The volume of yearly investment outlags and the volume of starts are also shown in *Figure 6.*)

With equation (1) it was assumed that if unsatisfied delayed demand increased from one year to another excessively, then starts would increase less in the following year than they should according to the trend. Easing of the inner tension, i.e. a relative decrease in

*The starts for the first time were determined from $i(t)$ by means of given values of realization coefficients $\beta(\Theta)$, constant in time, having a distribution

θ	1	2	3	4
$\beta(\theta)$	0.19	0.29	0.33	0.19

as well by using certain initial values. Then the value $G(t)$ of acceleration–deceleration was computed from start data obtained in this way and from time series of the volume of investment put into operation. With the help of time series $G(t)$ then the second estimation of investment starts was calculated. (A complete description of the estimation can be found in an extended study of the author. See Lackó. [21].)

**The distribution $\beta(\Theta)$ we use is similar to the development in time of the realization of those building-intensive major investment projects for which empirical data are available.

My attention was drawn to the exaggerated amplitudes of time series generated with the estimation procedure by Attila K. *Soós,* which I should like to thank him also at this place.

***The regression computations were performed by Gábor *Kornai.*

Table 4
Time series used for regression estimation

T	$S(t)^1$	$D(t)^1$	$i(t)^2$	$k(t)^2$	$G(t)^1$
1960	55 792	73 452	41 732	−1195.6	+ 756
1961	22 501	54 664	41 289	+ 40.0	+ 446
1962	67 041	76 283	45 422	− 579.7	− 399
1963	78 109	101 933	52 459	−1171.2	+1558
1964	25 157	72 887	54 203	−1676.2	+2310
1965	47 500	65 493	54 894	− 127.2	−1081
1966	124 893	129 964	60 422	+ 326.6	− 356
1967	66 775	122 239	68 800	− 870.2	+5143
1968	21 847	71 950	72 136	− 158.3	− 483
1969	145 754	139 927	77 777	+1831.0	−2364
1970	169 105	215 532	93 500	−2213.5	+6593
1971	11 799	123 031	104 300	−5743.7	+5862
1972	81 184	101 325	102 890	+1490.1	−3826
1973	251 688	246 381	106 632	+4739.2	− 703
1974	70 473	201 554	115 300	−4000.0	+11 497
1975	58 109	129 143	130 520	−3024.9	+ 87
1976	220 303	219 057	130 389	− 875.5	−3636

Note: $S(t)$, $D(t)$, $i(t)$, $G(t)$: million forints at 1968 prices $k(t)$: million foreign exchange forints
1 – estimated data
2 – statistical data

unsatisfied delayed demand brings about a greater increase in starts. External tension, the increase of which was measured by the relative deterioration in the balance of foreign trade and its easing by the improvement of this balance, is in a negative correlation with the increments of starts.

The result of estimation of the regression parameters verifies this assumption:

$$\Delta[S(t+1) - \tilde{S}(t+1)] = -1{,}46 \quad \Delta[D(t) - \tilde{D}(t)] + 15{,}43\ \Delta[k(t) - \tilde{k}(t)]$$

$$(0{,}15) \qquad (2{,}75)$$
$$t = -9{,}49 \qquad t = 5{,}60$$
$$R^2 = 0{,}89 \qquad \mathrm{DW} = 2{,}28$$

The standard errors of parameters (figure in brackets under the corresponding parameters), the values of t, the correlation coefficient of the function (R^2) and the value of DW coefficient do all support the relevance of the function.

According to equation [2] of the model, the value of acceleration, $G(t-1)$ is a function of changes in inner and external tensions developed in previous years. In the

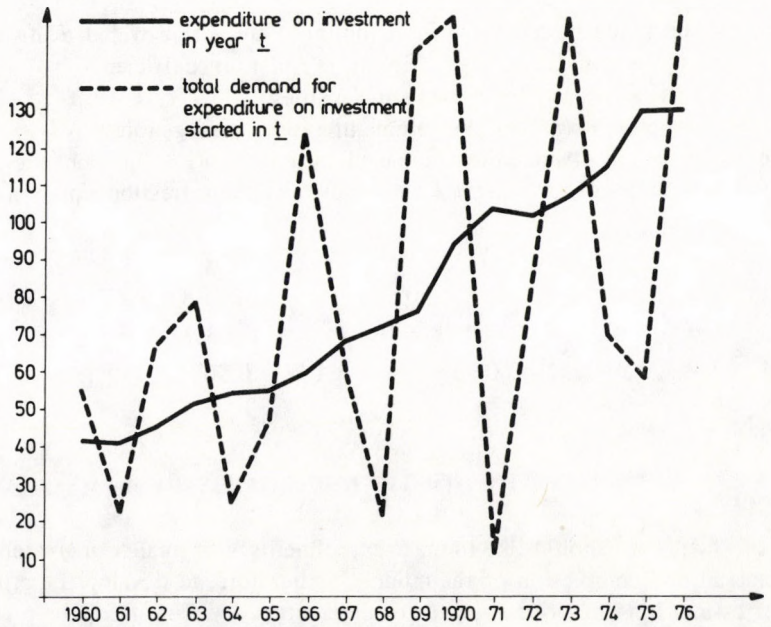

Fig. 6. Total demand for expenditure on investments started in t and the volume of yearly expenditure on investment

course of the estimation it turned out that the increase and easing of external tension *do not influence* acceleration or deceleration. With this factor neglected:

$$G(t+1) = 0{,}06\ \Delta[D(t) - \hat{D}(t)] - 1642{,}7$$
$$(0{,}0043) \qquad (264{,}2)$$
$$t = 21{,}8 \qquad t = 5{,}09$$
$$R^2 = 0{,}97 \qquad \mathrm{DW} = 1{,}24$$

If inner tension increases from year $(t-1)$ to year t then in year $(t+1)$ acceleration will be applied.

By equation (3), as it has already been indicated in the description of the model, a complicated mechanism has been simplified to a great extent. The simplified form is also important: it exhibits the pressure of unsatisfied delayed demand resulting from the past on contemporary investment expenditure:

$$i_D(t+1) = 18987{,}4 + 0{,}37\ D(t)$$
$$(9972) \quad (0{,}073)$$
$$t = 1{,}90 \quad t = 5{,}07$$
$$R^2 = 0{,}7 \qquad \mathrm{DW} = 1{,}66$$

Also the econometric analysis of equations (2) and (3) provided relatively favourable parameters (standard error, *DW*-coefficient, correlation coefficient).

Equations (4) and (6) of the model are identities.

In the equation (5) $x(t+1)$, the volume of export is exogenous.

The relationship between the volume of import – $m(t+1)$ – and the volume of yearly investment expenditure – $i(t+1)$ – is shown by the regression equation:

$$m(t+1) = 0.46 \quad i(t+1) - 9150$$
$$(0.027) \qquad (2314.8)$$
$$t = 16.84 \qquad t = 3.95$$
$$R^2 = 0.95 \qquad DW = 0.807^*$$

Accordingly,

$$k(t+1) = x(t+1) - 0.46 \quad i(t+1) - 9150.$$

In the future we should like to make experiments with smaller or greater structural transformation and completion of the model, furthermore, to develop the procedure of parameter estimation and to use groups of parameters deviating from the present ones. We do hope to render the model and its quantification more suitable for reflecting the real course of economic processes.

Chronological survey

As the next step – that could bumptiously perhaps be called "historical simulation" – the entire process covered by the model will be described according to subsequent moments on the basis of time series summarized in *Table 4.*

The computation made with the first form of the model must not be interpreted as a real "*ex post* simulation". The results obtained cannot be compared with factual statistical time series of the Hungarian economy in a strict sense. Let us consider them rather as time series of a hypothetical economy reminding in some respects of the Hungarian one. In the following this "hypothetical economic history" will be analyzed, in chronological order.

For *1961* reduction of starts and acceleration of the investments in process were characteristic. Together this led to a decrease in the volume of yearly investment expenditure. By the end of the year both unsatisfied delayed demand (inherited demand pressure) was decreasing and the balance of foreign trade improving, indicating the easing of tensions. For *1962* this inheritance was determinant: a powerful increase in starts increased the volume of investment. The deceleration entering into force in that year

*The low value of DW is no chance. It is because of the method used i.e. the sphere of investment is separated from the whole of the economy.

relieved a little the burden on the yearly investment volume but with this simultaneously increased unsatisfied delayed demand by the end of the year and the balance of foreign trade also showed a deteriorating trend.

In *1963* starts further increased but already only to a lesser extent and together with acceleration further increased the yearly volume of investment. As a result of these steps by the end of 1963 both indicators showed a further increasing tension.

As a consequence, reduction of the volume of starts began in *1964* and the yearly volume of investment increased under the effect of the volume of investments in process and their acceleration. By the end of 1964 inner tension definitely eased off but the balance of foreign trade continued to deteriorate.

The easing of inner tension eliminated the decreasing trend of starts and in *1965* a modest increase of starts could be experienced, which, however, was still considerably smaller than in previous years. Deceleration in that year – a seemingly typical reaction in years following easing of tension – counterbalanced the increase of starts and the volume of yearly investment could thus remain at the level of the previous year. The balance of foreign trade was still negative but definitely improving.

Such easing of tensions already resulted in a much more considerable increase in starts by *1966*. The yearly volume of investment was substantially increasing, too, despite the fact that deceleration had an opposite effect. At the same time, deceleration together with the other factors increased the inner tension of the investment process.

Despite improvement in the balance of trade in 1966 both tools for easing increased inner tension were put into action in 1967: the volume of starts was reduced and acceleration was characteristic in the realization of investments which, of course, further increased the yearly volume of investment in *1967*, too. The balance of foreign trade deteriorated and this indicated cumulating tensions.

Unsatisfied delayed demand representing inner tensions already showed a decreasing trend but its still considerable extent, accompanied by a deteriorating balance of trade, led to a further reduction of starts and deceleration of investments in *1968*.

Easing tensions by 1968 give an impetus to starts by *1969* again but because of the slowing down of investments, the volume of investment was increasing only to a small extent. The increase in unsatisfied delayed demand was, however, considerable precisely under the effect of deceleration and the greater number of starts. The balance of trade indicated further improvement for the time being, thus the increasing tension was reflected temporarily only in inner tensions of the investment process.

This may have been the reason that the volume of investment starts further increased by *1970* and acceleration aimed at mitigating inner tension also appeared. Despite acceleration delayed demand continued to increase considerably and a big leap took place also in the yearly volume of investment. All this contributed to the deterioration in the balance of trade and by then, with increasing inner tension, also the external one indicated tensions cumulated in the investment process.

On the basis of familiar mechanisms the mitigation of inner tensions began in *1971* with the reduction of starts and the continuation of acceleration. The yearly volume of

investment was further increasing but inner tension eased by the end of the year. On the other hand, however, the balance of foreign trade representing external tensions continued to deteriorate; the deficit was of an unprecedented extent.

Unsatisfied delayed demand definitely diminished by the end of 1971 and this already allowed a modest increase in starts in *1972* which, however, lagged behind the value corresponding to the trend. Following the easing of inner tension, a slowing down of investments occurred in 1972 again and this entailed a decreasing volume of investment even in absolute terms. A similar situation was experienced during the period examined only in 1965. By the end of 1972 already both kinds of tension became mitigated: unsatisfied delayed demand further diminished and the balance of foreign trade also showed considerable improvement.

In *1973* investment activity became lively again but – owing also to the deceleration – this had not yet a full impact on the volume of investment. Unsatisfied demand doubled by the end of the year similarly to the situation in 1969. The balance of foreign trade was still improving, though only to a lesser extent than in the previous year.

In *1974* unsatisfied delayed demand caused the keeping back of starts and acceleration was characteristic in the realization of investments in process. The volume of investment was growing despite the restriction of starts. The increase in the volume of investment already brought about a growing external tension, while the inner tension – though only modestly – was decreasing.

In *1975* especially the deterioration in the balance of trade may have caused a further reduction of starts. Thus, the inner tension continued to be further eased while the external one kept increasing partly under the effect of the acceleration in force though at a slower rate.

In *1976* trends similar to those of 1965 and 1972 could be observed: the decrease in delayed demand, the increase in starts and deceleration jointly resulted in an absolute decrease of the volume of investment.

We have traced, in a chronological order on the basis of available – partly estimated – data, which of the previously defined strategies are brought into action by various tensions and what kind of tensions are created by these strategies themselves. Now, if we define four types of tensions and examine *to what type of tension the application of various strategies will lead,* a surprisingly uniform picture will be obtained. (See *Table 5.*)

The types of tension are the following: 1. only the inner tension of investment is increasing, while the external one is easing; 2. an increase can be experienced in both kinds of tension; 3. only external tension is increasing, the inner one is easing; 4. both tensions show a decreasing trend.

Let us recall the applicable strategies: 1. increase in starts, deceleration; 2. increase in starts, acceleration; 3. reduction in starts, acceleration; 4. reduction in starts, deceleration.

Table 5
Relationship between strategies and types of tensions

Year	Type of strategy applied	Type of tension	Coincidence of type numbers
1960	2.	2.	+
1961	3.	4.	–
1962	1.	2.	–
1963	2.	2.	+
1964	3.	3.	+
1965	1.	4.	–
1966	1.	1.	+
1967	3.	3.	+
1968	4.	4.	+
1969	1.	1.	+
1970	2.	2.	+
1971	3.	3.	+
1972	1.	4.	–
1973	1.	1.	+
1974	3.	3.	+
1975	3.	4.	–
1976	1.	1.	+

It can be seen that the type number of strategies and that of tension relations coincide in the decisive part of cases

This considerable correspondence allows the following conclusions to be drawn.

– The strategy of type 1, i.e. the first step of increasing starts and application of deceleration, increases "only" the inner tension of investment, apart from a few exceptions.

– Strategy 2 following 1 and comprising the second step of increasing starts and acceleration influences also the external tension and under its effect both tension indicators signal an increase.

– Strategy 3 applying the first step of reduction in starts as well as acceleration already mitigates inner pressure but further increases the external tension.

– Enforcement of strategy 4 – reduction in starts with deceleration – results in the easing of both tensions.

Behind these correspondences qualitative differences in subsequent parts of outlays in investment processes can be found: expenditure on an investment process in the first year hardly contains import, or not at all.

The relationship between tensions of various types and strategies brought into life by the former does not show such a uniform picture. In 1967, since strategy 1 applied in 1966 accumulated great inner tensions, strategy 3 – reduction in starts and acceleration – was applied, according to our computations, "leaping over" step 2. The same phenomenon took place also in 1973–1974. It often occurred as well that tension

relations developed in the make of strategy 3 already showed such mitigation that this brought into action the inversion of the process, i.e. strategy 1, without "having waited" for the mitigation of both tensions.

Comparison with literature

Steps called by us possible strategies may be compared to the four phases in the explanation of cycle by Tamás *Bauer* [2]. According to Bauer's terminology these are the following: 1. revival; 2. boom; 3. halt; 4. recession.

Bauer's explanation of cycles is based on economic history analysis of the period prior to 1968 in Hungary and in other socialist countries.

The manuscript of about 1500 pages applies basically traditional methods of economic history analysis. Motives of the behaviour of those demanding investment and of central control organs as well as their relation to each other are plastically presented. However, the cycle phases used by the author are not operational enough from the aspect of the aim set by us and these phases do not contain a systematic analysis of deceleration and acceleration.

On the basis of the simple model formulated above it has become clear for us that cycles need not necessarily be made up of precisely four phases. The number of phases of a cycle depends on the values of the parameters of the model (α_1, α_2, σ, μ_1, μ_2, γ) and on their relation to each other, while the essence of control, that is, the sign of parameters, as well as the basic form of equations do not change. It is especially important to take this circumstance into consideration when the investment system developed in the course of the 1968 reform is analyzed and compared with that in force during the period of plan directives.

On the basis of our computations it seems that the reform did not bring about a change in the control mechanism formulated in the model.*

For the explanation of the development of national economic investments not only economic historical but also explicitly econometric analyses have been performed. From among them the latest ones are here examined, whether they correspond to or contradict our simple cycle-model. Of course, a comparison is rather difficult since rather different things have to be compared with each other. On the one side equations related to investments from models describing major macrorelations of the entire economy can be found, while on the other side a model on investment cycles somewhat separated from the economy. Precisely on this account, the comparison refers mainly to variables causing cyclical fluctuations.

The *econometric model M–4* built by Katalin *Hulyák* [15] and describing macro-relationships of the Hungarian economy explains investment volume with variables of value added and of the stock of unfinished projects in the previous year the latter factor

*In his article [26] Attila K. *Soós* has also come to similar conclusions.

representing investments running through from previous years that exert pressure on investment outlays.

In our model this coercive force is embodied in the variables $(D(t) - \check{D}(t))$ and $i_D(t)$. At first sight it may seem paradoxical that these, – i.e. unsatisfied delayed demand and the stock of unfinished investments – being complementary to each other, should represent the same coercive force. But it is not difficult to realize that the greater the volume of investments in process at macro-level, the greater will be both unsatisfied delayed demand and the stock of unfinished investments; consequently bot variables are relevant explanatory factors in the given approach.

Builders of the *econometric model of short-term* planning [16] have come to the conclusion after much experiementation that in the explanation of the volume of yearly investment outlays central development allocations, the production of the building industry and the balance of foreign trade with a two-year lag have to be taken into consideration. From among these explanatory factors I emphasize only the balance of foreign trade, since this is a variable having an important part also in the cycle model. The question may be raised whether there is not some contradiction between the two-year lag of the balance of foreign trade and the one-year lag applied in the cycle model? This contradiction is only an apparent one. Namely, if the relationship between $k(t-1)$ and $D(t)$ as well as the development in time of the realization of $S(t)$ – which influences $i(t+1)$ – are jointly taken into consideration then the connection between the yearly volume of investment and the balance of foreign trade of two years before formulated in a single aggregate equation becomes clear.

The paper by *Tarján–Tényi.* [29] applied a control approach similar to the one used in my article. However, it examined more general mathematical relationships, general problems of the stability of cycles and not cycles occurring in reality.*

*

I am aware that the model dealt with in my article is a gross simplification of the complicated decision-making mechanism of investments, therefore it may give only a rough description of these processes. At the same time it seems to be a proper basis for better reflecting real processes and relationships if certain strict assumptions are lifted highly aggregated variables are broken down and the model is modified and enlarged by the inclusion of further explanatory factors.

The most important task is the lifting of assumption referring to the constancy of realization coefficients. For this on examination of the technological structure of investments, consideration of the sectoral structure of investments as well as an analysis of long-term trends are absolutely necessary. In the course of a further elaboration of the subject investigations have to be extended to the role of prices as well as to the analysis of the relationship between investment tensions and inflation.

*General connections between cycle and control can be found in *Bródy*'s study [5].

References

1. BAUER, T.: *Investment cycles in planned economies.* Acta Oeconomica, Vol. 21/3, pp. 243–260 (1978)
2. BAUER, T.: *A beruházási volumen a közvetlen tervgazdálkodásban* (Volume of investment in directly planned economy) MTA Budapest. 1978. Közgazdaságtudományi Intézet.
3. BRADA, J. C.: *Methodological problems of econometric modelling referring to planned economies.* In the volume "Economic theory, Eas–West relations, Hungarian and American economies." Editors: Dobozi, I.–Simai, M. Research Institute for World Economy. Budapest, 1979.
4. BRÓDY, A.: *The rate of economic growth in Hungary, 1924–1965. Is the business cycle obsolete?* ed. by Martin Bronfenbrenner. New York, 1969. John Wiley.
5. BRÓDY, A.: *Ciklus és szabályozás* (Cycle and control.) Budapest, 1980. Közgazdasági és Jogi Könyvkiadó.
6. FAUR, T.: *A késleltető modell és működése* (The lagged model and its functioning) In: "National economic models in long-term planning." Ed. by M. Augustinovics, Akadémiai Kiadó Budapest (Under publication)
7. GÁCS, J.: *Adaptive planning and the cyclical character of economic activity.* Manuscript. Institute for Economic and Market Research.
8. GÁCS, J.–LACKÓ, M.: *A study of planning behaviour on the national economic level.* Economics of Planning, Vol. 13, Nos 1–2, 1973.
9. GÁCS, J.–KAPITÁNY, ZS.–LACKÓ, M.: *A magyar gazdaság ex post szimulációja Kornai makro-szimulációs modelljével* (Ex post simulation of the Hungarian economy with Kornai's simulation model) Budapest, 1967. MTA Közgazdaságtudományi Intézet (Manuscript)
10. D. W. GREEN–C. I. HIGGINS: *SOVMOD I: A macroeconometric model of the Soviet Union.* New York, 1977.
11. GOLDMAN, J.–KOUBA, K.: *Hospodársky zust v CSSR.* Praha, 1967.
12. GOLDMAN, J.: *Makroekonomicka analyza a prognóza.* Praha, 1975. Academia.
13. E. HEWETT: *Planners' behaviour in the CPE macroeconomy.* 1978. (Manuscript)
14. B. G. HICKMANN: *Econometric models of cyclical behaviour.* Studies on income and wealth, 1972. No. 36, Vol. 1, 2. National Bureau of Economic Research.
15. HULYÁK, K.: *Az M–4 ökonometriai modell: input-output összefüggéseket tartalmazó ökonometriai modell* (The econometric model M–4: an econometric model containing input-output relationships) Budapest, 1973. Ökonometriai Füzetek, No. 12.
16. HUNYADI, L.–NEMÉNYI, J.–SUBICZ, P.–FIALA, A.: *A rövidtávú tervezés ökonometriai modellje* (Econometric model of short-term planning) Budapest, 1979. SZÁMKI, (Hectographed)
17. HUSZÁR, J.: *A beruházások megvalósítási idejéről* (On the gestation period of investments.) Budapest, 1979. (Manuscript.)
18. JÁNOSSY, A.–KEPECS, G.–PÁL, G. *A nagyberuházások költségütemezésének vizsgálata* (Examination of costs scheduling of major investment projects.) Statisztikai Szemle, 1980, No. 3
19. KORNAI, J.: *A hiány* (The economics of shortage.) Közgazdasági és Jogi Könyvkiadó. (Under publication, simultaneously in English by North-Holland Publ. Co.)
20. KORNAI, J.: *Makroszimulációs modell* (Macro-simulation model.) Budapest, 1976. Közgazdaságtudományi Intézet (Manuscript.)
21. LACKÓ, M.: *Feszültségek felhalmozása és leépítése* (Cumulating and easing of tensions) Budapest, 1979. MTA Közgazdaságtudományi Intézet. (mimeo)
22. MARRESE, M.: *Econometric Investigation of Hungarian Investment Fluctuations.* 1979. (Manuscript.)
23. SHAPIRO, A. T.–HALABUK, K.: *Macro-econometric model building in socialist and non-socialist countries: a comparative study.* International Economic Review, 1976, No. 3
24. SHAPIRO, A. T.: *Macro-econometric models of the Soviet Union and Eastern European economies: a comparative study.* Econometrica, November, 1977. No. 8

25. SCHRETTL, W.–SLAMA, J.–KYN, O.: *Growth cycles in centrally planned economies; an empirical test.* In: On the stability of contemporary economic systems. (Ed. by O. Kyn, and W. Schrettle, Göttingen, 1979. Vandenhoeck and Ruprecht.
26. SOÓS, K. A.: *Causes of investment fluctuations in the Hungarian economy.* Eastern European Economics. Vol. XIV, No. 2
27. SOÓS, K. A..: *Túlberuházás, növekedési ciklusok és gazdasági reform Jugoszláviában.* (Overinvestment, growth cycles and economic reform in Yugoslavia.) Budapest, 1975. MTA Közgazdaságtudományi Intézet. (Hectographed)
28. TÉNYI, Gy.: *A beruházási egyenetlenségek a magyar gazdaságban* (Imbalances of investments in the Hungarian economy.) Budapest, 1976. MTA Közgazdaságtudományi Intézet (Hectographed)
29. TÉNYI, GY.–TARJÁN, T.: *Kísérlet a beruházási folyamat modellezésére* (An attempt at modeling the investment process.) Budapest, 1976. Közgazdaságtudományi Intézet (Hectographed)

НАКАПЛИВАНИЕ И СОКРАЩЕНИЕ НАПРЯЖЕННОСТИ (ПРОСТАЯ МОДЕЛЬ ЦИКЛИЧНОСТИ КАПИТАЛОВЛОЖЕНИЙ В ВЕНГРИИ)

М. ЛАЦКО

В статье анализируется некоторые особенности капиталовложений в Венгрии на макроуровне. Особое внимание автор обращает на запоздание в освоении капиталовложений и в этой связи на цикличность капиталовложений. Непосредственным толчком к написанию статьи послужили работы Т. *Бауэра* и Я. *Корнаи.*

Вначале автор дает определение основных понятий, необходимых для описания инвестиционного процесса. Эти понятия следующие: начало инвестиционного процесса; общий неудовлетворенный остаточный спрос в конце года, вытекающий из начатых инвестиционных процессов; замедление и ускорение инвестиционных процессов.

После введения понятий автор знакомит с малой линейной макромоделью, состоящей из 6 уравнений, с помощью которой он пытается представить поведение плановых органов, формирующее инвестиции.

Уравнение (1) формулирует плановые мотивы начала инвестиций, то, каким образом прежние напряженности влияют на поведение плановых работников при принятии инвестиционных решений. Уравнение (2) описывает регулирование плановыми органами текущих инвестиций, их замедление или ускорение, на что также влияют унаследованные от прошлого напряженности. Уравнение (3) представляет давление неудовлетворительного остаточного спроса на часть объема годовых капиталовложений. Уравнение (4) определяет объем годовых капитальных затрат с помощью уравнений (1), (2) и (3). Уравнения (5) и (6) описывают воспроизводство напряженностей, накапливающихся в ходе инвестиционного процесса, и создают условия для функционирования модели.

После описания модели автор делает попытку ее численного выражения, которую пока следует рассматривать лишь как иллюстрацию, позволяющую, с одной стороны, более конкретно расположить применяемые понятия в истории гипотетической, но во многом напоминающей венгерскую, экономики, а с другой стороны, открывающую возможность ближе подойти — с помощью формулировки «плановых стратегий» — к пониманию конкретного протекания инвестиционного процесса.

REVIEWS

J. RITTER MRS. PAPP

FIFTH JOINT CONFERENCE OF THE HUNGARIAN ECONOMIC ASSOCIATION AND THE VEREIN FÜR SOCIALPOLITIK

The Hungarian Economic Association and the Verein für Socialpolitik held their fifth joint conference in Budapest from April 14 to 16, 1980. Economists from Hungary, the Federal Republic of Germany, West Berlin and Austria participated at the conference.*

The participants of the conference discussed the following subjects:

– topical problems of economic policy;

– price policy with special respect to raw material price trends;

– structural policy tasks of the state;

– some questions of industrial cooperation and joint ventures of Hungarian and West German enterprises.

The participants of the conference visited the Duna Iron Works where the management of the enterprise acquainted them with the production and sales activities, foreign trade relations and development programme, and showed them round some workshops of the factory.

Topical problems of economic policy

The Western and Hungarian economists participating in the conference were of the same or of similar opinion concerning a number of major economic policy issues. Both parties maintained that the key issues of economic growth were to solve the supply of energy, to reduce crude oil consumption in relative terms, to carry out structural transformation for the purpose of saving materials and energy, i.e., to restrict the impact of inflationary factors for the sake of internal stability of the economy; and to expand and promote international relations.

The many common features of economic objectives notwithstanding, there also exist substantial differences between the economic policy tasks of countries. These are

*The 12-man delegation of Western economists was headed by Professor Günter *Hedtkamp*, Director of the Institute for East Europe, University of Munich. The Hungarian delegation, also comprising 12 economists, was led by Secretary of State, Professor Béla *Csikós-Nagy*, Chairman of the Hungarian Economic Association.

rooted mostly in the different conditions and opportunities of countries with different economic potentialities for achieving their objectives.

In his review of the topical problems of the *Hungarian* economic policy, Béla *Csikós-Nagy* pointed out that along with the deterioration in the terms of trade subsequent to the world market price explosion and with the increase of foreign debts, also the intrinsic weak points of the Hungarian economy came to the surface and manifested themselves, among other things, in the dissatisfactory standards of productivity, low efficiency and poor adaptation to changing market conditions.

The 1977 resolution on selective economic development aimed at enhancing the efficiency of foreign trade and the 1979 plan decision on curbing the growth rate showed that the need for changes in economic policy and in the methods of economic control was recognized. More consistent adjustment to world market prices has been made emphatical in the new price system introduced as from 1980. In accordance with this, the normativity of financial regulation was strengthened, that is, the number of exceptions from fiscal rules is intended to be powerfully confined in order to let the differentiation of enterprise profitabilities express differences in business efficiency.

In the *debate* on the lecture, answering questions of Western economists, it was stated in the Hungarian contributions that because of the structure of the Hungarian foreign trade a higher rate of growth would only increase the tension in external equilibrium and therefore it is attempted to increase exports with a slower growth rate by way of trimming domestic use. Domestic use is expected to be maintained or modestly increased by controlling the purchasing power. This means a restriction of funds and development resources for investment purposes in the first place but also the incomes of the population are affected.

Lectures of Western economists – by Professor Wilhelm *Meinhold* and Professor Norbert *Kloten* – presented the situation in advanced capitalist economies and mainly in the *West German economy*. They explained that the major economic problems of the advanced industrial countries were in connection with the growing troubles faced since the 1970s in the fields of material and energy supply, prices and environmental protection, with the collapse of the Bretton-Woods monetary system; with inflation; and with the halt of the post-war boom.

In such circumstances the advanced industrial countries intend to guarantee the development of their economies in part through powerful structural transformation: they want to make the energy supply to the economy gradually independent from the oil exporting countries. On the other hand they must combat the disequilibrium of international payments, the worsening financial problems and inflation. For example in the Federal Republic of Germany, where the impact of the oil price explosion was quickly tackled, there is a danger that new rises in oil and material prices might result in drastic increases of domestic prices. Inflationary tendencies are intensified by strivings after higher wages which are now much more powerful than they used to be. At the same time, under the influence of increased interest rates in the USA, capital export has increased. In

consequence the deficit of the FRG balance of payments might double by the end of 1980 over 1979.

In this situation it is a problem whether the West German monetary policy should give priority to the requirements of the home economy or rather to foreign trade considerations. The point is the contingency that the Bundesbank may happen to be forced by foreign trade reasons to raise the rate of interest to a value that would no longer be favourable for the home economy.*

In answers to questions of Hungarian economists the Western participants stated that the FRG successfully brought the deterioration in the terms of trade to a halt, i.e. eliminated it in a rather short time under the combined effect of stabilizing oil price – on a high level – in the years following the oil price explosion; of increased exports to oil exporting countries; of the favourable boom; and through the moderation in inflation. The case is more difficult at present. Steady development instead of cyclical fluctuations must be based on medium and longer range economic policy and first of all on means of structural policy and monetary policy. This would require an internationally stable monetary policy but there is no guarantee for its being created. Reduction of state interferences which are not in line with the mechanism of market economy and restriction of protectionism are found to be to the purpose.

Price policy

Both the foreign and the Hungarian parties stressed the direct connections and interactions between economic policy and price policy.

László *Rácz* explained in detail that the 1980 changes of the Hungarian price system (linking of domestic and world market prices, flexible price mechanism, profit regulations, approximation of relative producer and consumer prices, etc.) together with other constituents of the system of regulators (normative financial regulations, activation of the rate of exchange policy, etc.) directly support the economic policy aimed at restoring the Hungarian economy's equilibrium and international competitivity. The new Hungarian price and financial regulations provide favourable conditions for a fast development of sectors and enterprises that are able to cope with the international competition. Thus, the price provides orientation also for selective development policy to assess the sectors to be developed or suppressed.

Domestic prices of raw materials and primary energy adjusted to the level and proportions of import prices, and in a broad range manufactures' prices realized in export and price gains are expressed also in the domestic producer prices. In accordance with the economic policy of provisionally curbing domestic consumption also consumer prices were significatly raised.

*An article written by Professor *Kloten* on the basis of his lecture on the subject is published in this issue.

In his lecture Professor Helmut *Leipold* concentrated on problems of price stability and inflation, partly in a theoretical approach and partly through an empirical analysis of the last years.

Inflation might be triggered by internal and external causes alike. In countries having extensive international relations the external causes of inflation are usually considered to be more important mainly because external inflationary factors are more difficult to influence than locally motivated inflation.

The impact of external inflation could be, theoretically, neutralized by a supranational monetary and credit system. No such international monetary system has come into being. The hardships of averting the inflationary effects through international cooperation are attributable mainly to the conflicts of political and economic interests existing between countries in the world economy. This is the reason for the failure to establish a durable and efficient system of international monetary and financial agreements.

The socialist countries also have structural reasons for not eliminating the impacts of inflation encountered in the world markets even if external inflation is expressed only slightly in the domestic consumer prices. Here inflation appears in a disguised form. The principle of applying world market prices, asserted in the turnover between the CMEA countries, is also an agent of the inflationary impacts. Controlling the inflationary impacts by means of various financial bridges results in irrational national price conditions.

Implementation of the large-scale structural transformation programmes (strategies of substitution and saving) which are to balance the rising prices of primary energy and raw materials need significant capital investments. The ensuing vivid demand in the capital markets adds to the inflationary processes. Further sources of inflation are the forecasts suggesting scarcity of primary energy and raw materials and the hazards of new ways of substitution.

An analysis of the internal causes of the inflationary process pointed out that in capitalist conditions the state itself plays an important role in the inflatory money flows (it regularly spends beyond its receipts); so do the trade unions (pressing for wage rises also where the increase of productivity does not justify it), the aids paid for relieving unemployment, the bonuses (payments against no performance), the decrease of production and under-utilization of capacities. The wage–price spiral is considered to be the main source of inflation.

The Hungarian participants pointed out that socialist economic literature concerns itself with the theory, history, impacts and forms of manifestation of inflation and deflation much more than what is known to Western economists. Socialist literature has been using the term "controlled inflation" for a long time. Commodity shortage is considered by many economists in socialist countries an inflationary symptom.

In the seventies, after the world market price explosion, the problems of imported inflation were accentuated in Hungary. With measures taken to avert inflation an artificial economic environment was brought about, whose adverse implications have been recognized since then. The economic policy takes more and more care of the internal

factors triggering inflation, especially of overinvestments and also of other causes. Planned economy provides, namely, better conditions for influencing these factors than a market economy. The impact of external inflation can be controlled through a more active exchange rate policy.

The role of the state in the novel tasks of structural policy

The state's role and tasks in influencing the structure are *ab ovo* different in circumstances of market economy from those of planned economy. In market economies structure and structural changes are shaped basically by the market and by competition, Professor Wilhelm *Meissner* pointed out in his contribution.*

It is shown by experience that modern capitalist states powerfully influence the shaping of structure even if that is not called an independent structural political activity It is generally required that the state should use instruments that are in conformity with the market.

The lecture of Béla *Kádár* treated the process of structural transformation in its world economic context, pointing out the problems of the Hungarian structural policy.**

In connection with the Hungarian problems the conformity of state subsidies granted for the purpose of structural changes – e.g. direct or indirect allocations of capital – with GATT provisions and Common Market rules was discussed. Western economists said there was no prohibition in international agreements for the state to enhance the structural transformation of jeopardized enterprises by capital contributions in stages of recession. Also the building up of industries which will become important in the future (e.g. nuclear energy) may be supported by capital contributions of the state. Also enterprise investments for the purpose of environmental protection may be completed with state funds. As a matter of fact, any subsidy with domestic purpose is permissible, be it for averting environmental hazards, housing construction, improvement of energy supply or for raising productivity, higher technological standards and modernization. GATT rules prohibit only such state subsidies as are aimed at backing export activities.

Strategic approach to structural transformation, the structure-forming role of direct and indirect means of economic control and the actual industrial policy tasks of the 1980s were treated in the lectures of Ottó *Gadó* and Zoltán *Román.*

Western economists inquired mainly into the criteria on whose basis the Hungarian development policy makes its selection and the way it takes decisions concerning the reduction or eventual winding-up of sectors: what happens to the workers of such enterprises; how it is possible to demarcate economical products from non-economical ones; what the case is when the product is turned out uneconomically by international measures but the product is needed in the home market.

*An article based on the lecture is published in this issue.

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Considering also the replies given to the questions, Western economists were of the opinion that the conditions of structural adaptation to world market requirements were worse in Hungary than Hungarians supposed. They believed the reason was that to eliminate backwardness with respect to technological standards and productivity needs a longer time and significant capital investment. The results of structural transformation might be expected to realize after 10–15 years, they said.

Industrial cooperation between and joint enterprises of Hungarian and Western companies

The experiences of cooperation between and joint enterprises of Hungarian and Western companies were evaluated at the conference in a microeconomic approach.

The basis of evaluation were the enterprise surveys made earlier. Under the guidance of Professor Karl Ernst *Schenk* and of András *Rába,* resp., the Institute of Foreign Trade Research of Hamburg University and the Hungarian Institute for Economic and Market Research had surveyed, by means of questionaries, the opinions of enterprises about the experience and prospective chances of cooperation.

The Hamburg survey sought answer to the following questions: What is the role of technology transfer in industrial cooperation from the point of view of West German companies? Is cooperation a suitable means for technology transfer? What was the impact of cooperations with Hungarian enterprises upon the patterns of production and export?*

The Hungarian survey was inquiring into the impact of Western cooperation upon the technological development and marketing policy of Hungarian firms and upon the profitability of their own production; as well as into the motives of entering into cooperation contacts.

According to both analyses the main motive of Western enterprises to enter into cooperation was to obtain new markets and to find access to the CMEA market if possible. Another motive was the chance to thus prolong the market life of products which already reached the phase of maturity in the west. Through cooperation, established with Hungarian companies, western companies hoped to damp the problems they faced because of recession, unemployment and unutilized capacities.

The major motives of Hungarian enterprises are the strive after adopting new up-to-date technologies, higher engineering culture and expansion of export markets. It has been found that for the sake of closing up internationally, Hungarian enterprises lay greater emphasis on the acquisition of new technology than on the efficient implementation of adaptation at home.

*The results of this analysis were reviewed in detail at the 4th Conference held in Bad Homburg in 1978.

With respect to the marketing of products turned out under cooperation analyses point out that the cooperation contracts usually contain geographical limitations to the sales of products manufactured by Hungarian enterprises. By their terms of sales the western companies prevent the Hungarian one from becoming a rival abroad. The presumable facts in the background of such contracts are the weaker negotiating positions of the Hungarian enterprises, or that they are not enough strongly interested in the independent marketing of their products.

It is also typical that the Hungarian companies initiate fewer new cooperations. Cooperation contracts are concluded mostly with such western companies with whom there have already been business relations.

Both analyses covered the influence of prices on cooperation. Most of the Hungarian companies assume that western partners want to achieve unrealistically low prices for the Hungarian products shipped under cooperation. It is stated also in the Hamburg analysis that the western companies achieve advantageous prices for both their own deliveries and for the return deliveries. They argue that the special risks of east-west cooperations are compensated by the western companies in the price. They consider as such risk the procrastination of the preparatory phase of cooperation, the higher than average costs and the uncertainty regarding the observation of quality specifications and terms of delivery. Hungarian companies find that the western partners overcompensate their risks in prices.

With respect to the technical standard of technology transfer it is a uniform opinion that the technology transferred under cooperations is not the latest one but one that is already getting obsolete or outdated in the western market. The Hungarian companies will not readily admit that their cooperational products are of a poorer technological standard than that of the partner's. It may be assumed that West German companies are more rigorous in their judgement of up-to-dateness while the Hungarian companies use a less exacting measure.

The analyses also show that, as a rule, the western companies have more ample opportunity to select partners for cooperation than the Hungarian companies. Because of the risks of cooperation relations they have more confidence in such companies whom they have already found to be solid and dependable partners in earlier commercial relations. It was also noted that technology transfer is practically a one-way process and West German companies seldom adopt Hungarian technology. Except for a few cases, adoption of Hungarian technology does not mean a technological development for West German companies. For this purpose they enter into cooperation e.g. with US companies.

As far as the future of cooperation relations is concerned according to West German opinions the passive attitude of the Hungarian companies ought to be changed. It is a fact that the Hungarian industry was isolated for a long time from international competition and got spoiled in its protected monopoly position, wherefore it is not enough interested in the longer range and in running risks.

The formation and functioning of Western and Hungarian mixed companies must not be expected to appreciably speed up the development of the Hungarian industry. But

the mixed companies are very likely to contribute to the development of some special fields. It may be claimed, too, that western cooperations have not improved the Hungarian balance of payments palpably, as both parties are interested in expanding the markets and consequently the foreign currency receipts originating from mutual deliveries almost balance each other. Production cooperation with western enterprises is still appreciated and its promotion is pursued by the Hungarian economic policy. A favourable development of the international political atmosphere is highly important for the future of cooperations in production.

To sum up, the meeting of economists can be stated to have offered a good opportunity for a better understanding of approaches to and considerations regarding the discussed issues, for exploring the reasons of disagreements, for analyzing the experiences and for discussing the conclusions.

The conference has been a successful contribution to the endeavours towards economically based solutions of problems pertaining also to East-West economic relations. The two organizations will hold their next conference in 1982 in the Federal Republic of Germany.

BOOK REVIEWS

CSIKÓS-NAGY, B.: *A magyar árpolitika. Az 1979/80. évi árrendezés* (Hungarian price policy. The 1979/80 price adjustment.) Budapest, 1980. Közgazdasági és Jogi Könyvkiadó. 258 p.

The new book of Béla *Csikós-Nagy* gives more in reality than its title promises. It gives a picture not only of contemporary Hungarian price policy and the 1979/1980 price adjustment, but also describes the way leading to them. *Chapter I* is a historical survey of Hungarian price policy, *Chapter II* deals with the development of price concepts, *Chapter III* discusses the problems of the 1979/80 price revision, *Chapter IV* presents the new price system and *Chapter V* the new price mechanism.

Development of the Hungarian price policy is divided into periods by some important price measures of comprehensive character, such as the currency reform of 1946, the price reform of 1951, the reform of agricultural prices of 1957 and the 1968 price reform. These reforms are evaluated by the author not so much according to their importance, positive and negative effects at that time, but according to their impact on the present. This special attitude draws attention to new aspects as against habitual evaluations. In connection with the currency reform of 1946 the author emphasizes, for example, that relative consumer prices very considerably deviated from relative inputs. The reason for this was, in his opinion, that because of the stormy inflation with its disorganizing effects stabilization had to be realized earlier than conditions would have been ripe for it. With low incomes corresponding to the limited fund of available consumer goods, the decisive task to be solved had been that relative consumer prices should ensure harmony between costs of living and the low level of incomes. Thus such a sharp deviation from inputs came into being that did not exist in most socialist countries, that is, it was "a specific Hungarian problem rooted in the currency reform of 1946". (cf. p. 30)

Nor does he emphasize the direct negative effects of the 1951 price reform on the development of living standards, but that "the traditional socialist price system could be regarded as developed practically with the 1951 price reform". (cf. p. 32) Its four main criteria were: 1. officially regulated prices fixed in a price list; 2. producer prices unchanged for a long time and the changing of prices through concentrated price adjustment; 3. official price formation based on prime cost and mainly wage cost; 4. a price system divided into largely separated spheres.

From among the latter the primary goal of industrial price policy is to ensure the undisturbed self-accounting of enterprises, that of agricultural price policy to establish the planned relationship between workers' and peasants' incomes and to develop a desirable agricultural production structure, that of consumer price policy to ensure the market equilibrium of consumer goods and the realization of living standards policy, while that of foreign trade price policy to ensure the balance of international payments.

This fourfold separation of Hungarian price policy is characteristic even today, "yet with the significant deviation that a more organic connection has come about between domestic and foreign trade prices and that criteria serving

for basis of industrial price policy have changed". (p. 33) Since 1968 means of production have not been excluded from the system of market relations either.

The essence of the 1957 reform of agricultural prices was the elimination of the system of obligatory deliveries to the state. Free procurement and the contractual system required a policy on agricultural prices and a system of budgetary supports that created material incentives in agricultural production, and ensured the parity of incomes, but not that of prices, because agriculture contributed to common consumption first of all through lower prices and not taxes.

A special chapter is devoted to problems of the 1968 price reform. This more detailed discussion is justified by the fact that the 1979/80 price revision partly further developed and partly corrected principles and methods of price formation formulated in 1968. As regards producer prices the price reform started from domestic relative inputs but did not change the main relative consumer prices, though the latter considerably deviated from relative inputs. As a consequence of the reform the level of producer prices was raised and the sphere widened within which production costs exceeded consumer prices. The author reviews in detail the mixed price mechanism developed by the price reform, since this element has proved to be the most lasting one and was further developed in order to make the price system more and more elastic.

The author briefly reviews the price debates preceding the 1979/80 price revision and the concepts developed, as well as the conditions under which the new price system was established. Presenting the work of price adjustment three stages of its realization are mentioned: price modelling until June 1979, actualization until December 1979, and then corrections that will last until September 1980. The book explains the difference between modelling and actualization caused first of all by the acceleration of world market inflation in 1979. This resulted, for example, in that the positive two-level character of the price system – envisaged by modelling as a difference of 8 per cent between the producer and consumer price levels – became only 3 per cent with actualization.

A relevant characteristic of the price system is the price centre. The 1980 price adjustment developed a three-centre price system. Beside competitive prices adjusted to world market prices, in the sphere of related goods the principle of proportionality based on use value characteristics, as well as price formation based on prime costs are applied. For example, in the industry two thirds of prices are formed on competitive basis, but in transport and communication fully on the principle of proportionate prices and in the building industry on that of prime costs.

Revision of the prices of agriculturel products meant a special problem. The objective was also here to reduce the budgetary support and the subsidy to consumer prices of foodstuffs to such an extent that it should produce no longer unfavourable effects on free market trade. The possibility of realization was limited by the fact that the measure of the increase of consumer prices of foodstuffs had to be fixed at about 20 per cent that was fitted into a 9 per cent overall rise in price level.

In the course of price adjustment the majority opinion was to bring relative consumer and producer prices nearer to each other. It was desirable in the interest of bringing about an economically rational consumption structure and of economic efficieny. In the opinion of the minority relative consumer prices considerably deviating from relative producer prices are justified – for social policy reasons. A change-over to prices fully proportionate to value would have resulted in a considerable, about 25 per cent increase in the price level.

This would have been a more considerable rise than could be carried out in a single step. Therefore, implementation of the value-proportionate price principle was decided on mainly in those spheres which are more closely connected with foreign trade.

Reviewing the new price system in detail the author concretely deals with prices of the individual commodity groups, thus with those of basic materials, primary energy, oil products, metallurgical, chemical products, basic materials of light industry, building materials and wastes. The producer prices of finished goods are dealt with in similar detail.

The closing part of the book reviews the new price mechanism. In its formulation the starting hypothesis was to minimize the limitation by

authorities of the market automatism of prices. Besides, with the 1980 price reform, just as with that of 1968, the intention was to create such a situation, the author emphasizes, where there is neither an open nor a hidden inflation. The author adds furthermore that "accordingly, there is no excess demand and price control by the state is practically required in the interest of planned price formation and not of the suppression of inflation".

The author reviews the role and importance of the different price forms and illustrates the increasing weight of free price forms with tables. According to them, as a result of the 1980 price reform, already 55 per cent of personal consumption is covered by free prices not limited officially.

In the analysis of the price mechanism of basic materials investigation of the impacts of world market price movements is given special emphasis while in the chapter on price control the parts dealing with unfair profits and profiteering are very interesting.

The entire book provides a lot of useful information and is an almost indipensable manual on issues of contemporary Hungarian price policy. This quality is improved by its good arrangement and an abundance of data.

É. RADNÓTI

ROMÁN, Z. (ed.): *Industrial development and industrial policy.* (Proceedings of the Second International Conference on Industrial Economics, 5–9 September, 1978. Székesfehérvár, Hungary.) Budapest, 1979. Akadémiai Kiadó. 427 p.

The Second International Conference on Industrial Economics held at Székesfehérvár between 5th and 9th September, 1978 debated the most timely questions of the development of industry and industrial policy with 140 Hungarian participants and 70 foreign theoretical economists, industrial politicians and planners arriving from 20 countries or representing various international organizations. The 20 lectures submitted, the introductory speech (by Rezső *Nyers*) as well as the lectures debated and the survey lecture on the comments (by Zoltán *Román*) have been published in English in the form of a book by the Publishing House of the Hungarian Academy of Sciences. The organizers of the conference took care for the "regional equilibrium" of the lectures; 3 lectures were held by the co-fellows of the international organizations and by the Hungarian economists, respectively, while 7 lectures each by economists from the OECD countries and by representatives of other socialist countries.

A greater part of the lectures analyzing the rather diversified sphere of topics dealt with technical and scientific progress, structural transformation, effects of changes in the world economy, as well as with the perspective of the international development of industry. Another greater part of the lectures examined how the individual national economies reacted to the changes that have recently taken shape and seemed to be lasting in their effects, how the changes influenced the systems of goals and instruments of industrial policy, with what they enriched the experiences connected with the implementation of industrial policy. At last, several lectures analyzed in detail problems of methodology, questions of planning and prognostication, as well as the relations between productivity and industrial policy, and the problems of industrial organization in the EEC countries.

The new processes of international significance, having been ripening for a longer time already but taking shape in the last 10–15 years modified first of all the external conditions of industrial development for most of the countries. It is understandable that the participants of the conference devoted great attention to the *exogenous factors* of industrial development and to the analysis of new tendencies in the international division of labour and international technological and scientific development. There was a general consensus established on that the structural transformation of the world economy has accelerated, the relative importance of individual factors of growth has changed, and that after the deepening of the international division of labour through more than 3 decades a suitable strategy for industrial development can only be formed today by combining endowment with international possibilities. Quite a great stress was laid on the opinion according to which the accelerating changes in external conditions of industrial devel-

opment, and the strengthening presence of the developing countries' industries necessitate the establishment of a new international industrial cooperation policy (redeployment) or practice *(Nanjundan, Beran, Zeman, Oppenländer)*. As a consequence of the increasing importance of the international division of labour and specialization, the autarkic efforts cause losses in growth not only for countries having smaller internal markets but it is becoming more and more important for bigger countries, too, to join the international division of labour *(Shagalov, Bouchet)*. During the debates a majority standpoint was taken, although in differently shaded wording, that protectionism and protectionistic measures might only ease at most the employment or foreign trade tensions, but in the long run would brake the technological and structural modernization, and economic development.

In judging the external long-range conditions of industrial development the view, according to which the *international division of labour* would further deepen and the world economy would undergo further structural changes, was quite uniform.

There was a dispute whether the pace of economic growth of the industrially developed countries would be more moderate perspectively than in the 50s and 60s and, consequently, the pace of industrial development in the developing countries and their weight in industrial world production would not reach the estimations set in the "Lima Programme." Against the "growth-rate centric" notion of economic development and industrial development such standpoints obtained greater emphasis that deduced the perspective external conditions of industrial development and the benefits coming from the international division of labour not from the indices of economic dynamism but from structural changes. Significant stress was laid on the opinion that the main adjusting tasks of industrial development are related to tracking the changes in the demand structure *(Zala)*, and urged the international coordination of policies for economic development.

The participants of the conference did not forget that the present problems of the international division of labour reflected major sectoral imbalances (primary energy and industrial articles) and that the long-range development of the international division of labour would be more and more based on *specialization* in products rather than in branches. The international division of labour in industry and deepening specialization within the branches accentuate necessarily the determining role of competitiveness against the so-called techno-structural concept. Oppenländer and some others emphasized the necessity of a differentiated judgement of the components of competitiveness. Directions of the international division of labour and structural transformation can less and less be explained with the traditional capital or labour intensity of the individual products. The relative importance of research and development and the effectiveness of management is increasing among the factors of production. Similarly to the comparative advantages based on the natural geographic endowments those of the development of the most up-to-date technologies may as well be easily monopolized and can hardly be exploited by the backward or moderately developed countries. According to this opinion competitiveness in the industrially developed countries depends on the technico-economic characteristics of the individual products to a greater extent, while in the developing countries lower costs and prices play the main role.

As to the external factors of industrial development there was consensus about the increasing role of *technical progress* in growth and foreign trade *(Ray, Kurenkov, Muchnik)*. The experts stressed the necessity of developing mechanisms suitable for the rapid transfer of the most up-to-date technologies both between branches of different technological development level in the individual national economies and in international relations. They voiced at the same time that technological development could not be separated from the modernization of orgnaization and management, from raising its level and from a greater consideration of economic interrelations. The debates pointed out that in technological development beside the major priority programmes also smaller steps, innovations, acceleration of the massive spreading of modern technological processes play significant roles, too.

It was surprising how unanimously, in spite of their understandably different approach and

emphasis, the experts – grown up in different schools of economics, having dissimilar experiences – laid stress on the necessity of a differentiated handling of problems of industrial development based on peculiarities of the individual national economies. Although on a single occasion the idea of a common way of industrial development, the increasing structural convergence of industrially developed countries and the universal standards of industrial development was raised, the overwhelming majority of the opinions reflected in the lectures and debates set out fundamentally from the concept that the practical purposes and methods of adjustment to the new development tendencies were necessarily diverse for the more than hundred and fifty countries of the world with different levels of development, growth potentials, development policies and systems of institutions. The aims and directions of movement of industrial development are essentially *determined by the national economies,* its peculiarities and lessons can mainly be interpreted in this reflection. It is not mere coincidence then that at the conference eight lectures and the majority of the debates and comments dealt with the industrial policies of individual countries. These, despite the inexpediency of or limits to copying, render valuable help to each country in understanding their own problems and in the improvement of industrial cooperation with other countries. It cannot be regarded as accidental either that all the lectures on national industrial policies paid distinguished attention to the problems of structural transformation and world economic adjustment.

The demand for a differentiated conceptual handling of industrial development was reflected in the lectures of Czechoslovak economists *(Beran, Zeman)* who emphasized that *development policy* and main points of specialization could only be formulated on the basis of the geographical endowments, level of development, size of the national economy and external economic relations of the individual countries. Several contributions *(Johansson, Oppenländer, Bouchet)* pointed at the fact that the modern strategy of industrial development could not be restricted to protective functions, the possible softening of external shocking effects, to the rationalization of consumption, to the increase of self-sufficiency or substitution problems, but that the way out could be found in the long run in offensive strategies based on increased exploitation of the national economy's abilities in the stimulation of technological development, research and development, in on-the-job-training of the labour force and in the growing investments and granting of credits that promote the exports of technically up-to-date articles.

The participants did not dispute that the state should support in certain cases the sectors or firms in trouble, the supporting decision must, however, be thoroughly considered and greater attention should be paid to the stimulation of preventive adjustment. Assertion of the external economy's demands in industrial policy is by no means an easy task.

In the industrially developed countries – as indicated by Ö. *Johannson's* lecture – there are frequent conflicts and deriving tensions between the economic requirements of structural transformation, adjustment and the aims of social policy. The system of goals and institutions of the so-called welfare state may hinder the economic and economic-political efforts directed toward raising competitiveness and the application of forms of international division of labour accelerating adjustment. Thus the tasks of breaking the resistance of groups of interest (labour power, trade unions, entrepreneurs) of lower mobility, hit unfavourably by the changes in the world economy, fall also onto the organs of national states.

The differentiated views about the interpretation of *industrial policy* presented themselves in a particular way. Some standpoints identified the requirement of differentiation with the priorities of development policy, with preferences to branches, enterprises and geographical zones, while others with the use of instruments of economic policy. The idea, based on Hungarian experience *(Román)* according to which strong differentiation and selectivity should be asserted in choosing the aims of development, while in the control and regulation of economic processes and economic units the strengthening of normative elements, the formation of a unified economic policy environment are to be endeavoured was widely approved. From this point of view the use of instruments of selective economic policy is

justified only by extraordinary cases of emergency, for a temporary period.

Significant attention was devoted to the problems of concentration and the optimal size of establishments, too. Contrary to the formerly dominating views the participants of this conference did not identify the increase of concentration with the purposeful direction of developing industrial organization *(de Jong, Bouchet, Hubert, Johansson, Ray)*. Such majority standpoint was taken that suitable specialization might neutralize the disadvantages arising from the sizes of establishments and enterprises, thus it would be a mistake to overestimate the importance of the organizational aspects of industrial policy. Several participants pointed at the fact that in the OECD countries the proportion of small and medium-sized enterprises was almost unchanged and by means of their significant ability to adjust they played an important role in the stimulation of structural transformation and the dynamic development of industry. Their further survival is backed up not only by the viewpoints of social politics but by their above-average flexibility and by their readiness for innovations. In the OECD countries' industrial policies, improvement of the external economic manoeuvring of small and medium enterprises and their integration into the world economic system of relations are the main task. In several socialist countries, however, increasing concerns are caused by the predominance of big enterprises in the industrial organization, in the cooperation among the companies and this may bring about phenomena indicating external and internal imbalances. Although the motto "small is beautiful" has turned up several times, the balanced state of standpoints is characterized by the fact that the conference analyzed the practical size of industrial organizations not in general terms, but as a function of the technico-economic peculiarities of the individual branches.

Understandably, the identity of views was the least in judging the operating mechanisms of the economy. The role of the market and competition mechanisms was appreciated naturally by the OECD countries' representatives, while that of the planning of industrial development and its management through central programmes for development was appreciated by the representatives of socialist countries. Participants of the West pointed out, as well, that state intervention was increasing in the OECD countries, too, improvement of productivity and competitiveness was encouraged by widespread government programmes, which contributed to enriching the system of goals and instruments, to the institutional solutions of industrial policy to a greater extent than before. At the same time several Western participants doubted the state's enterprising virtues and underlined the necessity of keeping the central intervention between reasonable limits for the sake of healthy operation of competition and economy. But economists from the socialist countries accentuated the fact that industrial policy relied also in the socialist economic system on the companies' initiatives, while the possibilities for centrally influencing industrial processes and technical-structural development were much more advantageous. The methodological lectures held by economists from the socialist countries also illustrated essentially the abundance of models wishing to provide scientific bases for central forecasting and planning procedures, and the mathematical possibilities of drawing up technological prognoses *(Haustein)*, the foreign trade effectiveness and optimization *(Shagalov)* as well as the possibilities for sectoral long-range planning *(Kuleskov)*.

The *employment and productivity aspects* of national industrial policies were paid greater attention to first of all in the lectures of economists coming from the OECD countries *(Woodward, Kennedy, Hubert)*, which was aroused by the increasing structural unemployment in more and more countries. Deterioration of positions taken in the world market of dynamic industrial goods, the low dynamism of industrial manufacturing and productivity, the increase of the level of per unit wage-costs, the decrease of investments and unemployment are interwoven in a magic circle. For the socialist countries it is not unemployment that causes troubles presently, but the lack of labour supply. During the debates such opinions were also voiced according to which the lack of manpower was not independent from the low level of productivity and effectiveness. A lecture (by *Botos*) demonstrated that, unlike in the OECD countries, in Hungary invest-

ments expanding capacities were in preponderance over the so-called rationalizing investments, and this might as well contribute to the lack of manpower.

The conference meant a significant contribution to the enrichment of the notion of industrial policy, it enlightened from different sides how the changes in the external and internal conditions of industrial development affected the system of goals and instruments, the decision mechanisms and the organizational forms of industry and the interest relations in the individual countries. Beside the exchange and discussion of past experiences of the individual countries, the future-oriented approach starting from the latest international changes having lasting effects, characterizing most of the lectures, was quite instructive; as was the high-level sensitivity manifested by participants in relation to the generalizing possibilities of the specific national economic problems of the individual countries.

The conference, laudably, did not make efforts for the acceptance of universal recipes, nor for a final settlement of the problems debated, the issues left open give, however, further inspiration to subsequent research and debate forums aimed at a scholarly systematization of the practical experiences obtained in various socio-economic environments.

B. KÁDÁR

Foreign trade and price formation. Discussion papers presented at the meeting of Finnish and Hungarian economists during the Days of Finnish Science, Budapest, May 14–17, 1979. Helsinki, 1979. Economic Planning Centre, 162 p.

From 14th to 17th May, 1979 a meeting of Hungarian and Finnish economists took place in Budapest, at the Institute of Economics of the Hungarian Academy of Sciences, in the framework of Days of Finnish Science. At the meeting concentrating on problems of foreign trade and price formation Tamás *Nagy,* András *Nagy* and Gábor *Bakos* presented papers on behalf of the Institute of Economics. From among Finnish lecturers Veikko *Reinikainen* represented the Turku University of Economics, while Pekka *Parkkinen* and Eero *Tuomainen* the Economic Planning Centre of Helsinki.

András Nagy's paper was entitled "Growth and trade: the case of Hungary." Analyzing the development of the Hungarian economy between 1950 and 1977 the author pointed out that in that period the Hungarian growth rate was faster only than those of the GDR and Czechoslovakia from among CMEA-countries, but several developed capitalist economies had a slower growth rate than the Hungarian one. The increase of Hungarian productivity accelerated only after the 1968 reform, but it is still not exceeding the international average. The ratio of GNP spent on investment continuously increased, but this was not reflected in an adequate dynamics of national income.

Though the Hungarian economy is largely dependent on the international division of labour, in the mirror of figures it would be an exaggerated simplification to conclude from this on the openness of the Hungarian economy. The ratio of imports to the gross domestic product might indicate openness numerically, but it is not sure at all that reliance on the international division of labour is of a similar importance in the development of the economy from a qualitative viewpoint.

In the period of Hungarian economic development examined the import contents of both domestic use and exports considerably increased. In this regard the author called attention to a danger. If, namely, foreign exchange receipts earned through exports and foreign exchange expenditure on imports are not identically valued, the import materials exported in a processed form will appear cheaper than they are in reality, which will lead, after all, to an insufficient acknowledgement on external markets of the value added domestically. In Hungary's case this fact is one of the obstacles to improving the efficiency of export.

As supported by computations cited in the paper some growth indicators of the Hungarian economy showed considerable fluctuation in the period examined. Major fluctuations could be experienced particularly in the yearly growth of accumulation and imports, while the expansion of exports showed much less fluctuation. In the almost parallel fluctuation of imports and the rate of accumulation it had undoubtedly a part that yearly import plans were determined in con-

sideration of the balance of trade in the previous year. The author considers the investment cycles of the Hungarian economy, to which attention was drawn by Tamás *Bauer,* as a basic reason for this phenomenon. Major investment projects, started simultaneously, draw away an important part of investment resources which prompts economic policy sooner or later to intervention because of shortage phenomena and disproportions. After the mitigation of tensions economic control restricts the expansion of investments only to a lesser extent and the whole cycle begins again. According to András Nagy the development of investment cycles must not be traced back to the changing balance of foreign trade alone, but deeper reasons for this phenomenon should be sought after in the "soft budget constraint" producing a shortage economy.

Development of the Hungarian economy during the 1970s was considerably impeded by deterioration in the terms of trade. Though this deterioration caused no slowdown in growth thanks to interventions by economic policy, enterprises were not stimulated enough for the introduction of more economical new technologies nor for the increase of the volume and prices of export. Enterprises incurring losses could maintain their production owing to budgetary support. All this has led, beside cumulation of deficits in the balance of foreign trade, to a situation where enterprises could less and less adapt themselves to changed world market requirements.

Analyzing the development alternatives of the Hungarian economy the author emphasizes that at present nobody disputes the necessity of a radical transformation of the Hungarian economic structure. There are views according to which losses resulting from foreign economic relations are unavoidable, and thus import substitution and development relying on the CMEA-market are the ways to be followed. This opinion has spread first of all in circles of mining and the heavy industry especially hit by world market price changes. Other opinions insist on making export-oriented development policy general.

One of the final conclusions of the paper was that a decision in favour of one or another development alternative should be made exclusively from case to case, on the basis of efficiency requirements. A consistent enforcement of efficiency requirements necessitates considerable extension of a distribution policy with differentiating effects. Increasing differentiation is required also between enterprises. According to the example mentioned by the author the relationship between economic control agencies and the enterprises is at present like that between parents and their children. Parents love each child in the same way, therefore, weaker ones are saved and stronger ones are imposed on greater burdens.

Gábor Bakos read a paper under the title "Hungarian economy and the tasks of foreign trade." In the Five-Year Plan period covering 1976–1980 requirements of intensive development have come more and more to the fore, since employment can be raised altogether by 50–60 thousand persons only. On the other hand, also investment resources are available to a limited extent. Therefore, in the Fifth Five-Year Plan it was set as a goal that the growth rate of previous years should be maintained with a slower dynamics of accumulation and consumption.

Deviation from plan targets became quite obvious in 1978. The growth of national income did not attain what had been planned, while domestic use exceeded it. Thus, considerable additional imports were required first of all the balance of trade with capitalist countries.

The aggravation of economic troubles can be traced back basically to the fact that the expansion of production was not accompanied by modernization of a similar extent. Accumulation possibilities of economic units increased more than would have been justified by improvements in their efficiency. Thus the Hungarian party and economic leadership set the re-establishment of equilibrium as the main economic objective of the country to be realized in the next Five-Year Plan period. Special attention should be paid to qualitative aspects of development.

In his paper entitled "Topical problems of the reform of the Hungarian price system" Tamás Nagy outlined the main problems of the price system valid until January 1, 1980 that especially urged for the reform. The charges on assets and wages made new technology expensive and the enterprises used rather living labour instead of technological development. The new price system eliminates the charge on assets and reduces that on wages, as well as the rate of profits. All this

leads to a reduction of the level of industrial producer prices.

Since the previous level of producer prices was even by 4–5 per cent higher than that of consumer prices this made it necessary among other things, to maintain two rates of exchange for the forint, i.e. "commercial" and "non-commercial" ones. This made an international comparison of Hungarian economic performances for the entire economy impossible. The reform of the price system set an international standard to price development also in such a way that a raising of the general price level of enterprises is allowed only in connection with the raising of export prices.

The author deems necessary also economic policy changes for the enforcement of an efficient new price policy. Parallel with measures taken towards financial and market equilibrium reduction of inflationary pressure is also of great importance. Enterprises have to be forced to competition on the domestic market to a greater extent than previously, which requires better differentiation of enterprise and personal incomes.

Veikko Reinikainen's paper dealt with connections between advantages to be gained from foreign trade and structural accommodation. Analysis of effects of free trade is of special importance in the case of Finland, being an EFTA-member and having concluded free trade agreements with several CMEA-countries, too.

The increase of advantages to be gained from foreign trade requires structural transformation in production. The effect of structural transformation is largely increased if production factors can easily be replaced by each other and channelled from one branch to another. It has to be taken into consideration, however, that such regrouping brings about a differentiation of incomes of production factors.

With free trade, prices of production factors have to develop in such a way that they ensure the full utilization of scarce production factors. For this, however, neither market prices of labour and capital, nor rates of exchange provide an adequate framework.

The author does not judge the structural adjustment of Finland as fully satisfactory. Macroeconomic indicators testify to a considerable increase of the importance of industry and the share of industrial goods in exports also increased to a great extent. However, export dynamics was not too fast and attention was drawn to an important aspect. The problem is first of all not the existing specialization directions from which a country should chose, but how it should extend these directions.

Pekka Parkkinen's paper analyzed the input contents of Finnish foreign trade. Computations made on the basis of the 1970 input-output table of the Finnish economy indicate that the import contents in Finnish exports was considerably less than in import-substituting production. In Finnish imports products of branches requiring unskilled labour as well as intellectual and physical capital have a greater share than in exports. Because of the high proportion of the export of wood products, however, the most important production factor in exports is the land area.

In his paper entitled "Role of the rate of exchange changes in Finnish growth policy" Eero Tuomainen drew attention to the fact that three conditions have to be fulfilled for devaluation to stimulate growth and structural transformation. Some real or hidden unemployment, capacities suitable for the manufacturing of competitive new products are required as well as that the increase in the rate of investment should be accompanied by expectations connected with the improvement of profitability in the longer run and by adequate external financing possibilities as well.

There were three devaluation waves in the Finnish economy up to 1980 namely, in 1957, 1967 and 1977/78. This fact brought into life the theory of "devaluation cycles". According to this, in the first period of the cycle relative incomes of capital increase, which, however, is responded to by wage claims of workers. Inflation following wage increase diminishes the competitiveness of export that leads to devaluation. The average growth rate of the economy will be the faster the longer the first and the shorter the second period of the cycle. Opinions of Finnish economists differ as to the economic policy importance of devaluation. According to one group devaluation restores the rate of exchange nearly in conformity with purchasing power parity beside retrieving losses caused by inflation. On the other hand, there are views emphasizing

the importance of devaluation as a stabilization device.

According to the author no considerable devaluation will take place in the Finnish economy any more. Partly because the almost complete liberalization of foreign trade has been realized, structural adjustment could hardly be promoted by this measure any longer and partly because previous devaluations increased the inflationary sensitivity of the Finnish economy which should not be further increased.

Á. TÖRÖK

LAKI, M.: *Uj termékek bevezetése és a piaci alkalmazkodás* (The introduction of new products and adjustment to the market.) Budapest, 1979. Közgazdasági és Jogi Könyvkiadó. 219 p.

As a new feature of the Hungarian economic research a group of mostly young economists, analyzing the characteristics of enterprise behaviour on the ground of case studies, emerged during the 70-ies. The author who himself has conducted a number of successful case studies, tries to synthesize the findings of the case studies of necessarily limited validity with the advantage of generalization based on mass observation using a method not yet applied in Hungary.

The basis of the analysis is a collection consisting of several volumes of three newspapers of a different profile: a political daily and two weeklies: one concerned with the issues of the domestic economy and the other with those of foreign economy. Here he studied articles and reports dealing with the introduction of new products at the companies. The elaboration of quantitative relations based on the classification of the verbal information, and their comparison with the "unique factors" not expressable in statistical terms, all helped the creation of a valid picture on the situation of the introduction of new products at the companies – one of the most interesting but at the same time the most inaccessible economic problems of recent years.

The analysis focuses on the incentives of introducing new products at the companies. The author classifies the incentives stemming from the external environment of the company into two major groups relating to each other in many aspects but which are to be clearly distinguished from each other: incentives coming from the *market–business,* i.e. "horizontal" environment, and those coming from the *state management – power,* i.e. "vertical" environment.

As for the horizontal environment the author gives a detailed analysis of the various market emergency situations, based on the given sample. In his interpretation a market constraint for the introduction of a new product can be the result of either the deterioration of the market situation for a product or a product group, or the deterioration of the company's position in its inter-company relations. This distinction is necessary since it makes possible the separation of the processes related to the utility of the products, more or less independent of the company itself, and the development of inter-company relations where the company's responsibility is much more pronounced. Examples regarding the first case: the product becomes technically out of date; consumer behaviour and fashion changes; the market becomes saturated; a new type of raw material emerges in the market; the customer demands some other raw material or new technology for the production, or possibly there is a demand for a quite new product, etc. Constraints from the side of changing inter-company relations can be – as the most pronounced – the emergence of new competitors on either the domestic or the foreign markets of the old product. The above distinction between market constraints is quite an arbitrary approach, since in the analyzed sample in 70 per cent of the observed cases the deterioration of the intercompany relations was coupled with marketing difficulties as well. This is also true conversely: namely, in those cases when companies face difficulties in the marketing of their old products, intercompany relations will generally deteriorate as well.

The most exciting and the most elaborated part of the book deals with the activity of state management authorities generating stimuli for the introduction of a new product. The state stands here as a *collective term* for government, ministries, local council, etc. i.e. for organisations acting with varying importance at different fields in the sophisticated network of the relationships between state and companies, having at least one

common feature, that their activity is not profit-oriented.

The participation of the state in the introduction of a new product is not uniform in all branches of the economy. Experience gained from the sample show that the state relatively often plays an active role in launching a new product at large and medium-sized companies, manufacturing capital goods, where the typical way of development is buying license and where the new product is most likely to enjoy a monopolistic position on the domestic market. Contrary to this a less pronounced role is played by the state in the product development efforts of industrial cooperatives or small companies producing consumer goods, where the self-financed development is more frequent and the new product faces keen competition in the domestic market.

In the adaptation process of a new product with state participation – no matter which part, the state or the company has initiated the process – the harmonization of interests takes a longer period. In the course of the harmonization of interests both the state and the company try to achieve the most advantageous position using their specific means in the course of bargaining. When the state needs the new products as a *customer*, the company enjoys the more advantageous position in the bargain. In such cases the company wants to share the favour which may be granted by the state. Naturally the state – company relationship must not be regarded as a "one-way street". Just because the state as a customer grants substantial preferences in most cases, the companies are often forced to compete for obtaining the secure, quickly expanding state market. At the same time the preferred treatment granted on behalf of the state must not be regarded as an unreturned gift. The company supplying the state market is quite often forced to sacrifice its old, well-known markets, so that preferences granted by the state are often a sort of compensation.

The above forms of the relationship between state and companies can be analyzed by mostly horizontal, market categories characterizing the intercompany relations. However, the state – company relationship in the course of the launching of a new product may emerge in such forms as well which are far from showing any signs of a partnership. Such a case can be often seen when a company (mostly a large or medium sized one) is forced to resort to technical development in an emergency situation and the state is forced to refloat the company. The observed sample has proved that in such cases the state is more "generous" than in market relations where it appears as a customer and grants subsidies to its partner. In the above situation the state acts as an authority in solving cooperation problems, reorganizing and merging companies.

Why do mostly large and medium-sized companies get into crisis situation calling forth state intervention? According to the author this is closely related "... to previous decisions passed by the state... which actually forced the company into a crisis situation or at least played a part in it". (p. 142) "Those companies which participated in the technical development as part of refloating measures have generally met difficulties partly because the directive prices of their products failed to cover (on the grounds of real or supposed national economy interests) the manufacturing costs." (p. 143) "If insolvency is not only the consequence of inadequate company management but of central decisions too, the modification of the latter is required as well, more exactly: central authorities themselves are interested in the correction of their errors or in a consequent implementation of their decisions. But whatever their decision, the costs arising from it must partly or totally be borne by them." (p. 144)

The launching of a new product in a crisis situation threatens with "jumping out of the frying pan into the fire", since such tactical considerations as retaining of the given labour force, the utilization of given capacities, etc. are by no means sure to encourage the acceptance of the most adequate development strategy in the long run. Massive support by the state is never granted for nothing: in such cases state authorities have the right to urge company management to choose ways it would not choose otherwise (by prescribing supply quotas, export quotas, etc.).

The final part of the book analyzes the most frequent causes for failures of introducing new products.

One part of these failures can be explained by the *"bad inheritance"* from the pre-NEM period

(prior to 1968, the introduction of the New Economic Mechanism). Company attitude automatically expecting state intervention and preferred treatment when facing difficulties is still existing, even then when the state support can be expected only after much longer time and perhaps granted only partially, compared with the period before. The assumption that exports to socialist countries and therein exports to the Soviet Union can be expanded without limits is again rooted in the pre-reform period, however, it has some reality even today. Losing a market which seemed to be secure, often leads to the failure of a new product.

Another group of causes bringing about the market failure of a product is rooted in the *underdeveloped framework of inter-company relations.* This applies especially to those large and medium-sized companies which built up their partner contracts relatively slowly after the reform had been launched; these companies failed to establish their horizontal information and bargain contacts in time, which had not been of primary importance for them under the system of the former directive planning.

The author analyzed only one phase of the highly sophisticated process of reproduction. However, he succeeded in analyzing this single phase in such a way that he simultaneously managed to explore unknown dimensions of the horizontal and vertical environment of the Hungarian company management in the post-reform period. Special interest can be expected by readers interested in the economic reform efforts of socialist countries, following the debates related to them, and who will be given a detailed but at the same time clear analysis about the different aspects of the state–company relationship under the indirect (non-directive) system of economic management.

S. RICHTER

BENET, I.: *Mezőgazdaság, élelmiszer-gazdaság, agráripari komplexum* (Agriculture, food economy, agro-industrial complex.) Budapest, 1979. Közgazdasági és Jogi Könyvkiadó. 276 p.

The author, a senior fellow of the Institute of Economics of the Hungarian Academy of Sciences examines an important problem of the national economies of socialist and developed capitalist countries.

Deviating notions used in international literature (agribusiness, agro-complex, etc.) are considered as of practically – economically – identical contents. The definition of complex is nevertheless not unambiguous, owing to differing delimitations of the sphere of agricultural input industries and lack of proper clarification of the circulation sphere, increase in value, the activity and organizational principles. Input industries are restricted by the author to serving agriculture, that is, the activity of organizations dealing with the production of chemical fertilizers and plant protectives, manufacturing of veterinary devices and concentrates, production of agricultural machines and the material-technical supply of agriculture belong here, moreover also industrial activity of supplying character realized in the organization of the food economy which is considerable in Hungary. The author does not consider multi-purpose activities as belonging to the complex (thus metallurgy, transport, generation of energy). Food processing is an integral part of the agro-industrial complex, a separation is justified only in historical analysis. According to the author theory and practice indicate as regards the integration contents of the agroindustrial complex that it has to be extended also to include activities of processing and trade.

A complex is a macro-economic category for the author. It is a vertical unit that covers agricultural input industries (sphere I), agricultural activity (sphere II) and food processing and trade (sphere III). Besides, he also points to the great variety of micro-level organizational forms and relations noting that it is not expedient to make any of them exclusive.

The author attaches the development of the concept of agribusiness to Davis' and Goldberg's work published in 1957. They were the first to use input-output analysis for this purpose and made the first structural computations of new type. Western economics point out after them the characteristic feature of economic development according to which the shares of spheres I and III are increasing while the weight of agriculture is decreasing and the quality of relations between the three spheres has been modified.

In consequence of the fast-rate radical transformation of the Hungarian agriculture the ag-

ribusiness concept had been early adopted in Hungary because new intersectoral vertical formations came into being which were examined by Hungarian economic science in various analyses indicating conditions and directions of modern food production. It also contributed to the results of Hungarian agriculture that Hungarian economic science was first to undertake the outlining of the economics of food production in the framework of Marxist economics.

The author gives an excellent survey on scientific researches on agro-industrial complex carried out in the USSR and other socialist countries. It is stated on the basis of these researches that the sectoral structure of the complex reflects the level of productive forces, the key role of the industrial background and the circumstance that in sphere III of the complex the development level of processing and trade connected with agricultural commodities is not satisfactory.

When making comparisons between socialist and capitalist complexes the author points out that agribusiness designates – in its economic contents – not only a capitalist particularity of development but reflects a phenomenon in the development of economic structure taking place in both capitalist and socialist countries. At the same time from the viewpoint of its *social contents,* the complex means a new stage in the development of the monopolistic structure of American economy. On the other hand, in socialist economies a complex has several features of socialist character.

The book examines the structure of the Hungarian agro-industrial complex in a wide scope, supported by various statistical data supplied partly by the Hungarian Central Statistical Office and partly resulting from special data collection. On the basis of these data the author analyzes the qualitative modifications in the structure of productive forces – land, labour fixed and current assets –, the development of machine and production systems as well as Western technological transfer purchased on credit, that became necessary for them in the period 1961–1975.

It is shown in the book how Hungarian agriculture has become a capital-intensive branch of the national economy. As a consequence of decreasing labour force and arable land the capital intensity of agriculture is steadily increasing, – at the same time the proportion of net investments is low. Special attention is paid to the analytical examination of the 1975 structure and in this framework especially changes in the production structure of the complex, effects of the price system and the share of the complex in national income are dealt with. Attention is drawn to industrial, transport and commercial activities not connected with food production of contemporary developed socialist agricultural large-scale farming which deserve a special place in the "final product approach" to the food economy.

The book deals with the privileged position of foreign trade in the Hungarian agro-industrial complex. But, precisely because of the well-known open economy of Hungary, marketing would have deserved more attention by revealing its requirements and consequences.

The economic and social contents of the complex are correctly separated by the author. If he proceeds along this way, the social consequences will unavoidably come to light. Under capitalist conditions the social consequence of agribusiness is the penetration of value orders of urban character into farmers' communities. As a result, work will be separated from management, connections will cease between capitalist businessmen, specialists, on the one hand, and between farmers on the other; the latter lose their influence on decisions and become isolated in cultural possibilities; their initiative is damped. The question is whether these trends are valid also in the socialist complex?

The interrelations between the concept of agribusiness and vertical integration is not quite clear to us either. In the latter – under capitalist conditions – figures indicate a stability partly because of anti-trust laws. In the socialist food economy – mainly in the agricultural sphere – progress can be experienced in this field. How are these phenomena located in the agro-industrial complex?

It would have been interesting to deal as well with the problem whether costs of inputs are not too high if only marginal profits can be achieved by raising the technological level of agricultural production and processing.

These remarks – rather reflections of the reviewer after having read the book than deficiencies of the author – can be left out of considera-

tion if we see repeatedly the author's endeavours to formulate his research results and conclusions also for the purpose *of utilization by economic policy.* In national economic planning and statistical surveys the entire production line, complex production processes and relations have to be reviewed, but without trying to sum them up in organizational units. Sectoral economics of the new type requires thinking in terms of national economic complexes: to what extent the share of sphere I should increase within the complex, how much price policy considerations have an affect here and to what extent the food economy may come to the fore in economic policy.

At this point we have to mention the surprising coincidence of the train of thoughts of the author with the following statements by E. O. Heady in his introductory paper at the 17th International Conference of Agrarian Economists in 1979: "... Some suggest that we should no longer look upon farming as a distinct industry but as part of a continuum making up the national food system, or as a part of a continuum denoted as the agribusiness complex. If we consider these systems, rather than their components, to be the dominant concern of agricultural economists, then does the micro analysis concentrate on (for example) the integrating or central firm, with the farm component simple being a linkage to it? Instead of building systems, models of farms, should we build them of this larger complex with the farm as simply one "box" in the overall system? "

E. PATAKY

GROTHUSEN, K.-D. (Hgb.): *Südosteuropa-Handbuch. Band II. Rumänien.* Göttingen, 1977. Vandhoek & Ruprecht. 711 S.

Die derzeitige Politik- und Wirtschaftsgeschichte Rumäniens geriet Mitte der 60er Jahre in den Mittelpunkt des Interesses der sich mit Osteuropa befassenden Forscher. In den Diskussionen, die damals um die Weiterentwicklung des RGW geführt wurden, in Verbindung mit den Meinungsverschiedenheiten, die in der internationalen Arbeiterbewegung an die Oberfläche gelangten, trug der rumänische Standpunkt die Zeichen der Originalität an sich. In dieser Periode erschien die bisher beste Analyse der rumänischen Wirtschaftsgeschichte nach dem zweiten Weltkrieg (John Michael *Montias:* Economic Development in Communist Rumania. Cambridge Mass: The M.I.T. Press, 1967, 327 p), die während sie auch den politischen Hintergrund der Wirtschaftsentwicklung darstellt, die Zusammenhänge zwischen der anfangs der 60er Jahre eingetroffenen Relationsreorientierung des rumänischen Außenhandels, der Industrialisierungkonzeption des Sechsjahrplans 1960–65 und den in den RGW-Diskussionen eingenommenen Platz Rumäniens erschließt, auch die Anerkennung der rumänischen Ökonomen mit sich brachte. Die Periode zwischen 1945 und 1965 in der rumänischen politischen Geschichte wurde in einem anderen, die Mittel der politischen Soziologie anwendenden Buch von Kenneth *Jowitt* (Revolutionary Breakthroughs and National Development: The Case of Rumania, Berkeley University of California Press, 1971, 317 p.) rekonstruiert. Dieses Buch gab Antwort auf die Frage, durch welche innenpolitischen Motivationen die rumänische Außenpolitik auf ihren derzeitigen Weg geleitet wurde. Gegenüber der relativen Fülle der englischsprachigen Fachliteratur war bisher das Fehlen deutschsprachiger Zusammenfassungen über Rumänien auffallend. Es hat den Anschein, als ob die in der BRD vor sich gehende Ostforschung kein genügendes Interesse auf das Studium der südosteuropäischen sozialistischen Länder wenden würde, ihr Interesse wendete sich – verständlicherweise – in Richtung der mitteleuropäischen Probleme. Diesem Mangel will das Südosteuropa-Handbuch abhelfen, dessen ersten Band Jugoslawien, der zweite – unter Mitwirkung einer deutschen, amerikanischen und rumänischen Verfassergarde – Rumänien erörtert.

Der Studienband befaßt sich in einem gesonderten Kapitel mit dem staatlichen Aufbau und der Politik Rumäniens, mit seiner Wirtschaft, seiner Gesellschaft und gesellschaftlichen Struktur, seiner Kultur und Kunst. Zu all dem gesellt sich eine außerordentlich nützliche, genaue Dokumentation, die den Aufbau der Partei- und Staatsorganisation, eine Chronologie, die kurze Biographie der rumänischen Politiker und eine ausgezeichnete Bibliographie beinhaltet. Das Handbuch ist eben wegen seines, eine weitere, grundlegende Orientierung ermöglichenden Charakters wertvoll für

die sich mit dem Thema befassenden Fachleute und die interessierten Leser. Der Großteil der Studien ist eher von beschreibendem, informativem, zusammenfassendem Charakter, als eine neuartige, sich auf selbständige Forschungen stützende wissenschaftliche Leistung.

Die vier Studien des ersten Kapitels (Dionisie *Ghermani:* Die Rumänische Kommunistische Partei; Franz *Mayer*–Günther H. *Tontsch*–Illie *Oivànas:* Staat – Verfassung – Recht – Verwaltung; Stephen *Fischer–Galati:* Foreign Policy; Werner *Kowarik:* Landesverteidigung) bestreben sich den Staat und die rumänische Außen- beziehungsweise Verteidigunspolitik darzulegen. I D. Ghermani behandelt die Geschichte der Rumänischen Kommunistischen Partei von ihrer Gründung an bis zur Etappe des XI. Kongresses, indem er den Nachdruck auf die „Emanzipation" der rumänischen Partei, auf die Ausgestaltung ihres neuen ideologischen und politischen Selbstbewußtseins, auf die Darlegung der Selbständigkeit und Gleichberechtigung der rumänischen Partei innerhalb der kommunistischen Weltbewegung legt. St. Fischer–Galati projiziert – indem er an der Einseitigkeit seiner früheren Arbeiten festhält – die Züge der derzeitigen rumänischen Außenpolitik auf die gesamte Periode nach 1945 zurück, obzwar die Tatsachen beweisen, daß die heutigen charakteristischen Züge in den 50er Jahren umsonst zu suchen wären. In der damaligen Periode des kalten Krieges, wo die Gegenüberstellung von Ost und West scharf war, konnte auch die innenpolitische Richtlinie keine solche originelle Züge aufweisende Außenpolitik motivieren. Der Verfasser weist auf die „Erosionsprozesse" hin, die infolge der allgemein gewordenen ost-westlichen Annäherung und anderer Faktoren die rumänischen außenpolitischen Positionen berühren, sowie auf die Motive, die Rumänien bestimmten, sich den Entwicklungsländern zuzuwenden.

Die sechs Studien des Kapitels, das sich mit den Wirtschaftsfragen befaßt (Ian *Matley:* The Geographical Basis of Rumania; Werner *Gumpel:* Das Wirtschaftssystem; Roland *Schönfeld:* Industrie und gewerbliche Wirtschaft; George E. *Schmutzler:* Land- und Forstwirtschaft; Hermann *Gross*–George E. *Schmutzler*–Roland *Schönfeld:* Außenwirtschaft; Werner *Gumpel:* Verkehrswesen und Infrastruktur) beweisen, daß die Forscher aus der BRD darüber mehr zu sagen haben, als über die Fragen der rumänischen Innen- und besonders der Außenpolitik.

W. Gumpel hebt in seiner das rumänische Wirtschaftssystem behandelnden Studie die bestimmende Rolle der straffen Industrialisierung hervor. Im Wirtschaftssystem vor 1967 dominierten von Anfang der 50er Jahre an die Elemente der Kontinuität, und die infolge des Beschlusses des ZK der Rumänischen Kommunistischen Partei vom 7. Oktober 1967 begonnenen, eine „Vervollkommnung" des Wirtschaftssystems anstrebenden Bemühungen haben im Wesen an den „originalen" Rahmen nichts geändert. In Rumänien begann der Prozeß der „Zusammenstückelung" des alten Mechanismus – wobei die wesentlichen Züge des alten Mechanismus unberührt blieben – mit einer bedeutenden Verspätung. Die Wirkung dessen ist in der Organisation der Industrielenkung (Gründung von Industriezentralen), in der Lenkung des Außenhandels zu ersehen. Die Wirtschaftspolitik, die in Richtung der in 1971–72 überwiegenden Anspannung weist (Erfüllung des Fünfjahrplanes unter vier und einem halben Jahr) löste aber Rezentralisierungsprozesse aus, dadurch wurde die „Neuzeitiggestaltung" des Wirtschaftsmechanismus zum Stillstand gebracht und die „Modernisierung" konnte erst nach 1978 einen neuen Impuls erhalten. Der Autor weist aufgrund der Bekanntmachung des Planungssystems, des Preissystems, der Materialwirtschaft und der Tätigkeit der nach 1971 gegründeten gemeinsamen Unternehmen auf die Schranken hin, die von der Seite des Wirtschaftssystems aus zu den wichtigsten Gründen der Verbesserung der Wirtschaftseffektivität wurden, und auf die in seinen Reden vom Januar–Februar 1978 auch das rumänische Staatsoberhaupt hinwies.

R. Schönfeld zählt als Etappen der sozialistischen Industrialisierung die Fünfjahrpläne auf, obzwar die einzelnen Abschnitte der Wirtschaftsgeschichte (wie es das erwähnte Buch von J. M. Montias beweist) anderswo verlaufen, und analysiert die Zweigstruktur der Industrie, den Prozeß der Akkumulation-Investition, die Gestaltung der Arbeitsproduktivität, die regionale Gliederung der Industriestruktur.

Die Studie von G. Schmutzler über die Land- und Forstwirtschaft ist eine der am meisten gelungenen Schriften des Bandes. Der Autor über-

blickt die landwirtschaftliche Nutzung der natürlichen Kreise, die Geschichte der Eigentumsformen und der landwirtschaftlichen Organisierung, die Bodennutzung and Agrarproduktion, die Versorgung mit Maschinen, die Lage der Düngung und Bewässerung, die Forstwirtschaft. Der interessanteste Teil der Studie hat die Agrarpolitik zum Thema. Der Verfasser interpretiert die niedrige landwirtschaftliche Investitionsrate der 50er Jahre solcherart, daß damit gleichzeitig zwei wirtschaftspolitische Ziele erreicht wurden: Einerseits wurde die offene Arbeitslosigkeit beseitigt, anderseits wurden die Investitionsmittel zur vorrangigen Industrieentwicklung befreit. Außerdem belastete ein großer Teil der Landbevölkerung nicht die auch ansonsten angespannte Lebensmittelversorgung, da die Bauern sich weitgehend selbst versorgen konnten. Zur Zeit der Kollektivisierungskampagne von 1958–61 erhöhte sich die Rate der Agrarinvestitionen auf 17%; diesen Wert konnte man seither nicht mehr von neuem erreichen. Der bedeutende Rückfall der Agrarproduktion zwang aber Rumänien seinen Agrarexport zu vermindern, was wiederum von der Sicht der aus dem Osten und Westen zu importierenden Investitionsgüter und Rohmaterialien die Importfähigkeit reduzierte. Der Autor erwähnt als einen spezifischen Zug der wirtschaftlichen „Reformpolitik" der 60er Jahre, daß die Wirtschaftspolitik auf die Fehler meistens mit umfassenden administrativen Veränderungen reagiert, anstatt ökonomische Mittel anzuwenden. Auch in den 70er Jahren dominiert die Überschätzung des Lenkungsmechanismus. Gegenüber der präferierten Industrie ist die Investitionsmittelversorgung der Landwirtschaft außerordentlich niedrig, die Einkommenslage der Bauernbevölkerung ungünstig, die Abwanderung geht weiter vor sich, in den Hauswirtschaften erhöht sich die staatliche Einmischung. All dies bringt eine Beschränkung des Agrarexportes (und dadurch eine weitere Verschlechterung der Zahlungsbilanz) mit sich, kann Versorgungsstörungen verursachen.

Die Studie von H. Gross behandelt die rumänische Außenhandelspolitik und das Außenhandelsleitungssystem bis zur Etappe des zweiten Weltkrieges, und legt deren Umgestaltung von 1971 dar.

G. E. Schmutzler überblickt die Entwicklung und Struktur der Außenhandelsbeziehungen. Rumänien war von Anfang der 60er Jahre an einer der Pioniere der Wirtschaftsbeziehungen zwischen Ost und West, weil es seine Industrialisierungspolitik auf die Ausnutzung der modernen westlichen Investitionsgüter basierte. Infolge der Reorientation des Außenhandels erreichte der Handel Rumäniens mit den RGW- beziehungsweise den OECD-Ländern bis zum Ende des Jahrzehnts annähernd das gleiche Verhältnis. Diese Außenwirtschaftpolitik stieß Anfang der 70er Jahre an Schranken: Rumänien war gezwungen, früher als andere sozialistische Länder sich in seiner Wirtschaftspolitik mit dem Problem der Erneuerung und Konsolidierung seines Schuldenbestandes zu konfrontieren. Das Problem des Defizits der Zahlungsbilanz tauchte deshalb bereits Ende der 60er Jahre auf, während andere RGW-Mitgliedsländer meistens erst in den 70er Jahren diesen Problemen gegenübergestellt wurden. Rumänien wurde durch seine außenwirtschaftlichen Equilibrium-Sorgen gezwungen, eine Öffnung nach mehreren Richtungen vorzunehmen. 1971 schloß es sich dem GATT an, am 15. Dezember 1972 trat es in den Internationalen Währungsfonds und in die Weltbank ein. Von 1972 an urgierte Rumänien eine Gewährung von Präferenzen von Seiten seiner westlichen Partner, seinem Status eines „Entwicklungslandes" entsprechend – einen Import des aktiven Kapitals (gemischte Unternehmungen), sowie eine Erhöhung der Zahl der Kooperationen. Mit dem letzteren Thema befaßt sich R. Schönfeld, der auf die ansteigende Bedeutung der Kooperationsbeziehungen Rumäniens mit den sozialistischen, entwickelten kapitalistischen und Entwicklungsländern hinweist.

W. Gumpel stellt in seiner, die rumänische Verkehrsinfrastruktur analysierenden Studie mit Recht fest, daß die relative Unentwickeltheit dieses Gebietes, sein – infolge der sich auf die Industrialisierung zentralisierenden Bestrebungen – geringer Investitionsanteil immer mehr die wirtschaftlichen Entwicklungsmöglichkeiten hindert.

Auf die Bekanntmachung der sich mit der rumänischen Gesellschaft, mit ihrer Sozialstruktur befassenden Studien des Kapitels (Franz *Ron-*

neberger: Sozialstruktur; Marvin R. *Jackson*– Stephen K. *Happel:* Population Structure; Ernst Chr. *Suttner:* Kirchen und Staat), sowie auf das sich mit der Kultur und Wissenschaft befassende Kapitel (W. *Mitter:* Schulsystem und Volksbildung; Günter H. *Tontsch:* Hochschulen und Wissenschaft; Anneli Ute *Gabányi:* Literatur; Alfred *Coulin:* Massenmedien – (Presse – Funk – Film); Gh. *Firca,* Mircea *Simu,* Lia *Crisan:* Musik, Bildende Kunst, Theater) können wir hier nicht eingehen, wollen aber soviel bemerken, daß diese Studien über die gegebenen Gebiete eine gründliche Übersicht gewähren.

Den Band des Südosteuropa-Handbuches über Rumänien, der mit einem reichen dokumentarischen Anhang und einem Register versehen ist, können sowohl die Fachleute als auch die sich für das Thema interessierenden Leser mit Nutzen gebrauchen. Dieser Band bietet zu einer breiter angelegten Untersuchung des Themas eine bedeutende Hilfe.

M. FÜLÖP

BOOKS RECEIVED*

ALTMANN, F. L.–CLEMENT, H.: Die Kompensation als Instrument im Ost-West-Handel. München–Wien, 1979. Günter Olzog Verlag. Gegenwartsfragen der Ost-Wirtschaft, Band 10, 275 S.**

ARROW, K. J.: Egyensúly és döntés. Válogatott tanulmányok (Equilibrium and decision-making. Selected studies.) Budapest, 1979. Közgazdasági és Jogi Könyvkiadó. 411 p.**

BLAHÓ, A.: Transznacionális vállalatok az új világgazdasági helyzetben (Transnational companies under the new conditions of world economy.) Budapest, 1980. Közgazdasági és Jogi Könyvkiadó. 290 p.

BRÓDY, A.: Ciklus és szabályozás (Cycle and regulation.) Budapest, 1980. Közgazdasági és Jogi Könyvkiadó. 272 p.**

HAASE, H. E.: Hauptsteuern im sozialistischen Wirtschaftssystem. Berlin, 1980. Osteuropa-Institut der Freien Universität, Berlin. Duncker & Humblot. Wirtschaftswissenschaftliche Veröffentlichungen. Band 39. 107 S.

LASZLO, E.–KURTZMAN, J.: Eastern Europe and the new international economic order. Representative samples of socialist perspectives. New York, 1980. Pergamon Press. 108 p.**

LAVALLEE, L.: Croissance d'une économie socialiste. La Roumanie. Saint-Etienne, 1980. Edition Horvath. 188 p.

LEIPOLD, H.: Wirtschafts- und Gesellschaftssysteme im Vergleich. 2. Auflage. Stuttgart, 1980. Gustav Fischer Verlag. 268 S.**

PIORKOWSKY, M.-B.: Sozialistische Warenproduktion und Betriebswirtschaftslehre. Berlin, 1980. Osteuropa-Institut der Freien Universität Berlin. Duncker & Humblot. Wirtschaftswissenschaftliche Veröffentlichungen. Band 38. 160 S.

SILBER, W. L.: Municipal revenue bond costs and bank underwriting: a survey of the evidence. New York, 1980. New York University. Graduate School of Business Administration. Monograph Series in Finance and Economics. 1979–3. 63 p.

SPULBER, N.: Organizational alternatives in Soviet-type economics. Cambridge – London – New York –Melbourne, 1979. Cambridge University Press. 290 p.**

VAS-ZOLTÁN, P.: A kutatás és fejlesztés gazdasági hatékonysága (Economic efficiency of research and development.) Budapest, 1980. Akadémiai Kiadó. 195 p.

ZELKÓ, L.: International value, international prices. Budapest–Alphen aan den Rijn, 1980. Sijthoff & Nordhoff – Akadémiai Kiadó. 154 p.**

*We acknowledge the receipt of the enlisted books. No obligation to review them is involved.
**To be reviewed in Acta Oeconomica.

AUTHORS

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P. KÖVES: Do We Measure Development Correctly?
M. ZAFIR: The Growth Rate as Reflected in "Recent Investigations"
A. BRÓDY: On the Discussion about Measurement – a Rejoinder

BOOK REVIEWS

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Acta Oeconomica 24, 1980

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— I cantieri jugoslavi all'inizio degli anni '80
— Il turismo in Bulgaria: segni di ripresa nel 1979
— Incentivi all'esportazione nei paesi dell'Est europeo
— Problemi dello sviluppo energetico in Bulgaria

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— Prospettive della produzione e del commercio estero della carta e della cellulosa in Cecoslovacchia
— L'industria tessile jugoslava
— Inferiore al previsto la realizzazione delle infrastrutture di trasporto in Bulgaria
— Basato sulle ferrovie lo sviluppo delle infrastrutture di trasporto romene
— I problemi della concorrenzialità delle esportazioni jugoslave
— Sostegno delle attività private minori in Ungheria e Romania
— La nuova legge bulgara sugli investimenti dicapitale straniero.

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Direzione, redazione e amministrazione: 34122 Trieste-Corso Italia 27 - Tel. 69-130
Abbonamento per il 1980
L. 25.000 (per l'estero L. 30.000)
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REVUE TIERS-MONDE

Tome XXI, n° 82 - Avril-juin 1980

SECTEUR INFORMEL ET PETITE PRODUCTION MARCHANDE DANS LES VILLES DU TIERS-MONDE

Sous la direction de Philippe HUGON

Présentation par Philippe HUGON

I. — Secteur non structuré ou hétérogénéité des formes de production urbaines

Philippe HUGON. — Dualisme sectoriel ou soumission des formes de production au capital. Peut-on dépasser la débat?

Georges NIHAN. — Le secteur non structuré. Signification, aire d'extension du concept et application expérimentale

William F. STEEL. — Intensité de capital, dimension de la firme et choix entre emploi et production: l'importance de l'analyse multisectorielle

II. — Etudes de cas. Le développement des petites activités urbaines: processus évolutif ou involutif

Chantal BERNARD. — Les activités dites non exploiteuses

Jacques CHARMES. — Les contradictions du développement du secteur non structuré

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Direction-Rédaction: Institut d'Etude du Développement Economique et Social
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A kiadásért felel az Akadémiai Kiadó igazgatója
Műszaki szerkesztő: Botyánszky Pál
A kézirat nyomdába érkezett: 1980. VIII. 5. – Terjedelem: 17,5 (A/5) ív, 8 ábra
81.8598 Akadémiai Nyomda, Budapest – Felelős vezető: Bernát György

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20. IV. 1981

HU-ISSN 0001–6373
Index: 26.033