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I. T. BEREND

HUNGARY'S ROAD TO THE SEVENTIES

The seventies have become a period of particular and strange contradictions. The growth rate of the economy slowed down, in incomes policy the contradiction between the principles of equality and distribution according to work done came to the surface, living standards policy came to a halt and social mobility slowed down. Demands for new reforms were formulated with increasing clarity. The roots of the contradictions of the seventies can be found in the social and economic transformations of the past, and they have accumulated under the effect of external factors (transformation of the world economy, changes in world politics).

Surmounting the basic problems of backwardness, the fighting of the pains of insufficient consumption through industrialization, social and living standard policies were a historical achievement but the sharpening conflicts put the solution of unsolved problems of progress on the order of the day. All that produced similar requirements in respect of political and social democracy.

It is difficult for a historian to place his own age in time, and not only because it is still too close to him, and because our own age is too complex, or because a shorter period of time can only be understood in terms of the duality of world-wide processes and of historical antecedents, making the task too large for one who lightly undertakes it. A more likely reason is that the traps of error and prejudice, though frighteningly familiar, are nevertheless prone to camouflage themselves. Our point of view is unavoidably influenced by our age, and the way we ourselves lived as part of it (and still do). Can we forget what we experienced, our very own fears and hopes, all the totem-poles and taboos that stand around us, and inside us?

There is some consolation, though not much, in the fact that such questions arise not only when dealing with our own times. We all know that it was not only Friedrich *Meinecke* who was influenced by his own age when, following the Second World War, he saw twentieth century German history as the tragedy of forty years, as an unfortunate series of contingencies, but also Theodor *Mommsen* who, bitterly disillusioned by the turn events had taken in 1848, waiting for a *Bismarck,* saw Roman history as national unity established from above, by military force, and the genuis of a Caesar. Arnold *Hauser* was undoubtedly right when he argued that the point from which we survey history is not outside history, that studying the past is in itself a product of history. But Karl *Mannheim* was also right not to draw pessimist conclusions from this fact, wittily pointing out that the image we entertain of our parents depends of our own time of life, and yet it would be ridiculous to maintain that this makes recognition impossible. The truth is that we can only recognize what accords with the stage of development of our powers of perception.

The undertaking is, therefore, not hopeless after all. What follows is a bird's eye perspective and, naturally, much will be missing, and even more points will remain indistinct. Nevertheless I hope that I will contribute a brick to the protracted construction of the edifice of recognition.

The contradictions of the seventies in Hungary

The stormy quarter of a century which led up to the seventies is, in itself, an exciting subject. In that time, in Hungary, society and the economy, property relations and international alignment, ways of life and the settlement structure were radically reconstructed and stirred up. Let me say, however, that this process of reconstruction will not be the subject of my enquiry. Undertaking some sort of historical stock-taking would be doomed from the start. Nor do I propose to present major turns of event like the land reform, or the collectivization of agriculture. It is not the transformation of social relations that is the subject of my present enquiry, but the natural medium in which all those processes took place the connections of which, with the contradictions that manifested themselves in the seventies, I wish to examine.

It so happens that the seventies turned into a time of the most odd contradictions. Economic growth was unprecedentedly fast and well-balanced, and this at a time when raising productivity was so to speak the exclusive source of growth. And yet in the same decade the forced march of a quarter of a century was suddenly slowed, the rate of growth suffered a break, and was subjected to a lasting and significant application of the brakes. Incomes rose faster than ever before and standards of living and consumption were higher than they had ever been in Hungary, the supply of goods being better than ever before. The decade, however, gave rise to basic problems of income distribution, formulated precisely on the basic of the higher standards of consumption. Given that it is one of the basic sources of conflict at certain stages of the socialist transformation of relatively backward countries that, in order to reach levels of development that can provide a foundation for the practical application of the principle of equality, incentives for higher economic performance must be given by the application of the socialist principle of distribution according to work done, while at the same time there are endeavours to apply the socialist principle of equality on a given level, it is obvious that, in practice, this or that of the two principles suffers injury. By the seventies the Hungarian economy had exhausted the sources of extensive growth – that is labour reserves that had for long seemed a bottomless well; and productivity could not be furthered thoroughly without the appropriate incentives, that is greater income differentiation based on performance. The principle of equality, which was easier to implement on the earlier lower level when quantitative growth was stressed, seemingly suffered damage. At this time also, and precisely because of the higher level of consumption, social value systems gave rise to new, hitherto unanswered, questions: what then was to be the desirable model or pattern of consumption?

Growing consumption and quality of life, that is a more meaningful life, were often confronted in a pseudo sort of way, since, in Hungary, in the context of an economy of scarcity there was really no threat of excess consumption. The dilemmas, however, were nevertheless real enough.

What happened in the event was that this critical decade, far from providing time for answering these questions, produced jolts in a standard of living policy which had been successfully pursued for a quarter of a century. The dynamic growth of incomes came to a halt and it proved impossible for some time to maintain earlier long-term and well-balanced improvements. The gigantic social changes along the road to the seventies, particularly the switch from a peasant life to that of an industrial worker for many, and the processes which shaped the new managerial and professional strata which defined the high degree of mobility of the times, combined with an extraordinary extension of formal education, also suffered jolts. It was not only that the doors were closed to huge transfer processes but there was a recoil due to the earlier tremendous mobility. The change of guard as the forties turned into the fifties, and then again in the post-1956 period, was so concentrated and instanteneous, as it were breaking up the organic process of generational change, producing such a degree of rejuvenation with men and women in their late twenties and early thirties being appointed to university chairs and the editorial chairs of newspapers and journals, and as managers of industrial enterprises, as well as being promoted to field rank in the armed forces, that careers-ladders became rigid for a long time ahead, handicapping the advance of professional people who were younger still, eliciting a considerable lack of mobility in large and sensitive areas of society. Mobility generally slowed down in this decade and a natural consolidation could be observed following the earlier huge cross-wise movement of classes. Getting back into a proper routine, however, unavoidably elicited new (or old?) contradictions. It became obvious, for instance, throughout the educational system that social differences were being reproduced, a genuine equality of chances of someone of working class parentage becoming a member of one of the professions became problematical once again, and after long decades of unlimited job opportunities certain career-openings were closed and, what is more – though only in theory – full employment as such, which had been taken for granted, did not look such a certainty after all.

Progressing towards the seventies Hungary traversed a succession of periods of revolution and reform, times of continuous changes. The Second World War was followed by revolutionary years in which numerous ancient institutions were scrapped and new ones were introduced. Early in the fifties something new got on the way in an implacably systematic manner, and around the end of the decade once again much had to be started afresh. Things were changed and people changed. Many mistakes were made and corrections were introduced again and again, leading to new errors, and to progress being made once again. At one time a leadership holding on tight to the philosopher's stone, moving with the surefootedness of somnambulists, cimplacently trusting in ready prescriptions being honoured, and in the speedy implementation of pre-fabricated scenarios, in the carrying out of marching instructions prescribed for this year, or that day, dictated the

tempo. Later a sober leadership carefully weighing up conditions, realistically reckoning with interests including vested interests, and enlisting them in support of realizable objectives, a smoother harmony between the objectives of the future and the existential conditions of the present, as well as the morale boosting effect of permanent and genuine progress, offered more stability and, at the same time, greater incentives. These decades were characterized by the dynamism of continuous change and the wish to make changes, the sixties on the other hand were hall-marked by successful, tried and proven, experiments. The need for new reforms due to the achieved new stage of development, the changes that had been made and the huge shake-up the world went through, became obvious once again by the seventies. That this need was largely recognized is reflected in a large number of case-studies which pointed to the making up of lee-way by backward service industries as a central task, as well as by government decisions to reform educational policy, the industrial structure, foreign trade strategy, the price system and the economic regulators. And yet it seemed as if the earlier dynamism of reform had subsided. Stability, the desire to preserve what had been achieved and become familiar, taking things easy "as long as things do not get worse", slowness in doing something about recognized problems, all fed the dangers and atmosphere of obsolescence. The attack on an economic reform of far-reaching implications, which went off half-cock in the middle-seventies and looked for a time as if it might succeed to break through, formulated general questions that were more serious than its immediate effects. How inflexible had the framework become? Was the country capable of genuine renewal?

In the quarter century that had led up to the seventies just about every Hungarian old enough to had – at one time or another – experienced the euphoria that goes with the feeling of liberation, though there have always been, and there will always be alienated individuals whom history passes by and who turn their back on history. Liberation from the *cauchemar* of the Second World War, liberation from peasant misery, the isolation of a wattle-and-daub homestead-shack stuck in the mud, the backwardness of villages without electricity and one-class schools, anxieties about daily bread and shoes for the children to wear when at school, liberation from the humiliations inflicted by the social discrimination which minorities were subjected to, liberation from the fears of the first Cold War, the horror of the sound of brakes and the door-bell ringing at dawn, liberation from the oppression of obligatory enthusiasm which – perhaps strangely for English ears – finds expression in the slow handcap in this part of the world. Just about all these men and women experienced a sense of taking flight and soaring at some time in their lives: the joys of having made it at last, having risen in the world, the satisfied satiety produced by a proper diet, the achievement of industrial worker status, the happiness of obtaining a diploma that had earlier looked unattainable, or that of getting a new home where three generations no longer crowded together under one roof and where there was no need to make do with a wash all over using a tin basin instead of a proper bath. I might mention the sense of wonder and suprise at the unexpected speed with which new technical devices and gimmicks spread, the doubting admiration of the first television broadcast witnessed, the happiness of the first motor-car owned, the gift of the

first trip abroad. These people knew in their bones that things had been worse, and could be worse, and it precisely for that reason that they often confront uncomprehending the frequently met with sense of frustration, impatient dissatisfaction and eternal demands of those under thirty. The young have naturally grown into the medium which to the old meant a magnificient achievement, they therefore long for more and for something different: more independence and greater scope to stretch one's wings, and less sermonizing. The achievement orientation of earlier generations has also lost its attractiveness, as a way of life it no longer serves as a model. The young are attracted by enticing distant fashions, they want to make up their own minds, and they should like to ask questions which older people cautiously or tactfully avoided. What looks like determination to the old is often reckoned to run counter to human nature by the young. In any event they would prefer not to have to follow the tastes, desires and objectives of those older than they. Doing your own thing is, however, an aim only attained at the cost of pain and trouble –if at all – be it in one's thinking, or action, or even just in having a home of one's own.

In these days of slowed down economic growth, and material decline in certain fields, in the midst of new social and world political tensions, fearing a second Cold War, and what is more, after quite some time again unable to allay anxieties about a Third World War, carrying the numerous burdens of all this, with the premonition of all sorts of turns for the worse in one's bones, being unable to draw a dividing line between the problems of society and the nation and one's own, a man given to thought unavoidably poses questions that probe the present and future and, what is more, goes as far as reformulating those that had earlier seemed to have found an answer. Trying to find an answer for the future one questions the past as well, that is the road to the seventies. Did we find the right road, or did we lose our way amongst the possible paths?

Social and economic growth: a sense of direction and losing one's way

We are living through the difficult times of a changing world, in a small country exposed to international determinations, the storms of the world, world powers and world market prices. These forces, storms and changes do not encircle us, they stand for that universal medium of which Hungary is also an inseparable part, from which no part of our existence can be lastingly isolated. Hungarians had to find their way in terms defined by this medium.

It would be simplest to say that there were roads offered by circumstances, or else pre-determined by them, and finding one's way would not be an appropriate expression in that context. Furthermore, in the course of our long march we found many a good road, but we also lost our way.

Though this is obviously true it should not be forgotten that even the defined directions of history offer alternatives, even if this is no more than a take it or leave it

when faced with a real or imagined determination. A balance can after all be drawn from the unavoidable mixture of sound and bad decisions and steps that proved successful or failed. Confronting debts and assets must show some kind of balance.

On the way to the seventies, following the tragedy of the Second World War and the new arrangements in Europe, the only genuine alternative and possibility implied tackling the problems of inner social and economic advance. Following the sweeping away of the old social relations, structure of land-ownership, and private property we gave priority to doing away with economic backwardness, making industrialization the central objective. It should be remembered that by the middle of the 20th century only around a dozen and a half countries had reached and stepped across the threshold of a high degree of industrialization. At the time of the Liberation Hungary was not yet amongst them. The figures show that at the time of the 1949 census 53 per cent of the working population were still engaged in agriculture, that close to two-thirds of the country's inhabitants still lived in rural areas, around half of the latter in scattered homesteads and hamlets. By the seventies the proportion of the genuinely agrarian population (that is not including the third of those employed by agricultural enterprises who are actually doing industrial work) shrunk to a sixth of the working population. Fewer than half of the population live in rural areas, and only around 16 per cent of the total in scattered homesteads and hamlets.

One must take notice that these dry figures express a turning point in the history of the Hungarian nation, that is a passing over and through the age of industrialization. This is a process of great historical importance taking place within the framework of a switch of social systems which has only so far been achieved by a round three dozen countries out of the more than a hundred and sixty on this earth. Due to this in the first place the general level of development of the economy also rose considerably. Reckoning in per capita GNP – I decided to use Paul *Bairoch's* figures which may include some errors but which can certainly not be accused of bias – Hungary was indoubtedly placed in the European middle zone, both in 1950 and in the seventies, but, while only reaching 75 per cent of the European average at the earlier stage she moved up to 90 per cent by the latter. Though it may be true that ten out of twenty countries in Europe are still ahead it should be remembered that moving forward at such a rate took place during the fastest and most specular period of economic growth in the whole history of Europe, nor should one forget that, as a result, Hungary has now reached levels that are around those of the most highly developed countries at the time of the Second World War.

It may have been a tough road, strewn with sacrifices but industrialization has so far been a tough time in every country, even in those fortunate enough to be in a position to exploit the resources of others. What has been achieved by the seventies will be of lasting value though the path of industrialization was full of missed turns and involuntary detours. The starting strategy, with a one-sided emphasis on heavy industry and autarky, with an almost exclusively quantitative point of view, copying a pattern that came about under different circumstances, and with different resources, and doing so almost without amendment, obviously did not suit the country's properties or the technical and struc-

tural requirements of the second half of the twentieth century. True, it proved possible to correct this wrong course somewhat already after 1953, and again starting with 1957, nevertheless, almost up to the seventies – even in the sixities – the country was haunted and tempted by notions of self-sufficiency, either as a necessity or as a reflex, by the practice of constructing lines of vertical industries integration, placing emphasis on industries with high material and fuel requirements, and the creation of more and more jobs by more and more investment projects. By the end of the sixties the value of the total volume of industrial production had grown seven-fold but production per person employed only threefold. Hungary was seventh out of thirty-five countries in the number of persons employed in industry per thousand inhabitants, but only twenty-second in per capita net industrial production. In other words the relative backwardness of the country in productivity and technological modernity increased at the time of the great industrial breakthrough and advance. In the whole period prior to the 1968 economic reform a considerable part of production, at certain times as much as 5–7 per cent of national income was devoted to the accumulation of superfluous and useless stock while, at the same time, there was a shortage of just about everything. And this in spite of the huge increase in the volume of industrial production, or rather as its result. The characteristic symptoms of an economy of shortages handicapped the flow and efficiency of production as well as the proper provisioning of the population.

It was part of the wrongly set course of the industrialization breakthrough that standard of living and other sectors of the economy were sacrificed on its altars. The first was most true of the First Five Year Plan (1950–54) when, at one time, real wages and salaries dropped by as much as 22 per cent. True, after an initial 13 per cent the investment share of agriculture quickly grew to 18–20 per cent after 1957, but the development share of the service sector, though it somewhat increased from the original one-third, remained, up to the seventies, well below a level that would have sufficed to keep the sector abreast with the needs of production and international standards of progress. In this period the equipment park of what is called the productive sector grew six-fold, while that of service industries and "non-productive" sectors only doubled. The industrial work-force doubled, but that of this sector only grew by a third. Given the international infrastructural revolution of the second half of the century, the relative backwardness of many areas of this sector was potentiated, and the effects of this have adversely marked developments for some time.

It is part of all this that only the spontaneous process of growth called the Second Economy was able to bridge the gap of shortages. Mechanical repairs carried out after working hours (or in working hours), poultry and fruit produced on household plots, building work done at weekends, made up an extraordinarily large proportion of the supply of commodities and services. Official figures speak of 98 per cent of production and services as the fruit of the socialist sector but some estimates claim that at least a seventh or a sixth of the effective work done bears fruit in terms of the Second Economy.

Starting with the sixties Hungarian economic policy not only tolerated this sector but, in certain cases, encouraged it. At certain periods, however, it was subject to sharp attacks and firm sanctions were employed to limit it.

Slowly, when compared with industrialization, and clumsily, a proper course was set for agricultural development as well, starting with the sixties. It must be stressed, however, that there were even larger detours in this case. For a long time agriculture only served as the capital and labour reserve of accumulation and industrialization. The flow of half the agricultural labour force into industry and the agrarian scissors that were the result of the price system were present in Hungary right up to the seventies. Up to the middle sixties growth was therefore extraordinarily slow, an annual rate of 7 per cent, about a third of the international rate of growth for agriculture. The relative backwardness of the quantity produced and of productivity grew further. A genuine turn of events was produced by changes initiated during the sixties, in the course of collectivization, using methods and incentives of agricultural development that were particularly inspired, persistent and successful, steadily closing the agrarian scissors and increasing investments. As the sixties turned into the seventies agriculture was lifted from the handicrafts stage and turned into an industry. Within a single decade crops were doubled or trebled, and a rate of growth that competes with that of industry, and is twice as high as the international average, was produced by the speedy mechanization of most major work-processes, a three-fold growth in the use of artificial fertilizer achieved within a short time, crop-improvement and the introduction of industrialized production systems. After the bitter decades of losing one's way agriculture finally found itself on course in the seventies, producing exceptional results and becoming a determining factor in the shaping of the life of society.

The tremendous transformation of Hungarian agriculture, combined with the effects of industrialization, became a determining factor in the advance of the peasantry and of rural areas. Within a single generation the thousand year old rural beggar's world of poverty, impotence, and backwardness had disappeared. This is true in spite of remnants which crop up from time to time, which are naturally present. The wealth of rural home-building pointing to a new way of life, the growing mechanization of households, and the changes in the communal services available in rural areas, are undoubtedly the most spectacular feature of the social changes that have occurred. It was the peasantry, of course, that provided the greatest flow of new recruits into other social strata. That half of what had been peasants turned into industrial workers added to the significant peasant basis of the reformed professions, and of the major links between what remained of the peasantry became the determining driving force of social mobility. In three quarters of peasant families with more than one member in employment the other had a non-agricultural job.

This also makes evident that the working class which doubled its numbers, and became more homogenous, is the fastest growing section of society. The proportion of those engaged in industry and construction leapt from barely a fifth of the total work-force to close to a half. The fact that an important section of the proletariat, those

in domestic service, has practically disappeared, and that the overwhelming majority of industrial workers are employed by large enterprises, points to homogenization.

The new managers and professionals were largely recruited from their ranks, following the extraordinarily speedy disappearance of the old ruling classes and power élite. The changes that took place in the quarter century under survey are brought in evidence by figures referring to the early seventies which show that 61 per cent of managers and executives in Budapest and other towns and cities, and more than a third of professional people, had first worked in a different sort of job, starting as industrial workers or peasants. Intergenerational mobility shows an even more strongly flowing tide. 78 per cent of managers and executives in Budapest had parents who were not members of the professions, 58 per cent of them being industrial workers or peasants. More than 70 per cent of those in top positions were recruited in this way, 63 per cent of them having themselves done manual work in industry or on the land. More than half the engineers were born into working class or peasant families, and half the agronomists and veterinary surgeons had peasant parents.

Social mobility on such an extraordinary scale can, naturally, only be imagined during a period of transformation. Wrongly set courses which showed a pathological lack of confidence and a mean doctrinaire attitude undermining the existential basis and social position of whole sections of society, are probably linked to this. The liquidation of the old power élite and ruling classes also swept away a multitude of professional people and petty bourgeois. In the course of social change unreasonable and unjustified methods were frequently used. It ought to be added, however, that this unjustified lack of confidence was also in evidence in relation to the new professional people, that is those of worker and peasant origin, professional training being confronted with political reliability. In spite of the new social structure that had taken shape by the seventies more than half of executive positions in the economy, and what is more about half the chief engineer posts, were occupied by persons lacking the appropriate educational qualifications. In the feverish haste of an extraordinarily important social mobility which rearranged all things there was a far greater neglect of standards of quality than can be described as unavoidable and, what is worse, this was finally taken for granted.

Mobility was not, by a long shot, the most important means of working class advancement. Material and cultural progress affected much larger masses. Following the decline of the early fifties there were major leaps forwards. 1954 measures increased real wages by 18 per cent and restored the 1950 level, and the 1957 rises produced another growth of almost 18 per cent. This was followed by a steady growth rate of 2–4 per cent over a decade, increasing to 4–5 per cent as the sixties turned into the seventies, a growth rate in real wages without precedent in Hungarian economic history. In the quarter century here surveyed per capita real wages and salaries roughly doubled. Consumption, growing even faster, trebled. This growth, accompanied by an equalization of worker and peasant incomes, everywhere resulted in anxieties about earning a living fast losing their importance. Poverty which had still weighed heavily on the majority of the population before the war, and still burdened about a third around 1950, was still an important social

problem in the seventies, though affecting no more than 10 to 15 per cent of the population, people whose living conditions were particularly unfavourable, showing e.g. the conjunction of a low income and a large number of children, or else old system pensioners, single-parent families, and others. One should add that many more are involved if obtaining a home – a difficult and often insoluble problem for young couples – is included amongst existential anxieties.

A nation that had long done without, where large masses had been badly fed, obtained adequate quantities of food in this period, something expressed in a per capita consumption of 3.300 Kcal, too large by international standards, and an exaggerated reaction to earlier want. Meat consumption doubled, that of milk increased significantly, and, for the first time in the history of Hungary, the consumption of cereals started to decline.

The growth in incomes produced other essential modern changes in the pattern of consumption. The proportion devoted to food gradually declined and that of consumer durables grew fast. The growing dynamism of building activity deserves particular attention, in addition to the intrusion of modern technology into households, and the extraordinarily fast spread of television in a country where ten million inhabitants had owned only half a million wireless sets before the war, not to mention the start of the motorization of the citizenry. A million new homes were built in fifteen years, housing a third of the population; the larger part of them ownerbuilt.

Add the leap forward in the use made of cultural and health services, made possible, in part, by their being supplied free by society. Their share of the social income grew from 15 per cent to close on 30 per cent in the course of the period under survey.

The standards of living policy that got off the ground in the late fifties and found itself in full flight by the early seventies manifestly implied the setting and following of a course which changed the life of the masses with undoubted success.

Nevertheless one unavoidably occasionally found oneself off course in this area as well. For a time, given limited opportunities and a high rate of accumulation, it only proved possible to produce an essential improvement for those living in the most backward conditions by radically equalizing incomes. There was no rise in wage-levels in a number of fields, differentials for higher qualifications ceased, and there were certain fields where wages actually declined. The differential between the income of highly qualified technologists and the average working class wage shrunk to 50 per cent. The income of nurses or teachers was 10 to 30 per cent below that of an average locksmith or bricklayer, and that of a medical practitioner did not exceed it by as much as a third. The levelling of incomes, perhaps partially unavoidable at first, petrified later. The reform measures of the late sixties were the first to make at least partial amends. High qualifications, considerable responsibility, and difficult work were not properly valued, and more self-sacrificing outstanding performance was not appreciated or encouraged. The lacunae of the wage-system led to a decline of standards in important occupations, to a chase after opportunities to make something on the side, to corruption, and to a frightful spread of tipping. Lack of interest and more decline became central issues and

the springboard for serious economic and social conflicts. And yet the initiated greater income-differentiation was often only remotely linked to performance, and genuine wage-differentials were often handicapped by organizational weaknesses and the jolting supply of materials and parts.

Many another difficult question remained unanswered. Rising levels of consumption were not linked to new consumer models, nor did extensive housing construction succeed inlaying the foundations for new models of social living. Though effect was given to certain social preferences, the social ideals of socialism did not take shape, and that includes consumer habits, ways of life, communal living and the domestic environment. It is true that they do not exist in practice anywhere, nevertheless it appeared that their absence turned into a source of social conflicts. After all that had become possible was a delayed, and lower standard, following of the pattern established by nations better housed and better supplied with consumer goods. The spread of grey and uniform prefabricated high-rise tenements, and the Trabant, a cheap and small two-stroked car made in the GDR that was just within reach of the average man, were naturally evidence of a great leap forward, but they also symbolized the fact that it proved difficult to chart a course that went beyond a limping attempt to kep up with the rightly condemned consumer society.

Are these unjustified pseudo-utopias that can even be exploited for all sorts of aims in a given event? Or is this a survival of voluntarism in this area? What can we in fact demand of ourselves? Is it possible to create a consumer model that differs from the one we know, with all its weaknesses, within the foreseeable future? If not then may one, in a doctrinaire manner, deplore the absence of the nonexistent? Should one not rather demand the presence of the principle of collectivity in spheres of social life where open questions – demanding action – offer real scope. Meditation on the absence of forms of collective leisure would obviously offer more feasible progress in the direction of a collective solution of the problems of the aged, instead of leaving things to their families. Let us then face up to the genuine options open to us. What aspects of social collectivism can be genuinely created on the given level of urbanization and industrialization, and in the context of the need for wages differentiation, and where can progress be really made in the direction of some sort of new model? Let us see more clearly what can be done, and what ought to be done.

In plain words: a policy of industrialization, social policy and standards of living policy which produced the tremendous achievement of overcoming the basic problems of backwardness, that is the torments of insufficient consumption, placed the questions of further progress on the agenda in a more acute form. The issue is now the realization of socialist principles on a higher level finding the prover patterns, and no longer simply the aim of overcoming backwardness, levelling, and socializing basic benefits.

All this, naturally, also made an appearance in the context of politics and the demand for a democratic society. At the start it was undoubtedly a major social and political achievement that the earlier ruling classes, including every kind of exploiter and speculator, and the hated ruling elite of military and civil officials, were eliminated. The

replacement of formal and basically meaningless rights of equality by the substantial and material side of social equality and the achievement of democracy in society through major mobility was, however, accompanied by offenses against basic human rights, and illegal actions on the part of those whose job it was to maintain the law. The liquidation of the earlier distortions that was initiated in the middle and late fifties was a tremendous political and social achievement. An end was put to the wide range of mass prosecutions and inpoverishment of members of the working class, to court procedures involving close to half a million peasants, to the violent measures employed in the course of collectivization, and generally to officially sanctioned actions that ran counter to the letter and spirit of the law – all the way from show trials to everyday intimidation. Church and state relations, and the religious issue as such, were settled, individual rights were assured, including the chance to travel, and the wiping out of discrimination in university admissions, cultural policy rested on principles and practised toleration, the right to be different was accepted. These and other steps, and finding a way to a soundly based popular alliance, must be all reckoned major achievements. Democracy on the job that included the rights of citizens achieved by political democracy in the course of history, providing the material scope for their effectiveness, and taking them one step further by ensuring the direct and genuine and determinant participation of the masses, as well as administration also based on direct participation and an open government policy, eliminating the bad type of bureaucracy, and the creation of institutionalized conditions assuring control, can certainly not be taken as achieved. The early introduction of local councils or the recent essential extension of trade union rights and many other steps taken, were obviously not enough. The discovery of new paths and the institutionalizing of achievements already discovered elsewhere still lie ahead. Assured rights, be they of the old bourgeois sort, or the newer, socialist kind that go much further, cannot become suspicious commodities whatever propaganda or political attack may be directed against them. Many tasks of political and social roadconstruction still lie ahead, as we progress widening and paving existing bridle-paths as well as discovering and mapping thoroughfares that have not been found yet.

Progressing towards the seventies many sound roads were found, at the same time many possibilities were given a wide berth (or not even seen), wrong choices were often made, and some of the way led across unnecessarily tiring slopes, and even on the brink of dangerous chasms. All this was a source of numerous contradictions that awaited solution in the seventies.

The solution of old contradictions and the birth of new ones

Contradictions, however, were certainly not merely the result of avoidable or unavoidable errors. A fair part were the product of the natural dialectics of progress. They frequently met with a vulgar interpretation of historical progress which presumes linear

improvement to be natural, or the sort of apology of the present which recognizes development as a process involving the clash and struggle of contradictions right up to our own day, while seeing the present as the embodiment of absolute reason – as *Hegel* did – presuming contradictions to be either non-existent or else something to be ashamed of – as old rubbish that has not been disposed of, or unremoved stains – uncomprehendingly faces ever renewing conflicts. But the reproduction of conflicts in the economy, in society, in politics and in culture, in other words in the history of society, is a natural process, and the only possible road of progress. Huge efforts are made to put an end to a given contradiction, success is taken as the pledge of progress, but by the time success makes its appearance – if it does – a new conflict arises from what has been achieved.

Abstracting the errors and detours mentioned above, one can say that, in the quarter century that led up to the seventies, efforts were made to resolve the basic contradictions that had accumulated as the fruit of the earlier history of Hungarian society. Economic backwardness, social inequality and the serious shortcomings of social policy had caused the most serious troubles. But their solution, inasmuch as it succeeded, created new conflicts of a different kind. Take social policy as an example. The backwardness of health services, the fact that pensions were the privilege of civil servants and a few others, were important sources of existential anxieties, social isolation and misery for the 60 per cent of the population not covered by any type of social insurance. Social insurance as a citizen right, general health care free of charge and the supply of almost free medicines, the universal system of pensions and a pretty low retirement age, all achievements of socialism, were obviously important aspects in overcoming earlier contradictions. Their tremendous importance in creating equal conditions for a human life, and in providing proper foundations for such a life, cannot be overemphasized. But new contradictions arose in the course of coping with the old. Given the level of development, and industrialization which reduced resources available for improving the infrastructure, the equipment of health services, the capacity of hospitals and clinics, and the quality of professional medical services were unable to keep pace with increased requirements. Tensions and contradictions were the result. Overcrowded hospitals, declining standards in the care of patients, doctors often degraded to the status of prescription-writers, and payments under the counter for hospital beds and better medical care. At this point free health services were so to speak reversed. Following the universal system of pensions and a particularly low retirement age by international standards – at a time when life expectancies increased – the proportion of the population of pensionable age grew to one fifth of the total, which meant not only a greater burden for the community than resources permit, but also a lowering of pension rates, producing a section of the population who live in peculiarly difficult circumstances, thus simultaneously eliciting new economic and social contradictions.

I could give many similar examples. Industrialization and concurrent urbanization, while overcoming the contradictions of a backward settlement structure, swept huge rural masses into towns – again midst conditions where industrialization limited the funds available for urban development – thus making the urban housing shortage particularly

acute. The satisfaction of new urban housing needs turned into a race that proved almost impossible to win with poorer quality, smaller barracks like blocks as a result. At the same time owing to the overcentralized location of industry and therefore of jobs, the number of those travelling a long distance to work was considerably increased, again leading to serious personal and social problems. It ought to be noted that speeded up mobility mentioned above, which also helped to break up traditional family ties, contributed to particularly serious contradictions in housing. The role of mobility cannot be overemphasized in the break-up of three-generational cohabitation earlier considered natural, and the accompanying sudden leap forward in the quantity of demands for housing. It is also true that the position was unjustifiably worsened by frequently misguided efforts to do away with the homestead type of settlement structure, and to amalgamate smaller villages, against the interests of those involved. This often led to the destruction of habitable buildings.

It is therefore impossible to move beyond an ancient economic or social misery, or to do away with old contradictions without giving rise to new social or economic conflicts which then await solution. One can, of course, justifiably say that these manifest themselves on a higher stage of development. It is obviously not the same thing if social insurance is confined to 40 per cent of the population or if the standard of social insurance covering everybody is not as high as one might wish, but this in no way diminishes the tormenting force or the tensions of conflicts or contradictions.

Thus the solution of numberless contradictions along the road that led to the seventies in itself became a hotbed of new contradictions and conflicts. The way of history contains the need of unceasing struggle, flexing one's muscles again and again, to move across the obstacles of solved and newly arising contradictions.

Coping with new conflicts without illusions or ready made formulae

What was achieved in Hungary in the course of the quarter of a century that led up to the seventies did not stop this being a time of lost illusions as well, and of clashes with the hard realities of history which frequently produced disappointment. The peace that followed the war, and the expectations of a faith that moved mountains and wished to start everywithing from scratch in a revolutionary way, which was full of naive illusions, unavoidably became the source of serious wounds. Those who had lived through the war believed that much that they had experienced could not be repeated. How they had waited for the final disappearance of hatred and conflicts between the nations, and that the rule of pure reason would govern the world, administering society, after the raging of irrationality! These illusions were dispelled as naturally as they had bloomed in the course of progress stumbling over the stumps of reality. Pure reason could not come to power just as the dreamt about future could not be fitted out like a new house. Irrationalities that could never happen again revived in the world, in our world as well. The dangers of

war that were so oppressive after the war, the injustices committed against whole sections of society, lies that denied the facts, frame-ups that masqueraded as trials, prescribed tastes in art and literature, judgements on world policy, hidden in the cloak of pure principles that could not be doubted, that were no more than formulations of pragmatic interests, which often changed from one day to the next, and the description of what was obviously defective as the optimum, were only some of the reasons why the illusions were dispelled. A whole generation that felt that it could shape history as it wished, and that it could create a new world in six days, had to find out with a shock that history was not soft clay but hard as a rock, granite that breaks chisels. If the blow is too weak the stone will not split, if it is too hard flints will peel off that should have stayed in place, and six days are really a short time indeed. Whole generations lived through the revival of inner social conflicts and prejudices which had been thought of as so many buried hatchets, they realized that history knows of no starting from scratch that wipes the slate clean. Faith in lessons taught bv history, which had been accepted as certain, was shaken. A generation, with the best of intentions, set out to make that mutual recognition of the peoples of the Danube valley come true, which was expressed in *Ady*'s and *Bartók*'s work as their testament and heritage – something that had seemed simple and natural in the new historical situation. While we stubbornly rehearsed that everyone had to face up to his own past, putting an end to their own nationalism, we had to wake up to a new flowering of nationalism in the world around us, and this found expression in a clouded national consciousness, as well as in the realization of responsibility for the fate of Hungarian minorities living beyond the frontiers of the country, and also in nationalisms and racial prejudices, which had been imagined to have disappeared, raised their ugly heads again.

But we also lost illusions as a result of unexpected contradictions which presented themselves in the course of our advance, something which shook many a faith placed in progress. Overcoming ancient lee-ways it proved impossible to keep up with the new advances made by others, and we found ourselves in arears once again. We gained new values and lost old ones. Some identify this as the difficulty in obtaining desired and needed industrial goods in a country that has become industrialized and has climbed to higher levels of development. The quality of bread and of shoes has declined in that context. Others complain of the nervous urgency of life, and the impatience which people show each other. In that medium nostalgias for what has long been obsolete are revived. In the eyes of some everything is of value that is old and has been declared obsolete.

Moving up to the seventies we traversed a whole age and things to be done in another have accumulated.

The serious international shocks which the seventies have suffered, the crisis ridden changes in the world economy, the new world-political tensions that threaten to explode, and the multitude of irrational answers to questions which history put in good faith, strengthened all these inner processes and placed them in a new context. The contradictions and conflicts accumulated in the course of time were knotted up precisely as the effect of these outside influences. We see, illusionless, that we can make progress only in

the context of difficult determinations, and certainly not along a line planned and drawn with the help of a ruler. We shall move ahead not in growing harmony but as part of the historical process that has recurrently become more acute.

Looking back over the road travelled to the seventies confirms the truth of H. *Focillon's* metaphor. "History cannot be compared to a river that sweeps events and their sediment in the same direction, and at the same speed. What we call history is precisely the multiplicity of currents." In this multiplicity, midst the revival of what has been overcome, the rising from the dead of what had been forgotten, the conflicts elicited by progress, and the tensions created by errors, we must look ahead in our own tasks, the jobs that await us in the economy, in society, in education and in politics, with faith in the possibility of finding one's way again and again in the interests of reforms, and in the meaningfulness of the fight, without cherishing illusions about ready-made formulae, or roads that lead straight ahead without breaks.

ПУТЬ ВЕНГРИИ К СЕМИДЕСЯТЫМ ГОДАМ

И. Т. БЕРЕНД

70-ые годы были в Венгрии периодом своеобразных и странных противоречий. Темпы развития экономики замедлились, в политике доходов проявилось противоречие между принципом равенства и принципом распределения по труду, рост жизненного уровня приостановился, мобильность общества замедлилась. Потребность в новых реформах выражалась все сильнее.

Корни противоречий 70-х годов могут быть найдены в преобразовании, осуществленном в обществе и экономике; эти корни становились узловатыми вследствие внешних влияний (преобразование мировой экономики, изменения в мировой политике).

Мы искали основу продвижения вперед для отмены экономической отсталости в индустриализации. Продвигаясь по пути индустриализации, мы почти всегда заблуждались и так пришли к нашему настоящему. Начало индустриализации, военно-промышленный, автаркический и количественный подход к ней не отвечали нашим условиям и требованиям эпохи, предъявленным к технике и структуре. На алтарь форсированного количественного развития промышленности в определенное время были принесены в жертву интересы жизненного уровня населения и других отраслей экономики. Развитие сельского хозяйства и обслуживающих отраслей было далеко от уровня, отвечающего международному развитию. Нехватка услуг привела к процветанию «второго хозяйства», которое иногда терпели, иногда поощряли, а в отдельные периоды стремились ограничить применением жестоких санкций.

Сельское хозяйство долгое время являлось источником капитала и рабочей силы, накопления и индустриализации, и только в конце 60-х, в начале 70-х начался подъем этой отрасли из «мануфактурства» и ее преобразование в индустрию.

Сопутствующими явлениями заблуждений в экономической области были также ложные пути общественной мобильности и политики жизненного уровня; например, эгалитарная и доходная политика, которая привела к нивелированию зарплат и послужила исходным пунктом тяжелых экономических и общественных конфликтов.

Решение основных проблем отсталости и хронических нужд потребления с помощью индустриализации и средств социальной политики роста жизненного уровня оказались достижением исторического значения, однако они остро поставили на повестку дня нерешенные вопросы дальнейшего развития. Все это проявилось и в требованиях развития политической и общественной демократии.

Возникающие противоречия являются не только последствиями наших минуемых или неизбежных ошибок, но их значительная часть представляет собой естественную диалектику исторического развития. Воспроизводство конфликтов является естественным процессом в истории общества и единственным реально-возможным путем продвижения вперед.

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M. TARDOS

THE ROLE OF MONEY: ECONOMIC RELATIONS BETWEEN THE STATE AND THE ENTERPRISES IN HUNGARY*

The author looks for the reasons why the new economic mechanism (NEM) was unable to bring about a buyers' market in Hungary. He argues that this was not only a result of the survival of the supervisory role of branch ministries and the inconsistent regulation of the economy after the price explosion in 1973, but also of those parts of the regulatory system which hinder the free circulation of money in the economy.

Comparative economic science often tries to use uniform notions for describing economies functioning under different economic systems. Basically this kind of unification is carried out by the notions of monetary economy. What makes it possible is the fact that notions used in the monetary system of the capitalist market economy appear in statements about centrally planned economies as well.

True, the economic literature of the fifties described commodity (market) and monetary relations appearing between state enterprises in the socialist countries only as a legacy of capitalism. Monetary phenomena in a socialist economic system were qualified as a shell *(obolochka)* expressing that the functioning of money differs substantially from its task in capitalism.

It is evident as well that the assumptions of neoclassical economics about commodity and monetary relations are far from the reality of contemporary capitalist economy. The oligopolistic market organization and the influence of the state on the economy – the latter extending not only to the control of money supply but often to price controls and discriminative taxation – modify the concrete meaning of monetary economy to a great extent.

Lack of a uniform conceptual basis of commodity and monetary relations in both contemporary capitalist market-economies and different socialist economic systems does not relieve us of the requirement to analyse distinguishable characteristics when using financial notions applied to describe the behaviour of different systems and sub-systems.

Comparative economic analysis has not made enough efforts in this direction so far. In fact, we notice in these studies a peculiar contradiction. Without the notion of money it is not possible to describe the socialist economic systems, but with the use of this concept sometimes the particularities become indistinct. [1, 2, 3] At the same time, the

*The author is grateful to the participants of the Fifth American–Hungarian Economic Conference for their comments, firts of all to M. *Bornstein*, E. *Domar* and E. *Hewett*.

monetary sphere obviously plays an important role in the economy, reacting upon material processes at times to a more modest at other times to a more active extent.

In analyzing the capitalist market economy and describing the socialist system of target planning, phenomena of the monetary sphere are mostly simplified. But as much is certainly acceptable that in a capitalist market-economy money functions not only as measure of value, price standard, medium of circulation, means of payment and means of accumulation, but circulates without restriction among different regions of utilization and is playing a commanding role in the flow of incomes. While consumers and firms are purchasing goods and services they generate revenue for business which raises aggregate demand for hiring production factors as labour, capital etc.

The circulation of money is controlled by the state through determination of the incomes and expenditure of the budget and through money supply. The forms and extent of state interference are prescribed by laws and can be considered as normatives because they differentiate between firm and firm – or between consumer and consumer – only in exceptional cases. Thus state control does not disturb the behaviour of firms. The state measures are as objective factors to which the firms are forced to accomodate themselves as are any other market changes.

The normatively regulated circulation of money integrates the economy which comprises independent firms and consumers linked to each other through the channels of production and trade. We should emphasize that the economy integrated by money circulation has among many others a distinctive positive characteristic: it is able to assure harmonization of the demand for and supply of commodities, that is, accommodation of production and prices to the need of absorption is quite good. Without free money circulation the economy consisting of private firms and sovereign consumers would fall into parts.

The acknowledgement of this merit does not mean that we may forget about the malfunctions of contemporary capitalism, even if we restrict ourselves to the problem of economic performance. The most important among the ailments maybe that it does not assure full employment of production factors, first of all full employment of labour, it does not eliminate cyclical fluctuations of production, moreover the allocation of resources does not consider the production of public goods, as the liquidation of poverty, restriction of environmental pollution etc. according to the acceptable public needs and, finally, it cannot master inflation.

We may restrict ourselves by repeating that capitalist economy integrated by the circulation of money, the above mentioned difficulties originating from the discrepancy between demand and social needs notwithstanding, is able to assure the adjustment of production (supply) to demand.

The role of money in a traditional centrally planned economy (CPE)

It is relatively easy to describe the monetary system of a traditional centrally planned economy which uses directive control methods.

Money, though it functions as a measure of value, price standard, medium of circulation and it is used under certain restrictions as means of payment, and means of accumulation and savings as well, still does not integrate the economy. This is done by the national economic plan, and money is only a subordinate means of fulfilling the plan. [4]

"In a system of directive economic control the state determines production patterns in detail, and financial means are only to serve the plans, to warrant the financial conditions of fulfilling the Plan." [5] To say that finances play the second fiddle, does not mean at all rejection of moneys' impact on real processes. In consequence, a directive control system is making use of the economic motivation of managers and employees. Acceptance of the objective role played by money and prices can be seen from the fact that shortcomings in economic performance are sometimes explained by the inability of central planners to recognize the requirements of the "law of value." [6]*

The restricted role of money in a directive economic control system can be understood by explaining two factors.

Firstly, money earmarked for particular objectives cannot be put to other uses. Wages, purchases of materials and services, reconstruction and investment, are each plan targets, and the money-holder is not allowed to reallocate the sums in hand among them. Constraints, for instance on the division of investments into domestically produced machinery, machinery imported from socialist and capitalist countries, construction, and others are well known, and bind the hands of enterprise managers. Only consumers, who are not subject to the obligations of the plan are relatively free to spend their money. It is not exceptional that the right of the consumer to use his money as he likes leads to tension, since the central planner is unable to adjust commodity supply and the system of retail prices to the pattern of demand.

Secondly, it is no less important that almost the whole sum exceeding planned profits made by the enterprises, as well the whole value of planned but unrealized investment allocations are automatically drawn away from the enterprises.

Western economic literature dealing with socialist countries also calls attention to money's failure to integrate the economy, for instance when it points out how the effect of the import multiplier is asserted through special feedbacks in Keynes' reproduction schemes. [7, 8]

*Here it should be mentioned that according to the suppositions centrally planned economies with directive control system have a great possibility to overcome the shortcomings of the capitalist economies – underutilization of production factors, production cycles, the neglect of public services. We are not dealing in this paper with the question how far these possibilities were utilized and what the constraints are on the accomplishment of this purpose.

The fact that money is not integrating the CPE raises important issues concerning the specification of an econometric model of a socialist economy.* The arising problem is not only that the hardly endogenized attitude of the central planer should be modelled as well but also the fact that state intervention does not take place exlusively on a macro-economic aggregate level, but affects separate economic processes – the production of one or another product, a single investment project etc.

Money in the indirect control system of socialism (modified central planning)

Describing the Hungarian economy is even a much more difficult task. According to the decision on introducing the New Economic Mechanism (NEM), the Hungarian economy has ceased to be an economic control system relying on target-planning, in which the national economic plan is "broken down" by enterprises, through medium-level control organs, in the form of plan instructions and targets. In this system. ". . . [a] more active part".. . . is to be assigned. . . "to commodity relations and their categories, market, money, prices, profitability and credit." [10]

The question is what this more active part means. Has an integrated monetary system ben developed where money has occupied all the commanding heights?

When drawing inspiration from the Hungarian reform, T. *Wolf* introduced the notion of the "modified centrally-planned economy" (MCPE), and examined how external inflation works in such an economy to the effect of interrelating foreign trade with production. He assumed an integrated financial system. His MCPE's role distinguishing feature from the capitalist market economies is that in the first some of the prices are centrally fixed. [11]

Money's role has no doubt increased in Hungary in the last 12 years but it has remained restricted, and therefore money has not ,integrated the whole Hungarian economy.**

After a study of a major part of Hungarian economic literature, it seems, however, as if the lack of an all-out monetarized financial system were the result of two factors: on the one hand, the rearrangement of the branch ministries failed to come, and, on the other hand, the inconsistent changes in the control system diturbed the economic management after the price-explosion of 1973.

The lack of an integrated financial system has not been caused merely by inconsistency between the supervisory system and the profit motive, and the spreading of discriminatory taxes. Preventing markets from integrating is one of the basic characteristic of the system. I already pointed out in my studies written between 1969 and 1972 that the peculiarity of western market economies is that self-regulating commodity,

*Concerning this see [9].

**J. Kornai called the system "semi monetazed economy". [12].

capital, labour and foreign exchange markets are controlled by money-flows between these partial markets. In Hungary, however, free circulation of money did not exist, either in practice, or in the model of the reform. [13] Similar criticism is expressed by L. *Antal.* [14]

The stable elements of the Hungarian economic control system which hinder the development of an integrated monetary system are as follows:

Differentiated regulation of enterprise incomes planned for different uses

– wage control, which maked the increase of the average wage or the wage bill, moreover, the sharing fund and bonus payments dependent not directly on the cash income of the enterprise, but on a special wage regulation,

– a special regulation of income to be put into the development fund,

– a yearly-differentiated determination of the obligatory extent of reserve funds (the main tool for restraining enterprise investments in 1978–79).

First we shall analyze the question of *wage control.* We take for starking point that in an indirect control system two factors – enterprise revenues and wages – should determine the allocation of labour. From wages paid by the enterprises we should expect that they create demand on the market of commodities and services. However, in the Hungarian practice of indirect control this automatism is broken by the regulation of the outflow of wages. This regulation has a double meaning: first it protects the economy from surprises as inflation or shortages which might be caused by a rapid increase of wages. In this sense the necessity of wage control energes in a capitalist market economy as well. See for instance the suggestion of a Tax-Based Incomes Policy (TIP).* The second meaning of the wage control is, that it damps the contradiction between managers and workers which might be a consequence of endeavours of management to cut down wages. Till now the government has failed to eliminate the unfavourable consequence of wage control. Therefore, enterprises were often not able to keep level with the generally accepted wage increases on the labour market. The progressive, sometimes prohibitive profit taxes on the increase of the average wages or of the wage fund might hinder enterprises in preventing the dropping out of low-wage workers and in the employment of highly-paid workers, even if the payment of higher wages had contributed to the increase of gross profit. Sometimes it may happen that the wage regulation encourages employment of excess workers. [16]

By breaking the direct link between enterprise revenues and wages paid, wage regulation hinders the enterprises in following demand.

Passing over to the question of *investment allocation* our point of departure is that in an indirect control system the expected revenues resulting from the planned investment should determine the limit of the allocated assests. Contrary to that, the Hungarian

*The Hungarian incomes policy and the TIP suggested by H. C. *Wallich* and S. *Weintraub* has been compared in [15].

investment allocation system interferes with the flow of revenue in two ways. First, enterprises ought to use up the so-called investment fund determined by state rules even if the investments in the enterprises do not promise acceptable returns. Such amounts of money, if they exist, cannot be used for other purposes.

In consequence of the disturbed circulation of revenues in the second place it may occur that an investment project promissing favourable returns cannot be realized because of lack of money. Here we do not speak about unavoidable decision failure, but about errors which have their origin in the logic of the system itself, According to the Hungarian investment regulation it is a rare exception that an enterprise has sufficient internal funds to meet the entire cost of a new investment project. And external capital can be obtained only through the monopolized credit channels of the National Bank. Moreover the amortization and service cost of this development credit should not be paid from revenues but from that part of it which remains in the development fund after taxes. The extra costs of investments and the profit tax make the payment of all investment expenditure seldom possible from the revenues derived from the new development project. Thus it is easy to understand two consequences of the break in the revenue circulation: enterprises are unable to start a new investment project without the promotion of the credit center and the conditions of credit floating cannot coincide with the expected profit of the investment. Undisturbed repayment of investment credits is only possible if the range of enterprise activity creating the development fund is much broader than the newly developed production. In every other case a development project is only realizable if the state takes over a part of the costs. The above described regulation leads not only to a merging of state and enterprise investments but to a weakening of the profitability requirement. [17] The result of investment regulations is that enterprises are relatively susceptible to influence concerning modifications in their investment projects according to central conceptions. Moreover, enterprise interest in the profitability of investments is moderate and responsibility is shared by the central organs. It naturally follows, that even the indirect control system cannot put money to the commanding heights in the investment allocation. The planned investments and the investments in process obtain the financial means by force even from the state budget.

The creditworthiness of the firm is not a first consideration even at the granting of credits for the increase of *circulating assests.* Similarly to the allocation of investment it is evaluated whether the enterprise needs more circulating assets for the planned assignments than it may obtain from his own means and from its development fund.

Finally, we have to call attention to the break in money circulation in consequence of the *obligatory reserve fund formation.* The magnitude of the obligatory reserve fund and the speed of its accumulation is centrally regulated from time to time. These instructions serve as instruments to control aggregate demand. That method played an important role in restraining investment demand in 1979–80.

Instructions concerning obligatory reserve funds are not uniform and, owing to the divergence of the financial situation between enterprises, they cannot be uniform. This is why the restraint of demand is generally a discrimination against profitable firms.

The financial and price control of enterprises

The circulation of money and incomes is naturally affected by the state price regulations and the financial surveillance of enterprises. Harmonization of supply with demand is hampered by centrally determined prices. The consequences are well known: if the centrally fixed price is low, the income of the producer is so low that he is unable to develop production according to demand. The firm using the product suffers substantial losses even if it had some economy on its purchases, because it is driven into costly forced substitution or is forced to decrease production. The picture is similar at the consumer, only the option against forced substitution is forced saving. The opposite case, when centrally fixed prices are too high and impede the utilization of capacities is not so frequent.

The question we would like to answer now is whether the unfavourable effects of fixed prices stop in those regions of the Hungarian economy where directive control has been abolished, and where, just for the sake of harmonization of supply with demand, prices are free. The importance of the question can be seen from the fact that a substantial part of prices are free and export prices are practically free without exception.

Experience has shown that Hungarian firms do not experiment with price changes of free-priced goods in the interest of harmonizing supply with demand. With export sales the possibility does not arise that enterprises may increase their marketing by contacting new markets offering less revenue than the traditional ones, if the enterprise has free production capacity and if the additional revenues cover the variable costs.

It has not been answered why the Hungarian firms restrict themselves in a peculiar way in the pricing of free-price goods and in the determination of the volume and pattern of exports. The answer seems to be in the bargaining process between enterprises and central organs which is going on concerning the price determination of free-price goods as well. When preparing the price calculations enterprises take into consideration the recommendations of the centre and are often forced to show them at the central financial and price audit.

The well-disposed consent of central organs to the calulation of free-price goods, among others the calculation of overhead costs was very important for enterprises at least till the end of 1979. The level both of the centrally regulated prices and the state refund on export was dependent on this consent, and played a significant role in the profit made. Moreover there was a danger that unusual high profit on the free-price goods would have been considered as unfair profit, which was persecuted by law. Let us see a simple numerical example. We assume a two-product firm where the goods are freely priced: one commodity is old, but demanded both on the home and the export market. The other commodity is a new one. With the present prices the domestic market would be able to absorb the whole capacity, but a part of the output is sold on the very profitable export market.

Table 1
Production capacity, costs, prices, market demand, sales

	Old product A	New product B	Enterprise, total
Production capacity piece/year	150	100	
Production costs Ft/piece			
variable costs Ft/piece	50	50	
of which:			
wage costs Ft/piece	10	10	
material costs Ft/piece	40	40	
overhead costs Ft/year			10,000
Domestic price Ft/piece	110	118	
Export price $/piece	2	3	
Export price Ft/piece*	80	120	
Domestic demand piece/year**	50	100	
Export demand piece/year***	50	50	
Domestic sales piece/year	50	80	
Export sales piece/year	50	20	

*$ = 40 Ft.
**At present prices.
***The shortage on the home market is 20.

We may assume that in this case the enterprise management collated its production and sales activity with the supervisory authorities to get its consent to the prices set, to receive state refund on exports and to avoid the charge of unfair profits.

To understand enterprise behaviour let us see the price calculation. Two questions appear: how overhead costs are distributed between goods and what profit rates are set. The answers to these questions are generally given by well-established rules of thumb. Overhead costs are distributed among goods, for example, proportionally to wages. So in our example the 10,000 Ft overhead cost should fall upon each in proportion to 1000–1000 Ft wage cost (100 prices × 10 Ft in both cases) that means 50–50 Ft/piece. The total costs for both commodities comes to 10 Ft/piece.

According to prevailing practice it is reasonable that the price level of demanded goods should be higher than of those where production capacity is not fully utilized. But the price of the latter may include substantial profit too. Accordingly, we set 10 percent profit on commodity A and 18 percent on commodity B.

Table 2
Domestic price calculation

	Old product A	New product B
	Ft/piece	
Variable costs	50	50
wages	10	10
materials	40	40
Overhead costs	50	50
Total costs	100	100
Profit	10	18
Domestic price	110	118

When laying claim to state refunds on export, in the practice before 1980 enterprises took the domestic price level as a point of departure. The system of state refunds generally guaranteed that export revenues should or to a certain extent exceed the domestic price level. So in our example it is justified if the state refund on export reaches at least 23 per cent.

Table 3
Calculation for state refund after taxes

	Old product A	New product B	Enterprise, total
Export piece/year	50	20	
Export volume at domestic prices Ft/year	5500	2360	7860
Export revenue at the commercial exchange rate Ft/year	4000	2400	6400
Claim for state refund on export Ft/year			1460*

*The claim is equivalent to 23 percent after export revenue (1460/6400).

After consent has been reached about the calculation of costs, profit and the determination of state refunds on export we can easily say that in our numerical example the enterprise profit makes 2812 Ft.

Table 4
Profitability of the enterprise

	Old product A	New product B	Enterprise, total
Domestic revenue	5500	9440	14,940
Export revenue + state refunds	4920	2952	7872
Enterprise revenue	10,420	12,329	22,812
Variable costs	5000	5000	10,000
Overhead costs	5000	5000	10,000
Enterprise costs total	10,000	10,000	20,000
Profits	420	2392	2812

Now we have to analyse why, in the described system, our enterprise was not interested in using its legal possibilities for changing both prices and production and trade patterns.

It is easly conceivable that three methods were offered to increase profits. 1. The possibility to create new markets for the old product A in the interest of the full utilization of production capacity both by reducing the domestic price and contacting new markets promising lower revenues. 2. To increase the price of the new product, for which demand was not satisfied. 3. Finally, if the price of the new product was not higher for whatever reason than the export price, then to reduce domestic sales and to increase exports.

The unambiguous results of empirical experience show that Hungarian enterprises did not make much use of the above mentioned methods. It was much more frequent that beside neglecting these methods they rather tried to mislead the supervisory financial organs. The chance for that was given both by regular changes of the input prices and wages and by the effort to bring the calculation of overhead costs "up to date". The enterprises always tried to use such a method for the distribution of overhead costs which allocates a bigger part of these expenditures on those products whose expected sales are fast increasing. That helps them in selling at higher domestic prices and in obtaining support from the state budget.

The fact that enterprises have not fully utilized their rights in the determination of prices and the production pattern does not mean that their behaviour, which was inappropriate from the entrepreneurial point of view, cannot be explained. Managers refrained both from changes of free prices and from rapid changes in the sales structure, because these brave actions would not have been remunerative for them. The obtained high profits would not only elicit the charge of unfair profit but would endanger profit itself.

Enterprises must take into consideration the loss of benevolence of the supervisory branch ministries as well of the financial and price authorities. If the increase of profits were attained through decreasing exports or precisely the other way round, if in the interest of profitable export a shortage were produced on the domestic market, the resulting loss of goodwill would involve grave consequences for the enterprise in the bargaining about the state regulations. We can follow the enterprise's dependence on the bargaining in our numerical example too. It is obvious that in the framework of our example a profitmotivated enterprise would not decrease the export of the good A even if it did not get state refund on export because the export revenue of 80 forint/piece would still cover the variable costs and a part of the overhead costs. Moreover, the enterprise would decrease the export of good B only in the case if it were able to make significant advance in its domestic prices. Is is clear as well, that the free domestic price of good A set according to the accepted scheme and rated as reasonable by the price authorities is relatively high, a monopoly price. It would pay for the enterprise to reduce the monopoly price only if the discount increased its market significantly. For example reduction of the price from 110 Ft to 80 Ft for a piece of good A would not pay for the enterprise even if its sales doubled. The illustrations show that state support for enterprise action is often granted even for such actions which enterprises would carry out without any support. Moreover, it is perceptible as well, that state price control often accepts such prices which contain monopoly revenues. These experiences clearly show how important the goodwill of the authorities is for the enterprises.

This description of free pricing makes it clear that not only the rigidity of the officially fixed prices but the actual system of free prices makes trouble in the money and revenue circulation while it distorts the profits of the firms as a social success indicator and hinders adjustment of production to demand.

Regular changes in financial control

It is well known that all elements of the financial control system are profoundly transformed before the beginning of each five-year plan, as it happened in 1970, 1975 and 1980. The incentive power of the regulatory system would be significantly restricted by these systematic changes even if similar modifications did not happen year by year. In practice however, modifications in price, and profit regulations and alternations in the state refunds paid on export were regular. Moreover, changes in prices fixed by authorities followed by price and regulation changes at the enterprises using the commodity in question have been carried out frequently. That reduced even more the influence of the regulation on the economy. Under these circumstances the enterprises were not concerned with profit making, but kept their mind on the management of their links with the central authorities, to acquire their goodwill at the next bargaining round about prices and regulations.

Economic consequences of partially insulated money circles

The above described factors show clearly that in the NEM money circulation does not integrate the economy even if target-planning did not restrict its active role. Money, or rather commodity and monetary relations developing through money circulation are able to show their real activity only in money circles delimited in space and time, and even this activity is not undisturbed.

Money in hand to finance current production costs can be used to finance expenditure on wages only partially. Average wages or wage-fund increases can be financed through different channels only from special money, from profit after tax.

Financing development costs also has specific limits. Working and fixed capital can be increased only through certain monetary channels where the circulation of revenues is influenced not solely by the speed and security of the rate of return, but by the central plan concepts as well.

The settling of cost accounts of the enterprise is influenced by the prescriptions of the taxation system as well as by the central price and financial controls based on average cost calculation.

In addition, the enterprises as money holders are not given a free hand in deciding on the timing of using up their money, because of obligatory reserve fund regulations.

The fact that the Hungarian economic control system operates without plan instructions has positive results in activating monetary relations.

Every enterprise works as an isolated economic unit perceiving the changes of the external world, i.e. domestic and foreign demand, supply of utilized resources (labour, material, machines, etc.) through the financial system. Thus, between two points in time when the central regulators are modified, the enterprise operates rationally within the framework of the financial system. Compared with the economic system of target-planning, this is a step forward because it has removed the obstacles to meeting plan instructions from the way of rational adjustment, which have often disregarded or badly projected the changes in external conditions. Restriction of the active role of monetary relations to partial financial circles, however, has some negative consequences at the same time. Without aiming at completeness and disregarding the order of importance, these are the following:

The non-uniformity of economic criteria for enterprises

The prevailing type of enterprise regulation results in different rates of profitability for economic actions of equal efficiency for each firm. This phenomenon, the "incrementalism" originates in the fact that economic success is not measured or the payable wage is not determined on the basis of revenues or profits but by considering the improvement in performance. Thus, economic criteria are deviating for the enterprises

even in case of a uniform normative regulation. In such a case, depending on the profit of the enterprise in the base period, wages can be raised differently for similar actions at different enterprises.

This phenomenon is further strengthened by the fact that the system of regulation is constantly compelled to violate the requirement of normativity. It is characterized not only by different capital returns requirements in the economic branches but by a system of preferential funds paid to the enterprises from the state budget as well as by differential remission of taxes. In consequence, actions which would prove profitable at one firm, cause a deficit in an other one, and this discrimination among firms is disadvantageous from the social point of view.

Withholding of performance due to the regulation and its systematic supervision

It is not in the interest of the enterprises to reach maximum result with given external conditions, since it could worsen their future situation because of the "incrementalism" of the financial regulations mentioned above and the regular modification of the regulators. A typical contradictory situation for the first is when a sudden increase in earnings could allow the raising of wages but the resulting higher wage level would aggravate the situation of the enterprise in the following period when profit could not be augmented any further. (Measures introduced so far have not been able to offset fully this unfavourable effect.)

An even more important phenomenon to intensify the withholding of performance is that the advantageous result of the previous period harms the chances in the "regulation bargaining" to win state preferences. This is so because disadvantageous starting data give the enterprise a better chance for obtaining state preference.

Financial control and flexibility of the price system

Financial and price control by the state makes efficient price-bargaining between buyers and sellers impossible. Although prices' adaptation to demand and supply conditions to clear the market is not sufficient under capitalist market conditions, nevertheless it still remains a useful means of balancing demand with supply. And the established Hungarian system of price control based on average costs rejects this.

Changes of prices and regulators in 1980

We have described some important features of the financial system which functioned in Hungary till 1980. If we compare our conclusions with the statements about the modification of economic control and of the price system in 1980, then we should come

to the conclusion that the above mentioned failures have been recognized and an alteration in course has been provided for.

The modified control system has two main requisites: the first requirement is *the normativity of financial regulation.* This means that it is not the regulators that should be fitted to the individual firms, but regulators should press enterprises to respect the norms of efficiency. In the second place, price should not cover production costs automatically, but should be a *competitive price* which is a market signal. As these requisites show, the modified control system keeps alive only one from the three factors which disturb the integrating power of money and revenue circulation, namely, the state control of revenues. From the content of declarations concerning modification of the control system the conclusion can be drawn that the government's aim is constrained to the oversight of the revenue and money circulation.

In the interest of the normativity of regulation financial assistence has been significantly diminished and the firm-by-firm or branch-by-branch system of state refunds on export has been abolished. Flexibility of prices is attained by using export and import prices as a basis for competitive pricing instead of production costs. [18]

It is early to speak about the outcome of change. As much is already clear that the tension of the Hungarian balance of payments forced us to renounce the price determination of agricultural and manufactured products by adjusting to import competition. The competitive character of proces in manufacturing industries will be reached through the requirement that enterprises may increase their domestic prices only in case if they have increased their hard currency export prices as well. Thus an increase in import prices or/and production costs will lead to domestic price increases only in case if the enterprise is able to export at higher prices. The difficulty of introducing this method is connected with the fact that export products are not identical with the products sold at the domestic market. Thus, there is no possibility for identification of prices. At the introduction of the method the profit on export and on domestic sales is to be measured and equalized.* During the operation of the system the changes in export price level are to be taken into consideration by price formation on the domestic market.

This pecularity of the modified price and control system introduced in 1980 makes new forms of shrewdness possible for the enterprises in setting domestic prices. Moreover, it has not been clarified what difference will be accepted in the new system in the profitability between up-to-date products in demand and old, surplus products. It is not unjustified to suppose that enterprises will not fully utilize the possibilities for price increases of goods in demand even in the future. But they won't be in need of it, because for the price increase of one group of commodities they should decrease the prices of others. But without import competition, merely by state controls the price decrease of old, surplus products is not realizable. It will be easier for enterprises to realize monopoly

*It is possible that enterprises allocated their overhead costs mainly on those products whose sales were increasing. Thus their profit will surpass the value expected by the central organs without any effort.

profits on old goods even in the future than to overcome the resistance of authorities interested in price stability, and to increase the prices for new up-to-date products.

It is already generally agreed that the new method of pricing has a retarding effect on export in spite of intentions of central organs [19, 20, 21]. The abandonment of some export markets may lead namely to an increase of the average price for export which will give an opportunity to increase the domestic price and so the profit of the firm will rise without any effort.

Is is not likely, however, that the firms will show themselves to be so clever. That should not put us at our ease, because shrewdness and a significant improvement of adjustment to market conditions will fail to come owing to the same reason: presumably the enterprises will not try even in the future to accomplish great business transaction for profit as an entrepreneur, but will behave as a clerk, fulfilling on the whole the expectations of the authorities.

Summing up, we are inclined to think, that modification of the control system in 1980 shows on the one hand that the government reinforced the indirect control system introduced already in 1968, and expects from that change an increase in efficiency.

On the other hand, it is striking that the system will combine the methods of indirect control and the relative ‚independence of firms with a hierarchic order of decisions and organization in the economy even in the future. This solution is promising concerning full employment and relative price stability but henceforward raises doubts about changes in the production system which aim at a rapid increase of efficient export and at a buyers' market at home. The transition requires a risky change in the institutional pattern of the economy that makes enterprises able to autonomously adapt to economic needs and, at the same time, stimulates them to make strained efforts in order to survive.

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РОЛЬ ДЕНЕГ

(Экономические связи между государством и предприятиями в Венгрии)

М. ТАРДОШ

Новый хозяйственный механизм придал товарно-денежным отношениям в Венгрии большее значение, чем они имеют в условиях директивного планового хозяйства. Однако и в этом аспекте сохраняются существенные различия между практикой венгерской экономики и капиталистического рыночного хозяйства. Эта разница объясняется различной ролью денег. Если в капиталистической экономике денежный кругооборот интегрирует хозяйственные процессы, то в Венгрии свободное обращение денег происходит в сильно изолированных друг от друга сферах. Связь между обособленными финансовыми сферами весьма слабая. Вследствие этого кругооборот денег не

интегрирует венгерскую экономическую систему. Обособление финансовых сфер вызывается четырьмя факторами:

— дифференцированное регулирование использования различных денежных доходов предприятий,

— распределение кредитных средств согласно не исключительно критериям эффективности,

— строгий контроль над финансами, ценами предприятий,

— пересмотр регуляторов каждые пять лет и их ежегодная корректировка.

Активизация финансовых процессов вышеуказанным способом сопровождается тремя важными последствиями:

— Усиление активной роли товарно-денежных отношений происходит только внутри изолированных финансовых сфер.

— Меньшее, чем раньше, но продолжающееся значительное ограничение роли товарно-денежных отношений в экономике в целом. Этот фактор вызывает разобщенность критериев эффективности в деятельности предприятий, определенное сдерживание их возможных результатов и ограничение гибкости системы цен.

— Функционирование заинтересованных в прибыли предприятий в рамках иерархически построенной институциональной системы.

Данный анализ позволяет сделать вывод, что новый хозяйственный механизм в Венгрии оказался способным сочетать активизацию товарно-денежных отношений с сохранением иерархической централизованной системы принятия решений и централизованного контроля. В то же время из-за этого не удалось превратить венгерскую экономику из рынка продавцов в рынок покупателей.

A. Oeconomica, Vol. 25 (1–2), pp. 37–65 (1980)

M. LAKI

END-YEAR RUSH-WORK IN HUNGARIAN INDUSTRY AND FOREIGN TRADE

The study examines a specific fluctuation in the performance of industrial enterprises repeated by short periods and attached to a calendar year or some part of it. This phenomenon has survived in Hungary even after the system of obligatory plan directives had been abolished. On the basis of analysis of statistical data and personal investigations made in 16 industrial and foreign trade enterprises the author comes to the conclusion that the direct reasons for rush-work (reporting obligation of a enterprises towards authorities) have survived also after the 1968 reform. Their background has not changed too much either; it is still the specific market situation where sellers have advantages, while buyers are defenceless.

Why are you dealing with a commonplace? – asked one of my interviewers when he learnt that I was investigating the reasons for end-year rush-work. "Everybody knows about rush-work at the end of the year. Ever since I have been in this trade it has always existed and this will remain so" – another one said.

There is hardly any worker or enterprise manager, foreman or engineer, sales clerk or administrator in Hungarian industry or foreign trade who would not have experienced this phenomenon. The subject of this study is indeed a commonplace in this sense. The situation is similar with the reasons, too: they are "well-known". Material and labour shortage, plan-fetishism, interest in improvements over the "base" – just to enumerate those mentioned most frequently. But are they really known? More precisely, is it a proper explanation if they are simply enumerated without looking for interrelations between "commonplace" reasons of this strange phenomenon, or eventually for some regularity reproducing itself?

Had I looked for an explanation for rush-work at the end of the year, quarter or eventually month, say, 15 years ago, it is likely that I would have received the following answer to my questions: that the reason was to be found in the system of economic control and management based on plan directives, in that collectives interested in the fulfilment of quantitative prescriptions, or even in their overfulfilment, were increasing their efforts at the end of the accounting period (year, quarter, month, ten days). In other words: if plan directives ceased to be instruments of economic control, rush-work would also disappear from our life. It turned out, more than ten years after the reform of economic control and management, that end-year rush-work was a "stubborn" phenomenon of the Hungarian economy when regulated basically without plan directives, with indirect tools; what is more, the amplitude of rush-work has even increased in the last two or three years. All this took place despite the fact that participants of economic life

(enterprises and control agencies) consider rush-work from the viewpoint of their norms and interests as unambiguously harmful and to be eliminated – rush-work meaning better than average performance at the end of some calendar period and much less than this at the beginning of a period.

If we face a phenomenon occurring "against the will of all", then this not only means that end-year rush-work asserts itself widely and has been reproducing itself for more than three deçades, but also that it has proved unmanageable from the viewpoint of interests and the control system, too. Recognition and description of regularities and interrelations appearing in everyday actions of people and massively repeated give, in my opinion, a more exact explanation for social and economic processes than certain systems of normative theorems referring to the desirable behaviour of authorities.

Hungarian speciality or world phenomenon?

We are examining a specific fluctuation repeating itself by short periods in the performance and activity of industrial enterprises. Therefore, cycles lasting longer than one year are not dealt with, nor are several so-called seasonal fluctuations lasting less than one year. *We are looking for the sort of fluctuation, called in industry "arrhythmia", that is attached to the calendar year or a period of it, or to certain dates.*

Rush-work can be characterized by at least two features that can be demonstrated also statistically, namely:

– that performance is better in the last phase (month) of a given period, than in the first part (month) of the next period;

– *within* the period examined performance is gradually increasing: in our case better in the third month of the quarter than in the second, and better in the second month than in the first. . .

In case of end-year rush-work, performance in December is higher than that in the following January, or the average performance of the given year. (In the fourth quarter performance is usually higher than in other quarters of the year.)

The following statement is widespread: rush-work or "arrhythmia" as characterized above is unambiguously a feature of socialist economies, while capitalist economies are not affected by it.

Monthly changes in the index of industrial production were registered for 1976 and the first four months of 1977 concerning 14 developed capitalist and 6 European socialist countries. Thus, data on 70 quarters are available for capitalist countries, and on 30 quarters for socialist countries.

It can be seen from *Table 1* that concerning fluctuations within quarters a much more qualified formulation is required than is usual at present. All we can say is that better performances at the end of a quarter are more frequent in the industry of socialist countries than in that of capitalist ones. The same situation can be observed also concerning relapses at the beginning of quarters. But, apart from this general statement,

dispersion is rather considerable within both groups of countries. From among the countries examined the "symptoms" could be observed most frequently in Hungary, since in the five quarters examined she was on the top of the "league table" for rush-work, with four accelerations at the end of quarters, and five relapses at the beginning of quarters.

Table 1

Frequency of rushes at the end of quarters in industry by groups of countries
(percentage)

Group of countries	Third month stronger than second and second stronger first			Third month stronger than first month of next quarter		
	yes	no	total	yes	no	total
Developed capitalist countries	42.8	57.2	100.0	71.4	28.6	100.0
Socialist countries	53.3	46.6	100.0	80.0	20.0	100.0
Together	46	54	100.0	74	26	100
Hungary	80	20	100	100	0	100

Source: Computed on the basis of October, 1977 data of U. N. Monthly Bulletin of Statistics

How permanent a phenomenon is end-year rush-work in Hungary?

Examining the data of state industry, it turned out that output in the last month of the year usually exceeds the average monthly output of the given year. State industry produces 15–25 per cent less in January than in December and this has always been so in the last twenty years.

The most important source of production results exceeding the average in December is that output per worker or employee (performance of workers) is also more than in other months of the year. Between 1957 and 1977, only once was output in December under the yearly average. The most important source is, therefore, increasing performance, but overheatedness affects also such stable processes as employment. Employment in December exceeds the yearly average, while it somewhat diminishes in January.

Incomes in December, primarily in the last decade, are considerably higher than those in January owing to over-fulfilments. For example, the average wage of manual workers in state industry amounted to 3.280 forints in December, 1976, but only 2.939 forints in January, 1977. [2] We do not wish to deal with this fact in detail; it is interesting

from the viewpoint of our topic only because it indicates well the multiplying effect of end-year rush, namely, that not only outputs are higher at such times, but also incomes and therefore purchasing power. The possibility cannot be excluded, for example, that excessive purchasing power induces more active purchasing by trading enterprises, and thereby stimulates industrial production in several branches.

Increases in performance at the end of the year were modest in some years, while considerable in others. In years when foreign trade (more precisely export) activity and investment were brisk, rush-work became sharper. This drew attention to the fact that industrial production had more and less sensitive domains in terms of rush-work at the end of the year or quarter.

Deviations *between individual branches* are rather considerable, for example, several authors called attention to the fact that "arrhythmia" at the end of a year or quarter is greatest in the engineering industry, followed by light industry and the building materials industry, while in the chemical industry, mining and metallurgy production is relatively even. [3]* *Table 2* serves as an illustration of the falling-off of sales in January, 1977 as against the previous month in major industries.

Table 2

Sales in January, 1977 as a percentage of these in December, 1976 in major branches of the socialist industry

Branch of industry	
Engineering	34.2
Mining	76.0
Metallurgy	87.8
Building materials industry	66.0
Chemical industry	74.4
Light industry	64.3
State and cooperative industry excluding food industry	56.3

Source: computed on the basis of data published in KSH Statisztikai Havi Közlemények (Statistical Monthly Bulletin of the Hungarian Central Statistical Office.) No. 8/1977

What can be the reason for the greater than average "arrhythmia" of sales in engineering – and to a lesser extent light industries, and for the stronger end-year

*How stable this order is, is well illustrated by the following statement of a study published twenty years ago: "The extent of rush-work is extraordinarily influenced by technological particularities of the individual branches of industry and enterprises; it is the greatest in engineering and metallurgy, more moderate in mining and the chemical industry and even smaller in the textile industry."[4]

rush-work? In looking for an answer to this question, it is striking that rush-work is more considerable in branches where a significant proportion of sales is for export and for investment purposes. It can be seen from *Table 3* that the share of export is the greatest precisely in the engineering industry, but we also know that nearly two thirds of sales for investment purposes are contributed by this sector.

Table 3
Share of export sales in some industries
(percentage)

Branch of industry	December 1976	January 1977
Metallurgy	31.8	19.9
Chemical industry	25.3	12.7
Engineering	45.5	31.2
Light industry	30.1	14.1
Socialist industry	32.5	17.2

Source: computed on the basis of data published in KSH Statisztikai Havi Közlemények (Statistical Monthly Bulletin of the Hungarian Central Statistical Office.) No. 8/1977

Therefore, the greater than average end-year rush in the engineering industry is not explained by some kind of local negligence or other subjective factors, but by the fact that this branch and also some sub-branches of the light industry are delivering to markets where – for reasons to be discussed in detail later on – there are greater possibilities to "flood" the markets at the end of the year.

The different rhythm of certain markets has the following effect on the structure of sales: at the beginning of quarters, or of a year, the share of deliveries to wholesale and retail trade as well as of domestic industrial enterprises to each other is increasing within the total sales of the industry, while at the end of the given periods these markets give way to foreign trade and to sales for investment purposes. In December, 1976 foreign trade had a 30.2 per cent share in the total sales of state and cooperative industries and the investment market had a 6.4 per cent share. In January, 1977, out of sales amounting in any case to about 60 per cent of those in December, the share of foreign trade was altogether 15.9 per cent and that of sales for investment purposes 1.1 per cent.

At the peak of the rush *all* buyers receive more from suppliers while after the rush they get less; but foreign trade and the investment market receive much more in the rush and much less afterwards than the two others.

Now, if we consider the sales directions strongly affected by the end-year rush, then the extraordinarily strong fluctuation of deliveries for investment purposes can be

explained by the investment process, or more precisely by some features of the handing over of investment projects. In the 15 years examined the total of investments handed over in December has been two or three times the monthly average throughout the year, while that in January amounted only to 20–40 per cent of the December figure. The importance of the fourth quarter is demonstrated by the fact that 35–45 per cent of the projects are handed over in this period.

In foreign trade the end-year rush is stronger in exports than in imports, whatever indicator is chosen. This is presumably related to the fact that Hungary, as we have seen, shows this phenomenon more frequently and intensively than capitalist, and even other socialist countries.

Now, if we consider differences between major foreign markets, then firstly we have to state that they are not important. Looking at these minor differences, rush is unambiguously stronger with deliveries to western markets in the case of exports. As regards imports, though it is true that both rush in December and relapse in January are more considerable in western relations, nevertheless on reflection it seems that fourth quarter imports are basically at the average quarterly level.

On the basis of our present knowledge we can not evaluate these facts. However, we know for certain that this phenomenon has survived in Hungary even after the elimination of plan directives, and not only in exports to and imports from socialist countries where one could refer to the habits of partners which have to be respected. End-year rush-work can be observed also in connection with Western exports and imports, although those selling to or buying from a Hungarian enterprise have no special interest in deliveries at the end of quarters or of the year.

Unfilled orders (backlogs)

The proportion of unfilled orders may contribute to our understanding of the nature of end-year rush-work. This proportion is increasing from quarter to quarter reaching a maximum by the end of the year. From among sales directions the share of backlogs is the greatest with investment and foreign trade sales while it is smaller with wholesale and retail trade deliveries. Therefore, one may say that backlog orders forecast and reflect rush-work and the sectors where rush is stronger than the average.

It is not without interest – and we shall return to this later on – that, although under the effect of end-year rush-work the proportion of unfilled orders usually decreases in January, it never vanishes, and there are always some excess orders. On the other hand, since the level of orders in the first quarter usually amounts already in January to 90–95 per cent of total capacity, this backlog may bring about new rushes. However, statistics provide no answer to the question of why production is decreasing from December to January, if there are deadlines looming up later on as well.

Where is there no end-year rush?

It is obvious from the foregoing that this is not industry, since rush in December and relapse in January can be experienced in all branches of industry without exception. It is more difficult if we try to classify enterprises from this viewpoint. No statistics are available on the output of enterprises in a monthly breakdown in Hungary, so that only evidence obtained from 16 separately investigated industrial and foreign trade enterprises can be relied on.

Apart from a single enterprise, rush-work was described everywhere as a permanently existing phenomenon. The foreign trade enterprises transacting the export of 60–100 Hungarian industrial enterprises mentioned hardly any industrial partner where this phenomenon did not appear – at least in export deliveries. Therefore, it is not at the enterprise level of the national economy that this phenomenon disappears. For example, in the time series obtained from an engineering enterprise in Budapest the specific fluctuation we were looking for can be clearly seen, though the degree of fluctuation is considerably less than experienced in several other places.

Table 4
Rhythm of the production of finished goods in an engineering enterprise
(output in million forints)

Month	1975	1976	1977
January	73	46	108
February	106	116	139
March	162	218	234
April	71	107	146
May	183	141	264
June	170	203	256
July	99	86	156
August	125	153	173
September	160	177	207
October	81	131	
November	168	220	
December	180	263	

Source: enterprise report

In a foreign trade company exporting engineering products there was an underfulfilment by 19 per cent on December 10, 1977 with regard to the planned yearly turnover and on December 19 the plan fulfilment was by then 92 per cent, that is, 10 per cent of the yearly plan were exported from the country in ten days. Another foreign trade company had always realized 35–40 per cent of the yearly turnover in the fourth quarter and half of this (i.e. about 20 per cent of the yearly turnover) in December.

Hearing such data and information one should necessarily raise the question of how far this unusual regularity is characteristic *within the enterprise,* in the production process. A statistical approach to this problem is possible through the examination of individual *products,* since the same products are manufactured by several enterprises (though Hungarian industry is characterized rather by the fact that one product is mostly manufactured only by one enterprise). We could not and did not even intend to examine several hundreds or thousands of products manufactured in industry. Our sample is much more modest: only products of the engineering industry especially exposed to rush-work have been considered, and even among these only those which are ranked by statistics as "more important products". We have examined how frequently rush-work at the end of quarters or of a year was experienced among 31 important products of the engineering industry in 1975–1977. Outputs of the 31 products and groups of products, regarded as important were taken into account in 26 cases in physical units of measurement (piece, tonne, etc), while in the other five cases in terms of value (forints).

Even superficially reviewed the 31 important products showed a rather varied picture. On the one hand, extremely strong end-year rushes could be found, while on the other there were several products for which the well-known curve of rushwork did not appear, though it might have been expected under the conditions of mass production. A good example of the former is the manufacturing of milling machines, where in 1976 out of the total yearly output of 260 machines 114 were finished in December; an example of the latter is the manufacturing of gas heaters where output is gradually decreasing after the November peak quite until March.

It should not be forgotten that we are examining engineering, which most frequently reproduces rush-work and "arrhythmia", therefore, variety and extremities are not self-evident. As it can be seen from *Table 5* we find not simply variety, but that rush-work at the end of quarters and of the year, which is general in this branch – and presumably also in the enterprises belonging to it – occurs with the important products manufactured here much more rarely, since at this level considerable forces are working against "arrhythmia".

The percentages presented in the table are especially interesting because in the same period there was not a single "irregular" quarter contradicting the previously given criteria of rush-work, nor any weaker performance in December than in November, nor any stronger performance in January than in December either in the engineering industry or in its sub-branches.

Why is this unanimity decreasing and even disappearing in the case of physical quantities? The answer cannot be found on the basis of the previous table, but an important fact can be observed, namely that the "rush-sensitivity" of products or groups of products accounted in kind or in forints is not the same. In fact, the latter are groups of products (e.g. office equipment) consisting of several hundreds of products.

Rush-work appears more in production measured in terms of forints than in performances recorded in physical units of measurement.

Table 5

Frequency of rush-work at the end of quarters and of the year with important products of the engineering industry

Form of accounting	Percentage		
	of cases when		of "normal"* quarters
	December was stronger than the previous month	January was weaker than the previous December	
Physical indicator	61.5	80.7	36.9
Value indicator	100.0	100.0	72.0
Altogether	67.7	83.8	42.5

*Definition of "normal" quarters see page 38.

Price losses, increasing costs

A Hungarian industrial or foreign trade enterprise has several reasons for trying – if possible – to avoid end-year rush, or that at the end of quarters. This may be disadvantageous from two viewpoints: on the one hand, costs are higher than the average and on the other hand prices are lower.

Let us consider firstly the factors leading to lower than usual western export prices. This is no easy task since quantification or even an estimation of price losses suffered because of end-year rush are almost impossible. Thus, the problem is not that product prices would be higher, as a rule, in October or April than in December, though this, too, has occurred. This refers especially to products made, for example, for Christmas, but delivered by Hungarian enterprises only after season, so that they will be put into circulation – if at all – only in the next season. It is much more characteristic that Western buyers are well aware that if Hungarian enterprises determine the term of delivery in a quarterly breakdown, then this often means that goods are massively "dumped" at the end of the given quarter. At such occasions buyers may choose between two kinds of tactics: 1. they try to get Hungarian contractors accustomed to being more punctual, 2. Hungarian partners are charged with the costs of stockpiling of goods arriving less punctually.

Further price losses and often even the loss of a market may result from not fulfilling terms of delivery stated in this way, which are considered on western markets to be rather loose anyway. As an experienced foreign trade agent said: "We have always been reckoning with this and various sections (of our firm) take this into consideration. I knew that if industry had given 30th of March as a delivery date, I would have to tell our buyer 30th of April. Even so, I was often wrong."

At the time of shock-deliveries at the end of the year the number of complaints and claims is also incresing. This is connected partly with quality control being not so strict in many places at such times, and partly with losses caused by transport congestion. However, the consequence will always be the same: subsequent price reduction, penalty, refunding of expenses, return of certain items.

We come then to the cost-increasing effects of end-year rush-work. Among them, the extraordinarily great amount of overtime increases wage costs. It is likely that the cost-increasing effect of overtime is by no means so important anymore – especially in production – as it was 10–15 years ago. This is because overtime is already planned in advance owing to permanent labour shortage in many places; more precisely, plans can be fulfilled only if a definite number of overtime hours is allowed. From our viewpoint this means that there remains less possibility for *extraordinary* overtime at the end of quarters or the year.

On the other hand, the possibility of cost increases caused by transportation at the end of the year has not diminished. Although the transport system usually accomplished less freight ton-kilometres in December than during the autumn peak, this does not mean at all that there would be no rush-work in transportation at the end of the year. Although freight ton-kilometres well reflect the performance of the entire railway and public road transport system, they indicate nothing concerning the turnover *on individual lines.* All enterprises examined complained without any exception that transportation circumstances are worse than the average at the end of the year. As a head of a transport department stated: "It would be good if nothing had to be transported in December, but things are piling up."

Those ordering transportation at such times are faced with several difficulties. Usually there are not enough wagons and trucks available. There is such a shortage in wagons that enterprises are queuing up for them with the railways and obtain vehicles according to a list of priorities which never disappears, but keeps changing. There was an enterprise that obtained altogether 30 wagons instead of 70 requested at the end of 1977, but even worse proportions are not rare.

The enterprise's problem is by no means solved even if it managed to obtain an adequate number of wagons and trucks, since after this goods must still cross the border and get to the buyer. Because of the rapidly increasing traffic some border stations and ports are regularly closed in December and do not receive new cargo at this time.

If the exporting enterprise cannot arrange transportation on the usual or most favourable route, then it is realized not through the overburdened CMEA railways and ports, but through the railways and roads of Western countries instead.

If this is not possible either, or if the end of the year is already very near, then it is mostly not the route, but the means of transportation that is changed, that is, instead of by railway or truck goods are transported by air. At this time, traffic is increasing at the Ferihegy (Budapest Airport) office of the forwarding company MASPED. They obtain usually 60–70 consignments a day, but from the end of November 1977 onwards the following situation could be observed:

November 30th – 87 consignments
December 1st – 114 consignments
December 3rd – 250 consignments
December 4th – 319 consignments
December 6th – 410 consignments

Are exporters rushing to the transport agencies at such times perhaps because later on, in January or February goods would be even more difficult to forward to the buyers? According to our experience this is not the case. At the beginning of the year the transportation organization is not only "recovering" and setting its administration in order, etc., *but could undertake even more,* since considerable capacity reserves are accumulating.

Planning and programming – under conditions of material shortage

There is no direct connection between planning, production programming and end-year rush-work, and even if there is some, this is unambiguously a "negative feed-back", since these activities are aimed precisely at ensuring continuous production and realization. Therefore, a presentation of the planning process and *an analysis of deviations* between programmes and actual production results may also help us in understanding the nature of "arrhythmia". *Direct* reasons for end-year rush will not be found in the course of the description or examination of these activities. It is much more likely that impressions will be gained in this way about the *back-ground* of the phenomenon we are interested in.

There are only a few management activities in Hungarian industrial enterprises that are based on such permanent organization and established methods as planning and production programming. Enterprise managers have learnt the techniques of planning under the control system based on plan directives. During this long period, not only the method and organization, but with most enterprises also the objectives of planning and programming have been rather exactly predetermined (or preordained).

Let us consider some characteristic statements: "The initial level is examined, and more is demanded". "People would like to live better, they want more wages and profits. A precondition for this is that output be at an adequate level. We are interested in having such a plan."*

In other words, such plans have to be drawn up, and one has to work so that wages of workers and other employees of the enterprise should increase, at least to the same extent or more than in other enterprises of the trade or of the local labour market. Otherwise, labour will leave the enterprise, or it will not come to the enterprise which in

*Excerpts from interviews (with a head of production department, a chief engineer of a cooperative).

many cases amounts to the same thing. In order to avoid this, sales returns have to be increased to such an extent that efforts to increase wages can be satisfied from them.

There are also some other factors inducing enterprises to strive for a continuous, and even accelerating increase of revenues. This is stimulated, for example, by the "growth ideology" inherited from the past, but also by the personal ambitions of leaders and by several elements of the regulatory system, too. It is not our task to evaluate this phenomenon: we take this "expansion drive" as given. It has to be noted, however, that this is a specific market expansion followed or brought about by a proportionate or even faster growth in the volume of output.

Why do enterprises try to attain their goals first of all by increasing production? The answer to this question is in most cases that they could not choose any other path even if they wished to, since capacities of the enterprise are committed for a long time in advance. Most Hungarian enterprises have orders already in January covering about two thirds of their yearly capacity. When we asked in autumn 1977 for what term the enterprise could undertake deliveries the answer was in most cases that 70–80 per cent of their 1978 capacity had already been committed, and the plan for the first half of 1978 had already been "fully covered". It was not uncommon either that a considerable amount of orders had already been obtained even for 1979. The situation is similar also for foreign trade companies, where the information was given that 80–90 per cent of the turnover plan for the next year was covered, but there were also some enterprises which in 1977 had already made important contracts for 1980.

Therefore, enterprises are choosing the path of growth not only because they are forced to by wage competition and the labour situation, but also because the demands of buyers usually exceed or more precisely outrun their production possibilities. This is also indicated by the proportion of *stocks of finished goods* in industrial enterprises.

Stock of finished goods were insignificant relative to the volume of production in the industrial and foreign trade enterprises examined, while there was no production for stock at all. One of the enterprises had a stock of about 12–13 million forints-worth of finished goods, compared with a yearly output of about 220 million forints. The overwhelming part even of this originated from "waiting", that is, when big series were not yet ready or not all elements of the assortment required by the customer came off from the assembly line. With another enterprise of the machine building industry there was a stock of finished goods of 30–40 million forints against a yearly turnover of 1000 million forints. The bulk of this was made up of products exhibited at fairs that could not be sold on the spot, or resulted from errors when a few more pieces were manufactured than planned. In this enterprise there were very strict rules in force even for this small stock of finished goods. (Finished goods must not be kept in stock for longer than three months and nothing must be left in the factory by the end of the year.) Enterprises are also opposed to holding stocks of finished goods, mainly after 1968, because their accounting is made at so-called "reduced" prime costs. This means that not only are they not earning profits, but also overhead costs cannot be allocated to them, so that the latter costs are charged to other products which will therefore earn lower profits.

Whether we consider the insignificant stock of finished goods or orders committing capacities for one and a half or even two years in advance, sellers are in a comfortable situation. It may seem that they may begin planning on the basis of reliable information and start detailed programming of production on the basis of these plans. Planners do try to prepare plans which are reliable from all aspects.

First, loosely compiled programmes are elaborated 6–9 months prior to the planned production. In this preliminary plan the quantity to be manufactured is included, rather than the order of production. As compared to this the operative, quarterly programme made 30–60 days prior to the beginning of manufacturing is much more precise. In principle everything is in order in it: it is precisely described, broken down to factories, plants, workshops, and even to persons, what should be produced, with what tools, materials, what wages will be paid for it, etc.

On the basis of the foregoing there is nothing surprising in this, since it is natural that an enterprise knowing the requirements of buyers and usually having advantage over buyers in the bargaining process should dispose of plans elaborated so thoroughly. But how can it be explained that plans and programmes have to be regularly modified one or two weeks prior to the beginning of production, and what is more, even when production is going on?

In enterprise parlance it is said: the programme has been upset. At such times "the degree of readiness of the product is 80–90 per cent and then it is laid aside for one or two weeks until the missing things for its completion are obtained", a head of a production department said concerning this problem. "At such times something has to be omitted from the programme, this brings about losses, new documents and work card have to be filled in", it was said somewhere else.

It was pointed out in a big precision engineering enterprise that overall plans are fulfilled proportionally to time, but there is a lag as regards the product distribution of output.

Instead of products included in the programme something else will be produced: "Plans are fulfilled as regards volume, but the products manufactured are not the same as envisaged by the programme." Spontaneity of production was indicated there by specific concepts: "We have changed over to *continuous planning.* At present planning changes even in the course of its execution, and adjusts during the year to production possibilities, market and purchasing possibilities. Of course, there are also stable elements within this. Furthermore, without permission of the department no production above the plan may take place. If some more important market is lost, plans *are modified.* Besides, there exists also plan supplement and sometimes we speak about permission to produce above the plan," – the head of the economic department at a big precision engineering enterprise said.

Foreign trade enterprises are usually prepared for this phenomenon: "we always expect this, departments take this into consideration, there is always some 'reserve' in the export plan. Luckily, there are many partners, so that if one drops out it is replaced by another. Since our people have been in this job for a long time already, abundant

experience is available concerning capabilities of the industry and expected delays. If there is underfulfilment in one section of the department, the two others are making extra efforts, because departments try to fulfil the plan." (head of department at a foreign trade enterprise.)

A head of a department for business management formulated it in the following way: "If the programme is upset because of lack of materials, something else has to be delivered. Then spare parts or components may be delivered instead of finished products. If this is not possible, we examine whether other plants have superfluous products that could be rapidly delivered. Buyers are usually glad of forward deliveries, especially concerning spare parts."

The latter quotation is especially remarkable since it refers not only to the reason for the disruption of programmes, material shortages or the unreliabilitiy of cooperation partners, but also to the fact that *programme modifications have no unfavourable consequences for the enterprise on domestic markets or on those of other socialist countries, since buyers are glad* if they obtain the required goods at all. The situation is different on Western markets, where Hungarian suppliers may lose their markets if they deliver considerably sooner or later than required. However, such failures have no considerable consequences if deliveries to the West have only a relatively small share in the total turnover of the enterprise.

Before continuing our examination let us consider for a while the problems related to purchasing materials, which make programmes and production plans unrealistic and cooperation difficult. The phenomenon can be well explained on the basis of the foregoing "since in the case of excess demand almost all enterprises are in a monopolistic situation in their role as suppliers. Buyers are forced to take notice of this. There are other occasions when they become suppliers and do the same. This behaviour results from the fact that all suppliers are simultaneously buyers, too, and in this capacity they are also forced to order in advance, for long terms of delivery, often even without knowing specified production tasks." [5]

An enterprise enjoying advantages as supplier, and having adequate foresight in that respect, is certainly not in the same situation as buyer, and has to consider its purchasing conditions as an *almost unforeseeable circumstance.* The most frequent reason for its being defenceless is the extraordinarily *long term of delivery.*

It is not a rare phenomenon on Hungarian markets that delivery is undertaken only with an 18-month lag, but the shortest period between placing the order and the arrival of the consignment is at least three months. There were many cases when materials and semi-finished products required for 1978 had to be ordered already in the first quarter of 1977. The situation is not better concerning imports from other socialist countries. Terms of delivery of 12–18 months are not rare here either, but we have heard also about suppliers requiring that orders be placed two years ahead and with at least a 90 per cent exactness. Thus most enterprises – mainly in manufacturing industry – *are forced to*

order several spare parts and components at a time when they do not know the demands of their buyer-enterprises at all, or only partly. *

One of the possible consequences is excessive purchasing of materials with a view to safety, resulting in large material stocks. Among these there is an especially great amount of "bad stock", unused spare parts, etc. Another consequence is – and this is more interesting for us now – that by the time the enterprise is informed about the exact requirements of the buyer it is no longer able to satisfy them quickly, even if it has spare capacity. Since – as we have seen – there are hardly any finished products in stock, the enterprise may only have a slight hope that it will be able to purchase all the parts and components required for fast delivery.

This may thwart first of all western business. It was mentioned in a foreign trade enterprise that the export of a product in very high demand has been taken up also by a domestic industrial enterprise having capacity troubles. The "big seller" of the western world is delivering usually within 7–8 months, while the Hungarian enterprise undertakes delivery only in 24 months, which is unacceptable for its eventual customers. When reasons for this were examined it turned out that the effective production time was only 6 months with the Hungarian enterprise, that is, somewhat shorter than with the great rival, but while the term of delivery of components was 18 months in Hungary, the western firm could obtain immediately.

The enterprise's problems are still not nearly solved, even if it succeeds in diminishing uncertainties resulting from long terms of delivery of materials by proper market research or a conscious increase of the stock of orders. For example, it is a frequent and serious concern that sellers *deliver less than the amount ordered.* Reasons for this – if there are any given at all – are various. There was a case when the material ordered was directly delivered to the western market; sometimes the delivery of a smaller quantity than expected was explained by the importance of supplying consumers. Whatever explanation is given, the customer can usually only do one thing, namely change the production programme and start producing something for which materials are available. **

Buyers at the mercy of sellers are not only forced to accept long terms of delivery, but even *roughly determined intervals of deliveries.* Suppliers undertake usually quarterly, but often even half-year terms, so called "form... to ..." deliveries, that is, it is up to them on which date they deliver within the quarter. What is more, they stipulate the right of forward delivery in the contract and deliveries are accomplished earlier than the fixed terms, as a pleasant or unpleasant surprise.

It was a general opinion of the enterprises examined that difficulties of materials supply are insignificant as against problems of cooperation. As one of our interviewees

*"Producing enterprises demand preliminary orders well before the delivery date (90–120–210 days ahead). They confirm orders only immediately prior to the delivery date; thus customers are kept in a state of uncertainty during this long period."[6]

**This is not always the case, because enterprises may eventually obtain materials on such occasions also by exchanging them between each other. This exchange, called "intra-branch assistance", is often an efficient way of eliminating shortages.

put it: "Materials can somehow be obtained through exchange, but the behaviour of cooperation partners cannot be influenced by us at all."

The greatest problem with cooperation is to find a partner: "Products manufactured in cooperation are small items but they are required by almost everyone. It is very difficult to place orders for them, because enterprises do not greatly welcome them" – a head of a production department said.

It is a further problem – as with material orders – that partners do not deliver despite having confirmed acceptance of the order. This may occur even if the party "ordering cooperation" provides the material and machines required for production, since not only the consigner, but also the partner has staff difficulties. It is counted among the better cases if delivery is accomplished, but behind schedule, or if it is on schedule, but not of the quality ordered.

Because of uncertainties of material supply and insignificant stocks of finished goods enterprises try to gather as many orders and materials as possible. *However, by collecting more and more orders they are simultaneously increasing uncertainties of material supply and cooperation concerns for other enterprises. All enterprises are in an emergency situation. As sellers they try to "sell" their entire capacity as soon as possible, but this behaviour, if it becomes general in the economy, simultaneously also increases the uncertainty of enterprises when they appear on the market as buyers.* On the basis of all this even a large stock of orders cannot be regarded as a sign of merit in Hungary at present, neither as a sign of favourable market conditions, but much more as a factor necessary for the survival of the enterprise. Enterprise behaviour, the pursuit of a permanent and relatively rapid growth of production volume, has once again to be judged differently. It is brought about directly by high and never satisfied market demand. (Remember that there always remains some backlog of orders!) However, we should also bear in mind that the uncertainty of an enterprise, which is at the mercy of monopolistic suppliers and itself has no buyers queuing in adequate numbers, may be so great as to endanger its very existence. In other words, it holds also for the enterprise that "forced growth" and "suction" can be traced back to a considerable extent to common motives, they mutually reinforce each other and even the direction of their effects coincides". [7] Increase in volume is, therefore, a condition of survival of enterprises, but according to our experience this state alone is far from sufficient for a smooth and undisturbed adjustment. At such times the entire system of management is inelastic, while there is more and more improvisation within enterprises.

And so we have come back to the real topic of our paper, that is, to rush-work at the end of the year and of quarters.

Stimulation, reporting, assessment

We have come back to rush-work and stoppage but we still have not found direct reasons for them. Processes and phenomena described in the previous section only created the conditions for a permanent reproduction of rush-work and "arrhythmia". We can also

describe it in the following terms. Consider an enterprise without stocks of finished goods and having trouble with material supply, which has to queue in its capacity as buyer, but makes its own buyers also queue, and furthermore whose production plans and operative programmes are usually upset; in short, an average or rather typical enterprise. *In this case, the unreliability and disorder are sufficiently great for the output of products to become arrhythmical at any time.*

In the enterprise examined – and this is likely to be so in the entire Hungarian industry – premia and bonuses are not given for the realization of one objective, but for the simultaneous achievement of several objectives. In most cases also regular production is among these objectives, but it is not clear where it is ranked in the order of objectives. Nor is the order of objectives and requirements the same within the enterprise and with the supervising authority. Let us consider firstly the order *within the enterprise.*

With industrial enterprises where there is an end-year rush the primary goal of financial stimulation is the accomplishment of the production task prescribed in the plan, in terms of value. On such occasion plants and workshops are given tasks stated in terms of value: for example, they have to manufacture finished products with a value of 200 million forints in the first quarter, and managers will receive premia if output reaches or exceeds this amount. Of course, the system of internal stimulation prescribes the fulfilment of a detailed programme in which it is prescribed in a daily or weekly breakdown what has to or, more precisely, ought to be produced, and in what distribution. Merely fulfilling the programme in the rhythm prescribed is, however, not enough in most enterprises for obtaining the premium if it is accompanied by an under-fulfilment of the sales plan; what is more, this may even lead to losing the premium. Therefore, the task is formulated in reality as follows: "it would be good if you could produce rhythmically, but if this is not possible, then you should accomplish the forint plan" (the head of the business management department at a big industrial enterprise).

With these enterprises "the situation is the same as in the old mechanism, the plan is broken down by factory units. Recognition and premium can be obtained if sales plans are fulfilled. The task of the unit is to create stocks of saleable goods." (head of business management department at a big precision engineering enterprise). "It is considered a good result if we deliver and money comes in. Everybody is interested in the volume of sales receipts. This refers also to smaller production units." (Head of production department at a medium-size engineering enterprise).

Factories or workshops interested in the fulfilment of the sales receipts plan are forced towards the end of the quarter and of the year, to produce something for which parts are available at all, especially if parts required for several products are missing or the cooperation consignment does not arrive in due time. "If material needed for something arrives and we begin work on it, this upsets the scheduled programme. But, if buyers hear that deliveries will be accomplished not in the third, but already in the second quarter, they will only be glad," as one of our interviewees (chief engineer of a cooperative) said.

It seems that the explanation as to why the production of several articles showed no periodicity or rush-work within the quarter can be found in this phenomenon. It could

be seen that fluctuations in the manufacturing of several products of the machine building industry were rather occasional. Roughly formulated: they were produced when it was possible to produce them. In this case factories and workshops, *forgetting about production rhythm, choose that combination of products with which the sales receipts plan can be most easily fulfilled.* This, at the same time, creates the precondition for the emergence of another cycle. Thus, when rush-work occurs, performance is increasing in most places to a varying degree in the different units and production phases. Assembly sections experience a bigger rush than those manufacturing and supplying parts. As a production manager put it: "Fluctuations result from the fact that everything is made ready at the end of the quarter in order to fulfil plans determined in forints. As a consequence, stocks are exhausted, and thus at the beginning of the quarter it is parts that are manufactured, *since there are not enough of them."* (My italics, M. L.)

The same phenomenon was formulated by András *Bródy* more than two decades ago in the following way: "Factories achieve the output of products at an accelerated rate by 'robbing' the stock of unfinished products (this terminology, which precisely described the situation, had been created by practice). The rate of production of individual factories and branches of industry will be the smoother, the less possibility they have to apply methods which cause a dangerous distortion of production processes." [8]

That is why rush-work is followed by problems of capacity utilization primarily in assembly shops and workshops accomplishing the last production phase. "At such times assembly shops have to be given special tasks" – while "in the machine shop there is always enough work, but in an assembly shop change-over is already made more difficult if there are material shortages or something happens to be missing." (Head of a production department, in a medium-size machine building enterprise.) In this phase the gathering together of parts is one of the primary tasks of production management. (Let us remember that the weight of deliveries of industrial enterprises to each other is always increasing within sales at the beginning of quarters and of the year.) At the same time the performance of considerable groups of workers is also decreasing. In January workers in many places only carry out maintenance work and tasks under guarantee, and there is more downtime than average, as well as forced or voluntary holidays, too.

With foreign trade enterprises, the shortest accounting period is not the quarter, but the year. Sales departments and sales agents are interested in the fulfilment of yearly turnover plans. Probably this also partly explains why rush-work is stronger than the average in foreign trade – or rather exports – since sales agents know what they have to fulfil already at the beginning of the year, but they usually increase their efforts in the second half of the year. Then they make inquiries with industrial enterprises more frequently and try to "export saleable goods" from their partners.

In the introduction to the present study rush-work was described as a phenomenon appearing and reproducing itself "in spite of everybody". We must now refine this formulation: although a considerable part of those concerned feel the elimination of "arrhythmia" to be desirable, under the coercive effect of circumstances they act in such a way that rush-work and subsequent relapse become unavoidable for themselves and also for others.

Therefore, an economist wanting to solve this problem could also raise the question in this way: if end-year rush is directly connected with the fulfilment of the sales receipts plan, then its elimination is not too difficult a task: managers of factories, plants and workshops have to be made interested, not in the fulfilment of plans prescribed in forints, but instead in the exact realization of the production programmes presented. Without giving up the descriptive approach of our papaer, this standpoint has to be disputed. Namely, a premium for regular production can be efficient and stimulating only together with other conditions. We have visited an enterprise where the premium for regular output introduced several years ago could not be paid out even once. In other words, should the realization of impracticable tasks be stimulated by whatever premium, workers will be indifferent to this, since there is very little chance of their ever obtaining this promised premium.

"Expectations" of the highest authorities

"Arrhythmia" and the laxity of delivery discipline are of the same age as the Hungarian planned economy, and are causing permanent troubles for the centres of economic control and management, which try to find a solution by various measures from time to time. It seems, for example, as if the advice of an imaginary clever economist had been followed when in the Ministry of Metallurgy and Engineering enterprise managers were made financially interested in the accomplishment of a predetermined (monthly) proportion of performance within quarters in 1976. At first, this prescription had an *obligatory* character, while at present it is only a guideline. As one interviewee put it: "It is merely a pious wish at present. We have immediately torpedoed it, saying we are not a bread-making factory".

Without underestimating the inventiveness or influencing ability of enterprises, we believe that this still has not been the reason why sectoral and functional ministries do not take rhythmical output so seriously any more. Their other viewpoints of evaluation, often contradicting the former, have been more important recently.

Enterprises ranked the checking of stocks by the National Bank of Hungary every quarter and half-year most frequently among the factors acting against rhythmical production. Before so called stock-taking days – often coinciding with the last day of the quarter or half-year – (i.e. at the end of rush!) – enterprises do their utmost to get rid of that part of their stock characterized as superfluous. If the increase in stock is classified as *permanent* by the Bank at the time of checking, the source of the increment of circulating assets required for financing it will be the development fund of the enterprise, which decreases the scarce investment or wage-increasing potential.

To avoid this unpleasant situation enterprises try to minimize their purchases before stock-taking days ("no trucks were let in"*), while putting everything possible on

*Extract from an interview in a machine building enterprise industry with a programming clerk.

the market. Not only stores of finished goods are emptied, but cases are even known of products being delivered to the customer semi-finished. Since domestic enterprises are more reserved than usual as buyers at such time – they prefer to face shortages for some days or weeks rather than surpluses. The most important way to get rid of goods is export.

Being aware of all this, there are many enterprise managers inclined to blame mainly the National Bank of Hungary and the system of stock management for "arrhythmia" and rush-work. However, for the sake of objectivity it has to be mentioned that since the stimulating of exports to the West has come to the fore in Hungary, the Bank has somewhat eased its previous rigidity.

The prescription according to which the Bank finances only such production for which orders are already available is not kept so seriously, either. Credits are already granted also for production for stock, but only to enterprises usually having no sales difficulties. We have heard also of a case when the action of the Bank was aimed precisely at overcoming the shortage psychosis. For example, credit was granted to an enterprise trading in means of production to buy up frozen stocks. Export to the West has been promoted by several allowances as well. Refunding of interest on credit should be mentioned here; furthermore, that if there are inadequate development funds the necessary increment in circulating assets is financed by the Bank, in some cases even if the loan to be repaid is not supported by documents.

We do not wish to deny the connection between the system of checking on stocks and "arrhythmia". But we believe that it is not only the banking system among the central authorities of economic control and management that increases "arrhythmia".

Deliveries or forward deliveries of quantities prescribed in plans by the end of the year or of quarters are explained by many experts by the strengthening of the so-called "base approach".* Here, however, a distinction has to be made between two things: one is rather a problem of accounting techniques, while the other is already connected with the measure of enterprise independence.

It is a matter of accounting practice that the balance-sheets of enterprises have to be drawn up according to their situation on January 1st (or January 20th). But, there is no simple financial technique, which can detect on the basis of these balances what taxation and wage conditions an enterprise may expect, which will strongly influence the competitiveness and liquidity of the enterprise for at least a year. Thus, according to the rules at present in force, deliveries can only be considered as real exports when they have been given outward clearance by the customs authorities. The domestic forint value of the exports will be credited to the account of the enterprise by the Bank only when it is in possession of this licence. The consequence is that at the end of December most foreign trade enterprises, and industrial enterprises with foreign trade rights, dread that because of a few days' delay they will be unable to fulfil the plan, or more precisely,

*i.e. that every performance is compared to some base over which an increase is expected – ed. note.

cannot produce the result that they consider advantageous for the determination of the "base" for the next year.

The so-called "base approach" is different in nature when the supervising authority, usually the sectoral ministry, prescribes for the enterprise – or, which is equivalent, makes the premia of managers dependent on it – by how many per cent turnover and other indicators of production, above all the volume of exports to the West, have to be increased. "For example, the enterprise head office adapts itself to the so called action programme of KGM (Ministry of Metallurgy and Engineering). This contains technological development projects and profit prescriptions that are of obligatory character" – we heard in an engineering enterprise. At another place it was formulated less diplomatically: "It is a prescription and guideline of development in the case of exports that the enterprise should raise the plan by 6 per cent, but there are also special expectations within total exports concerning exports to the West. At present there is no special premium payable on exports to the West, as there was previously. The main point at present is how much wage funds are allocated by the ministry in return for a given result."

The situation is similar also in foreign trade. One of our interviewees formulated it characteristically as follows: "In the future prices obtained will also be important, while up to now it has been only volume that counted. But this is also how the enterprise is measured. Our superior in the ministry says "you should provide 64 million, but you will be nice boys if you bring 68 million." (Commercial director of a foreign trade enterprise.)

The consequence is well-known in Hungary: plan bargaining reappears and spreads whenever the enterprise restrains its efforts: "It is expected that exports to the West will be increased. This is a matter of bargaining. Enterprises are asked how much they will contribute, and when they propose an amount, it is said to be not enough and they are asked to contribute 1.2-times as much." Therefore, enterprises keep reserves, while their supervising authorities try to mobilize these reserves by extraordinary incentives. This is done usually towards the end of the year which then, if successful, increases the end-year rush: "Since there is no reserve in production, the Ministry of Foreign Trade announced at the end of the Five-Year-Plan, that those bringing in some more exports will be given extra premium. The concomitant end-year rush led to the bad start of 1976." (Economic director in a medium-sized precision engineering enterprise.)

Experienced enterprise managers already count on special stimulation during and at the end of the year. "It is conceivable, that such a premium is given by the ministry, but this is usually initiated by the enterprises. Managers of producing enterprises come to us and undertake to earn some more million dollars by their utmost efforts. But, as they say, their efforts cannot be compensated under the present conditions. We usually accept this argument because it is worth our while. But we are not initiators, there are 6–8 enterprises regularly coming to us at the end of the year." (Head of department at a ministry.)

Therefore, sectoral ministries and the National Bank of Hungary are through their present activity accentuating rather than mitigating rush-work at the end of the year or

quarter, and thus also the "arrhythmia" of production. Some factors in foreign trade are further strengthening this phenomenon. Among them enterprise behaviour at the time of "stock-taking days" has already been mentioned, namely that enterprises are delivering on such occasions to foreign customers instead of the domestic ones. Another factor is that the conclusion of interstate agreements and thus also the fixing of delivery quotas are dragging on until March or April. The resultant delay "shifts" exports to the second half-year and requiring greater efforts at that time anyway.

Can rush-work be avoided?

As we have already shown at the beginning of our paper, less rush-work can be observed at the end of quarters or of the year in capitalist economies than in Hungary. It can be added furthermore, that even if there is some rush-work its extent is much smaller than in the Hungarian industry, as regards either acceleration or relapse. Our interviewees at various enterprises reported similar impressions, adding immediately that under the conditions prevailing there, they could also avoid rush-work.

What are these circumstances, to be found in capitalist economies but not in Hungary? Firstly, it was mentioned that suppliers on the capitalist market can satisfy demands of buyers within a short time since they have considerable stocks of finished goods and also capacity reserves.

What is the situation with Hungarian exporters? "Over there, stocks are minimized through the use of computer programmes. Department stores are very keen on that, calling in small items and working with minimum stock. They are afraid of carrying stocks, so this function falls on us, stocks are with *our agent.* Big Japanese firms also have consignment stores in the FRG and thus they are able to deliver on schedule. Our enterprise *prefers storing there* in the given situation. If we could store at home, costs in DM could be saved." (Head of department at a foreign trade enterprise.)

A Western industrial enterprise – in a typical case – puts hardly any effort into materials purchasing, while it is likely to have a much smaller stock of orders than a Hungarian industrial enterprise. While the Hungarian enterprise is looking first of all for materials and parts on the market, in capitalist countries the objective is to find buyers.

It is not our task to compare the two basically opposed adaptation processes, but the specific "arrhythmia" we are interested in can be better avoided where the industrial background can be relatively rapidly created with the aid of reserves of finished goods and capacity, than in the Hungarian economy where a rough form of adaptation (capable of undertaking only "from. . . to . . ." delivery terms) has developed. Deliveries on time and abundant supply make the work of production programmers easier, less modification is required, and even if it becomes necessary, it will not bring about such unavoidable consequences as in Hungary.

Also, the forms of economic control by the state and of the banking system are different there from those in the Hungarian economy. The form of stock control introduced in Hungary is hardly known in capitalist economies; in granting credit the entire economic situation of the enterprise applying for credit is examined, and not only some elements of it. "Capitalist banks do not 'earmark' money, but examine almost exclusively the enterprise's financial standing", according to an official of the National Bank of Hungary. "They are only examining if what the enterprise says is economically correct". On the other hand, stockholders or other organizations supervising the activity of the enterprise are ready to "tolerate" less profits then previously, what is more, even to undertake the disadvantageous consequences of losses for several years if they are convinced of its justification. In other words this means that even if there is annual reporting, this is not such an important event there as in the contemporary Hungarian system of economic control and management.

As regards checking by taxation agencies, even if these take place annually, in most countries calendar years are not insisted upon; instead they accept a so-called fiscal year, whose dates can be determined within rather wide limits.

Under the different Hungarian circumstances it is more difficult to realize rhythmical production. On the basis of the foregoing, rush-work at the end of the year and quarters can be eliminated with the joint or individual existence of the following conditions:

1. if the stock of orders is so big that enterprise capacity is engaged for a considerably longer period than delivery terms of materials;

2. if the enterprise can make itself independent of the delivery conditions usual in Hungary;

3. if the enterprise is forced to accumulate reserves in finished goods or capacity and, in order to accomplish deliveries rhythmically, these "locks" are opened and closed, respectively.

Several forms of the case mentioned under point 1 have been found when collecting material for the present paper. In a big chemical enterprise first of all a long-term interstate agreement concluded for 3–4 years as well as participation in a central development project ensure that material orders required for the otherwise not too complicated products be placed in due time. Their task is made easier by the fact that the bulk of materials is purchased on western markets and thus the competent director may order according to the internal schedule.

End-year rush has been eliminated also in a precision engineering enterprise where, though the stock of orders was not too big, materials required for the products already manufactured for some time with unchanged production methods could be ordered with relatively great security. "With this product, manufactured for decades, there is no problem with material supply; purchasing agents are 80–90 per cent sure of what should be bought for manufacturing them, without knowing what type it actually is." It is characteristic that in the case of another major group of products including several hundred types and sub-types in the same enterprise and "sold so to say with retail trade

methods" there are permanent troubles with material supply. Here "plans have to be given to the purchasing department before we even know what type is requested by the buyer." (Head of an export department at a medium-sized machine-building enterprise.) The consequence will be the usual "arrhythmia" and rush, mainly in export.

Though the tactics and situation of the two enterprises were in many respects different, since one of them "extended" the stock of orders, while the other diminished uncertainties of material supply by manufacturing a traditional product, they still show a lot of similarities. At both places rush-work has been eliminated with *relatively simple* and technologically settled products, but it is not certain that their receipe could be used in dynamically changing industries and commodity markets.

The most frequent way of successfully manufacturing new products is subcontracting-work for the West or cooperation, where the beginning and the end of the flow of products are with the Western partner. In the case of subcontracting, not only does the material arrive on a predetermined day, but also the technology and machines required for production are supplied so that delays can be caused only by the labour force. From the viewpoint of rhythmical production such "islands" are really welcome, but their number cannot be multiplied without limitation for reasons of economic goals and policies not dealt with here in detail. The situation is the same with products based on materials imported from the West.

It has already been indicated that an important buyer requiring deliveries very punctually for a definite day or week is a serious disciplinary force, especially with enterprises where export to the West is not a marginal part of turnover.

It is a source of several conflicts and difficulties that domestic, socialist and capitalist markets demand different degrees of punctuality. As could be seen, because of problems of material supply the formulation of production programmes begins very early, but usually the western buyer would not take this into account. Let us consider a typical problem of a production manager: "The western partner indicates demands rather loosely, while requiring delivery within 40 days from the date of announcement. Only a prognosis is given, but this is mostly not realized and accordingly, orders arrive late from the viewpoint of our enterprise. Here we have quarterly programmes for which we are prepared, but their practice does not fit into ours. Western businessmen justify this practice on the basis of market circumstances, saying that this is usual there. And we accept these conditions because export for dollars is important. This has to be taken as given, the enterprise can be competitive only in this way." (Production manager in a medium-sized engineering enterprise.)

Therefore, the enterprise accepts the conditions, but in our case exports to the West scheduled according to the demands of buyers increase rush-work with other deliveries: "Our buyers say that if we do not accept their conditions, they will go and buy elsewhere. But this upsets the production process. If they ask for some change, this will exhaust our reserves, but people have to be paid, since here almost everybody works according to norms. On such occasions something has to be taken out of the programme." (Head of sales department in a medium-sized precision engineering enterprise.)

Contracts stipulating the day or week of deliveries are undertaken by Hungarian enterprises primarily on western markets. This is indicated by the fact that the very small stock of finished goods is reserved for this market. Thus, production for stock, as we have seen, is strongly limited by stock control, so that enterprises are working with small stocks, and even so a considerable part of these is made up of materials and not of finished goods. In such a situation some enterprises form "illegal" capacity reserves, if forced to it by their buyers. Plans drawn up for authorities who determine regulators, taxes and supports as well as prescribing tasks, are looser than internal ones. The difference between the two plans will provide, with luck, a reserve which can be mobilized. Let us take a characteristic case: "With us the basis of planning is capacity but, between you and me, the factory could disclose even more than this capacity, the enterprise has some more reserves. Sales plans are based on the stock of orders available and the production plan adds to this about 15–20 per cent. The so-called programme is even stricter; the difference between the various items is shown by the following figures: production plan – 100, programme – 130, sales plan – 80. In the plan a so-called "others" item is included containing production not contracted yet and this will be redistributed among production areas." (Head of sales department in a medium-sized machine-building enterprise.)

This enterprise has thus formed a specific capacity reserve, since by fulfilling sales plans which are in the "shopwindow", receipts and profits necessary for survival are attained, while in case of a favourable business possibility capacities can be rapidly enlarged. It has to be noted, however, that this favourable situation may be attributed not only to experienced managers, but also to technological potentialities. Thus, semi-finished products can be relatively rapidly transformed into finished goods, or semi-finished products sold as spare parts. Thus building up the stock of semi-finished products does not entail any special risk. Where this is not possible, such reserve-building is much more risky and therefore it is not undertaken.

Conclusions

What can be the explanation for the phenomenon that in the Hungarian economy, functioning basically without plan directives, and within it mainly in industry, the amplitude of the particular "arrhythmia" has not decreased, but even increased?

Many observers indicated that the survival of rush-work was probably connected with certain changes in the economic structure. Since the 1968 reform, for example, the share of more complicated products requiring greater cooperation has increased within total production. These processes took place, however, also in economies where there is neither rush nor standstill. This means that the process strengthens the rush-sensitivity of the industry only if rush-work exists at all.

The situation is the same concerning the relationship between rush-work and changes in the size and thus the inner structure of enterprises. The development of

enterprises in Hungary has been rather one-sided during the last 30 years, amalgamation has prevailed as against the foundation of small enterprises. This process has continued, and what is more, even become stronger occasionally even after 1968. Not only has the number of big enterprises increased in this period, but parallel with this also the number of control levels. Although it is true that a hierarchical enterprise organization is ideally suited to stricter accountability, and thus may strengthen rush-work and relapses, control levels multiplied also in countries where there is no sign of the specific fluctuations in which we are interested. Therefore, this structural change does not explain the maintenance or strengthening of rush-work in recent years, either.

It is more appropriate to raise the question of *what has not been eliminated after 1968,* what phenomena connected with rush-work have survived the reform, or found new forms, in this period.

In our paper these phenomena were divided into two groups. The first one included forms of reporting and *directly producing rush-work,* as well as certain elements of the economic regulators; while the other group included market situation, and the survival of sellers' markets, constituting *the background and medium* of rush-work.

After the reform profits have become the most important indicator of success in the life of enterprises instead of plan directives. Those who prepared the reform had believed that the market situation would determine the share of receipts remaining with the enterprise, i.e. profits would thus determine the position and expansion possibilities of the enterprise. *The success of an enterprise would thus be measured by the market* (indirectly in the incomes of the collective) *without measuring it in the centres of economic control and management,* e.g. in sectoral ministries, or *without specifically examining success or failure at that level.*

In this world as imagined by those who prepared the reform, production would be planned and programmed in the enterprises on the basis of market demands, ignoring the previous sacred accounting and reporting dates. As against this concept, when looking for the causes of rush-work we have found that profit not only indicated the position achieved on the market, and thus possibilities for development, to enterprise managers, but (similarly to previous indicators of plan control) it has become an indicator of success recorded by superior authorities. Ministries require the same reports on the management of enterprises, and within this on the development of profits, as they did previously on the fulfilment of plans. Profit is not only a means of control but also a viewpoint of financial and moral judgement of managers; furthermore, its measure also determined – through certain conversion formulae – wage-increasing possibilities and the amount of capital available for investment. Therefore, profit is "two-faced", just as is the entire system of economic control and management. It reflects not only the market position of an enterprise, but is at the same time also a measuring tool for assessment by authorities.

This duality is no chance event, since it is not only decisions of enterprise managers made on the basis of market impulses which influence profits, but also resolutions of central agencies of economic control and management on production and sales referring to the enterprise. Industrial authorities prescribing the yearly growth of production or

export cannot be regarded as exceptions any more in the contemporary Hungarian economy. Joint decisions of ministries and enterprises, and for the expectations of ministries, are usually aimed at the manufacturing of quantities measurable in physical units, and the realization of concrete market transactions. If these expectations, or hidden or open commands, reduce profits and thus impede the undisturbed running of the enterprise, then the surmounting of difficulties is ensured by subsequent correction, by *"ex-post"* financial regulation.

Whether profits manipulated in this way or production and export plans defined in physical units of measurement are the means for evaluation of the enterprise by superior authorities, the fixing of reporting dates is unavoidable in this system. If there is periodical reporting, then accomplishments promoting "good impressions" will increase prior to the set dates, and alternating periods of rush-work and stand-still will develop and be reproduced.

Not only the survival, but also the *strengthening* of rush-work is connected with the changing role of profits. Profit, as a tool for enterprise evaluation, had the original function of indicating market conditions; but it also reacts more sensitively to viewpoints of evaluation outside the market than its predecessor, the plan directive. If, for example, the criterion for ranking is the amount of profit remaining with the enterprise, then even a relatively small change in it may considerably influence the volume of production and thus the intensity of rush, too. In fact, under Hungarian circumstances the increasing amount of profits must be accompanied by a proportionate or even faster growth of production. On such occasions everything has to be manufactured that is possible at all, among them also products with a relatively small profit content, in order to attain the expected and prescribed increase of profits.

Thus, the direct reasons for rush-work have survived also after 1968. It has also turned out from previous sections of the study that evaluation procedures are concomitant with rush-work only in a specific state of the market, in a determined structure of enterprise relations. Let us see how this background has changed following 1968.

The reform did not affect the basic elements of the system of inter-enterprise relations. Furthermore, competition began to develop only on the market of a few goods, and on the market of most products sellers dictate conditions to buyers. From this it follows that enterprises as buyers are at the mercy of their suppliers, while in their capacity as sellers they make their own buyers queue. And buyers have to maintain their forced relations with their suppliers also because there is hardly any possibility for competiton from imports and furthermore because there are no superfluous stocks of finished goods on domestic markets, nor capacity reserves. Considering these phenomena, it is often argued that the centres of economic control left the institutional system of the economy, and within it the system of inter-enterprise relations, practically unchanged in 1968, for example in the interests of a smooth transition or for some other reasons. However, why have shortages and concomitant phenomena, namely, queuing and the accumulation of orders, not been eliminated by the everyday activities of enterprises in meeting market demands?

It is not enough to refer only to the undoubted prevalence of monopolistic positions here, since there exist also economies where monopolistic positions are not accompanied by shortages but by excess supply. It seems that this did not take place because for an enterprise *obliged to report to higher authorities, seller's advantage and buyer's disadvantage are more beneficial than a state of equilibrium or of buyer's advantage.* This is not simply because supervising authorities ask them first of all not whether and how they have met the requirements of buyers, but if products important for the ministry have been manufactured in adequate quantity, or if the required level of profits and sales receipts has been attained. Even this may be enough for the requirements of buyers to be pushed into the background, and for the state of market equilibrium not to come about. Still, we would like to draw attention at this point to the fact that accountability is at the same time also the most important reason for shortages, and that the direct reason for *rush-work is itself at the same time also a factor in the reproduction of the background and medium of rush-work.*

To put it another way, in the case of equilibrium or excess supply accountability would no longer make sense, since for what could the enterprise be brought to book, if excess capacities were available? Perhaps for an increase of output which is no longer required by buyers? However, let us suppose that the supervising authorities still tried to "collect" those indicators important to them from the enterprises. If this were so, the enterprise would get into a very difficult situation, since the well-known tool of upsetting the production programme could hardly be used in order to meet expectations, because it would thereby risk losing the goodwill of its buyers and some of its markets. On the other hand, the increase of production for production's sake would lead to increasing stocks and thus to the loss of a part of profits, in precise opposition to the goals of those carrying out the evaluation.

In other words, the stronger the sellers' market, queuing, and accumulation of orders, the easier it is to satisfy the changing criteria of obligatory reporting to the authorities. The enterprise obliged to report builds up reserves in part from orders, so that in case of necessity the desires of the ministry can be satisfied by selecting from these orders.

Therefore, as long as accountability exists, there is little hope that the rough adjustment procedure presented in this study can be replaced by a more refined one.

For this it is undoubtedly necessary, but not sufficient to eliminate or at least mitigate material shortages, for example by means of freer import than at present. It would probably strengthen the effect of partial excess supply created in this way if more capacity reserves were available in the Hungarian industry than at present, perhaps in those enterprises where the market encourages high capacity utilization. At first, only enterprises competing with each other are forced to do so (manufacturers in a monopolistic situation may consider whether to hold reserves of capacity or orders). The multiplication of such situations, however, can only be expected from a system of economic control and management where accountability would be replaced by a neutral control limited to major processes of the economy.

The repetition of rush-works and standstills would not disappear from one day to the next even under such conditions. Norms and business habits developed in the system of plan directives would hardly change at once. This state is conserved by the very fine network of personal relations which is of primary importance for the enterprises under contemporary circumstances, and where the stability of contacts among people would, at the same time, also slow down changes in habits.

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ШТУРМОВЩИНА В КОНЦЕ ГОДА В ВЕНГЕРСКОЙ ПРОМЫШЛЕННОСТИ И ВНЕШНЕЙ ТОРГОВЛЕ

М. ЛАКИ

Тридцать лет спустя после национализации и десять лет спустя после реформы управления народным хозяйством выяснилось, что штурмовщина в конце года (квартала) продолжает оставаться «упрямым» явлением венгерской экономики, регулируемой без применения плановых директив. Все это происходит несмотря на то, что субъекты экономической жизни (предприятия и органы управления) считают штурмовщину и ее последствия (потери в выручке на внешнем рынке, дополнительные затраты, ухудшение качества, затруднения с транспортировкой и т. д.) безусловно вредными и подлежащими искоренению.

В первой части статьи определяется сфера экономических явлений, где систематически наблюдается штурмовщина в конце года и кварталов. Затем на основе сравнения отраслей и видов деятельностей выделяются факторы, которые обостряют и смягчают штумовщину, а также те участки экономики, в которых нет этих своеобразных колебаний. Далее рассматривается практика разработки производственных программ и планирования в условиях дефицита материалов, поскольку ее неизбежные неточности вызывают последующее грубое приспособление, что и является основой, общим фоном штурмовщины.

Далее перечисляются те виды контроля и отчетности, которые в подавляющем числе случаев являются непосредственными причинами штурмовщины. Заключительная часть статьи рассматривает нетипичные участки и пути, которые могут вывести субъектов экономической жизни из порочного круга штурмов и затиший.

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J. TIMÁR

ABOUT COMMUTING*

After a clarification of the notion and interrelations of commuting the study reviews the data on commuting in Hungary. Relying on their analysis, it points out one of the roots of problems deriving from commuting: the relative backwardness of transportation.

Using novel empirical methods the author compares the transportation relations affecting commuting in six countries and establishes the order of the latter from the viewpoint of development level of transportation.

Beside migration commuting is a major type of regional mobility of the economically active population. In the case of commuting people take a job in some settlement outside their domicile and regularly commute between the work place and home, that is, they are commuters. It follows that the main criterion of the generally accepted notion of commuting is the *crossing of the administrative border of the domicile.* Some commuters go daily to their work place while others, though much less of them, maintaining a permanent home do not return there but periodically, mostly for week ends. The ratio of these "long distance commuters" was 2.9 per cent of all employees in the state and cooperative industries in Hungary at the end of 1977. In this paper the term commuter will be used always for those *travelling to their work place in a settlement other than their domicile, and returning home day by day.*

The regional mobility of labour is motivated mainly by the structural transformation of the economy and especially by the process of industrialization. Industrialization upsets the relative harmony established in earlier economic-historical stages between the domicile and the place of work. As a necessary consequence of the conserved settlement structure adjusted to the conditions of agricultural production, more and more of the labour force seek and find employment in settlements outside their original domicile.

The main channel of the territorial flow of labour is from villages to cities or from smaller cities to big ones. *As to its volume* this flow is determined *by the rate of transformation of the economic structure* and *as to its direction by the industrial development level of settlements and areas.* The flow is enhanced by the original substantial differences between rural and urban demographic conditions. The fertility and natural increase of the rural population are for quite a long time much higher than those

*In the research work on which this paper is based I was helped by Jenő *Kohlinger* in transport computations and by Pál *Majoros* in processing the literature. I should like to take the opportunity to thank for their contribution.

of the urban population. Thereby the agricultural regions become relatively "overpopulated" which in turn works towards migration and commuting.

In later stages of development new factors come to the foreground. The importance of *supply of settlements with services* increases in the territorial flow of labour and in this context *in the choice between the alternatives of migration or commuting.* In settlements where the basic supply of the population (with commercial network, schooling, health care, etc.) is inadequate and where transport connections are also unfavourable, the migration of people and especially of younger generations accelerates. Beyond a certain limit this becomes a self-accelerating and irreversible process leading to the total depopulation of some settlements.

The development and higher standard of supply with services and especially of the transport conditions of the settlements, on the other hand, work against migration and at the same time increase commuting.

Last but not least, on a higher level of industrial development the traditional trends of labour flows are partly reversed by the more and more distressing living conditions, pollution, and a number of other factors prevailing in big cities and in industrial agglomerations. As a new symptom, migration from industrial centres into their zones of agglomeration increases *whereby the commuter traffic to centres is growing.*

Commuting in Hungary

In Hungary, during long decades of capitalist industrial development, only a small fraction of the labour force was commuting. Because of the slow rate of industrial development the development of the commuter traffic *was neither necessary nor practicable.*

As a matter of fact, commuting as an up-to-date and mass phenomenon related closely to industrial development *was evoked by the first big wave of socialist industrialization.* As a result of this process in 1960 more than 1/7th of the total economically active population and 1/5th of the non-agricultural earners were commuting.

The rate of commuters was especially high in transport and in the construction industry: on average every fourth of these employees went to work by commuting. The *development of transport* played an important role in that. Besides, a special role has been played up to now by the conditions of and changes in *housing supply.*

The direct cause triggering commuter traffic is the scissors between the territorial distribution of work places and of the residence of the population, i.e. of labour, which opens wider and wider along with industrialization. Again, the territoral distribution of population is directly related to the territorial *distribution of housing stock.* But this latter structure did not change appreciably at the beginning of socialist industrialization in Hungary, for in the stage of stepped-up industrial development housing was *ab ovo* relegated to the background vs. industrial investments. Characteristically of the state of affairs of the times, in spite of the poor heritage as regards the housing stock and the

heavy war damages to it, the yearly rate of home building between 1949 and 1954 did not exceed the rate of the thirties but slightly.

Regional distribution of the housing stock was thus *conserved* by the low building rate and by the regional distribution of construction and this in itself *enhanced* the role of *commuting* as a way of mastering the misfit of the regional distributions of work places and manpower.

The second major wave of commuting took place in the 60s. Between 1960 and 1970, the economically active population increased by a mere 4.5 percent, while the number of commuting labour by almost 60 percent. The number of commuting women increased at a partycularly high rate, amounting to 130 percent vs. 40 percent of men (see *Table 1*).

Table 1

Number of commuters in 1960 and 1970 and distribution by sex

	Index		
	1960	1970	1970/1960
Total number of commuters (1000 souls)	636	993	156.1
of which:			
men	518	718	138.6
women	118	275	233.0
Total number of commuters in percentage of economically active population	13.4	20.0	–
of which:			
men	16.9	24.6	–
women	7.0	13.4	–

The distribution by age of commuters did not change appreciably in this period. Young age was and has remained to be characteristic. From all active earners only 1/3rd are younger than 30 whereas nearly half of commuters are younger than 30. Young women represent an even higher percentage.

Neither has the distribution of commuters by sectors of economy changed much since 1960: then and now too, *nearly half of all commuters* were and are employed *in industry* and another significant part in the construction industry and transport. The ratio of commuters is naturally not this high in sectors where the regional distribution of jobs is better adjusted to the settlement pattern than in the case of the industry, in the construction industry and in transport *(Figure 1).*

In the course of development the increase in the number of non-manual commuters was higher than in that of manual workers. The difference is, however, still considerable: each fifth manual worker while only each seventh non-manual worker is commuting.

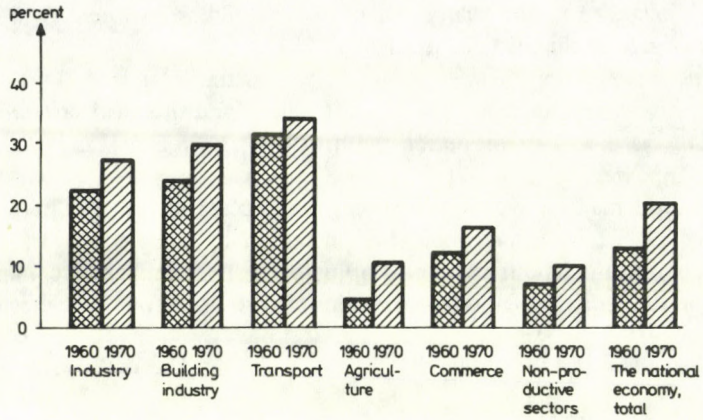

Fig. 1. Ratio of commuting labour in percentage of all active earners in sectors of the economy in Hungary, in 1960 and 1970

It follows from the nature of commuting that the ratio of people travelling from the capital and from other cities is very small (2 percent and 7 percent, resp. of commuters) and that round 90 percent of the commuters going away to work are rural inhabitants *(Figure 2).*

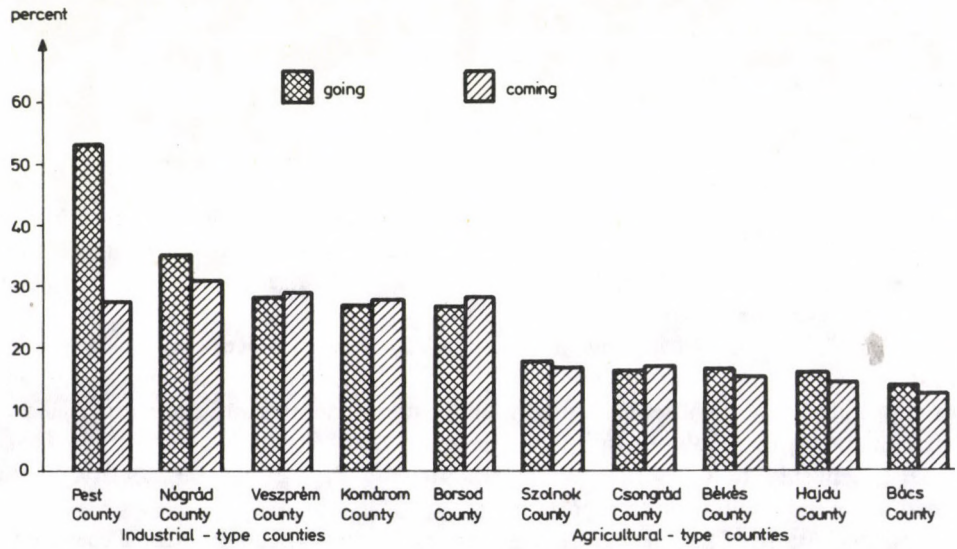

Fig. 2. Ratio of going and coming earners in percentage of resident earners in some industrial and agricultural counties in Hungary, in 1970

The difference between the territorial structures of settlements and of work places is illustrated by 1970 data, namely that at least 40 percent of the resident active employees go to work to another settlement from half of all the villages.

It follows from the above that a significant part of active employees in Budapest and especially in other cities are commuters. From industrial employees every fifth one in Budapest, every fourth one in other cities and almost every second one in county seats is a commuter.

These factors have influenced the development of the commuter movement of the last decade not exactly in the same way as earlier. Transformation of the economic structure has remained the major motive of the territorial mobility of labour. However, in the 1960s there was a considerable decrease in the number of agricultural workers and the growth of employees in the industrial and other non-agricultural sectors was somewhat slackening. At the same time, the old reserve labour resources were gradually depleted in the cities. Thus the industrial-urban areas were in still worse need of the labour resources released from villages and especially from agricultural areas.

Still, the "permanent" *internal migration of the population decreased* at a slower rate and the "temporary" migration decreased abruptly.* This tendency is correlated with the fact that under the first 15-year housing plan (1960–75) the number of flats built in the first half of the 1960s was not much more than in the second half of the 1950s and this kind of housing construction, too, contributed to conserving the old settlement structure.

Thus, the housing stock of villages increased at a far higher rate than the national average, i.e. by 7.4 percent, even though the population of villages decreased by 5.6 percent in the last decade because of migration. *The housing standards improved in villages much quicker* than in cities and especially than in industrial centres with a big surplus of immigrants.

By 1970 permanent migration of the population slowed down even more and particularly in the capital, while the balance of temporary migration fell to minimum, what is more, in certain regions temporary migration began to take the opposite direction: from cities to villages. Here, in addition to the aforesaid, the shift in relative earnings to the benefit of agricultural work as well as the location of rural industries whereby industrial jobs were transferred to or near to living areas also played their roles. As a result of this development in 1970 half of the non-agricultural workers were eventually living in villages and the ratio of resident active workers was practically the same in the capital, in other cities and in villages. [3] All these factors explain *the rapid growth of commuting in the 60s* from various aspects.

In the 1970s there was a turn in commuter traffic. The exhaustion of labour reserves in rural areas as well as new trends in the transformation of industrial structure and, in particular, the stagnating and even slightly decreasing numbers of industrial

*By "permanent" migrants Hungarian statistics means those who transfer their permanent domicile from one settlement to the other. "Temporary" migrants are those who move for an indefinite period to another settlement while maintaining their permanent domicile.

employees necessarily put an end to the 20-year growth of commuter traffic. According to latest statistical data the number of commuters hardly increased from 1970 to 1979 and even this increase originated entirely from the growing number of commuting women *(Table 2)*.

Table 2
Number and distribution by sex of commuters in Hungary, in 1970 and 1979

	Index		
	1970	1979	1970/1979
Total number of commuters (1000's)	993	1047	105.2
of which:			
men	718	702	97.7
women	275	345	125.4
Total number of commuters in percentage of economically active population	20.0	20.6	–
of which:			
men	24.6	25.9	–
women	13.4	15.3	–

The correlation between the new trend in commuting and the changes in economic structure is also indicated by the considerable decrease in the number and ratio of commuting industrial workers during the 1979s. The number of commuters in the building industry and in transport increased only proportionally to the total staff in the two sectors. the volume and rate of commuter traffic increased appreciably only in commerce and agriculture.

The considerable slackening of internal migration and the reversing direction of temporary migration, i.e. the appreciably decelerating increase in the number of commuters are specific of the nation-wide changes in labour market conditions, of the exhaustion of free labour resources and of the general escalation of global labour shortage.

Judgement of commuting

In this new situation the role of commuting has gained even more in importance, especially from the aspect of satisfying the labour requirements of industrial and infrastructural centres. Commuting also has a not negligible influence upon housing supply and especially on the easing of urban housing shortage. Therefore social and economic interests are attached to preference for commuting when decision is made between the alternatives of commuting or migration in cases when the distance between the place of

work and the place of living is within the span of 30 to 60 minutes, a travelling time considered generally reasonable for commuting, and when urbanization of the settlement is a realistic possibility.

The above formulation shows the *outstanding importance of transport* in commuter traffic. *A commuter measures distance in space in terms of time. Fast and comfortable transport* is an essential factor of commuter traffic, and the latter one is becoming a more and more important requirement.

The – mostly sociological – literature treating commuting, however, explicitly or implicitly *disapproves of the commuting of labour.*

If one makes a comparison e.g. between the situations of commuting and resident workers then in most of the cases of course one finds the commuters to be relatively at a disadvantage. However, the need for and the perspectives of commuting are often assessed in a biassed or wrong way on this ground. The volume of commuting is found to be "extremely enormous" [4], its spreading is attributed to the lag of urban housing construction in the first place [5] and a quicker and greater centralizing of the population is asked for [6, 7].

In their discussion of the situation of commuting workers most authors place first the boosting of urban housing construction, the *settling of commuting workers* and the strengthening of the process of "agglomeration" [8]. Improvement of the transport conditions is rather neglected in comparison to the above and it is actually not considered as a task in every treatise [9].

These approaches are probably related to the assumption that though commuting is an expedient and right thing but chiefly for its being indispensable as yet, necessitated in Hungary by the actual standard of production, by the actual labour market conditions and the given technical and productivity conditions or other similar factors [10, 11, 12]. These otherwise correct and justified approaches, however, have the more or less common trait that commuting is considered by them to be essentially a transient symptom and that a new harmony between the domicile and the place of work should come about after some time and that would reduce the current mass phenomenon of commuting to exceptional and individual cases.

This, as a rule only implied, approach finds support in the opinion sometimes claiming that in Hungary the rate and volume of commuting are excessive, that this is a *"country of travellers"* and because of the errors and shortcomings of development commuting "will play a bigger role in Hungary also in the future than in many other countries." [13, 14].

In an abstract approach it is an irrefutable fact that the rate of commuting would be down if a big amount of urban flats were built quickly and if housing supply in industrial areas were substantially improved. On the other hand, *immigration would parallelly* increase and this would only retard the accomplishing of the task to be attained.

Under the given conditions in Hungary it is and in a foreseeable future it will be absolutely necessary to maintain the present high rate of urban housing construction and

even to increase it. But this is necessitated in order to *improve the housing supply* of the contemporary population in the first place as well as of the *urban population* who keep on increasing even with a slackening rate of immigration, and not by the need to reduce the number of commuters and to settle them near to the work place.

Coordinated studies of the labour supply of large towns and transport conditions have shown that approaching the work place takes similar amount of time for a considerable part of workers as does commuting. In big cities the distance between the domicile and the place of work is often not less, whereas in case of idential distance travelling time is often longer – because of crowdedness in cities – than what is spent by commuters.

If approaching the workplace still does not have as grave individual and social implications in big cities as commuting between settlements, this is mainly owing to substantial differences in transport conditions. The first advantage of urban public transport over longdistance transport is mainly its frequency. Therefore, *a worker travelling from one end of the city to the other spends much less time on waiting relative to running time than a commuter does.*

At the same time it is indicated by fragmentary statistical information that there is nothing unusual in the rate commuting has attained in Hungary; the volume of commuting is *more or less similar in countries which are economically more advanced and which have substantially better housing supply.*

Let us quote for example that the ratio of commuters in the economically active population amounted in 1970 to 20.6 percent in Austria having a structure and size rather like Hungary's, to 24.2 in Bavaria (15) and 32.0 percent in Czechoslovakia (16), while in Hungary this ratio was then 20.0 per cent and 20.6 percent at the beginning of 1979.

Finally, let us point to the earlier quoted finding, i.e. that in countries with the most advanced economies and with the highest standards of urbanization the important change is shown not by the intensity of commuting but, partly, by its *reversed direction.* Part of the people crowded in city centres move from the deteriorating living conditions of the centres into the agglomeration zones of cities or part of the people migrating toward industrial and infrastructural centres settle immediately in little cities surrounding the borders of large ones and go from there to work. Striking signs of this process are the urbanistic aspirations of the last decade or two, the building of "sleeping cities" and "satellite cities" as new-type settlements surrounding urban-industrial centres.

But these symptoms and new trends of development imply that commuting should be *as lasting and necessary a form of movement* as migration of the population. In order to strongly reduce the negative symptoms accompanying commuting and to relatively level out the situations of workers residing in the settlement and of those commuting between settlements not only the essential living conditions must be improved in the domicile. *So must transport conditions, to eliminate the wast differences now prevailing in the time and conditions of going to work of people living inside the settlement and of commuting workers crossing settlement borders.* As already noted, it emerges from most

of the studies analyzing living and access-to-work conditions of commuters that one of the causes of the disadvantageous symptoms and impacts is the length of the commuters' travelling time, the neglected vehicles and the profound insufficiency of equipment for comfort, especially in rail transport. The only thing missing from the details of the critiques – except for a few cases [17] – is their failing to point out the importance of *frequency.*

The role of transport

Not even the best development of transport conditions can substitute for a substantial improvement in housing and, likewise, the promoting of housing construction cannot be regarded as an alternative to commuting. *Improvement of transportation and balanced development of settlements* that can be reasonably linked through transport into the circulation of social and economic development as well as the economical location of workplaces are not substitutes for but *complementary trends of development. Combined and complex development maintain the mobility of labour together with the processes of migration and commuting,* but may well reduce the inconveniences to individual and to society.

The *possibility* of commuting is *ipso facto* determined by the existence or non-existence of rail or road transport between the domicile and the workplace. The lack of this condition which is now taken for about granted used to play an essential role in Hungary all over the long stage of building out the *transport infrastructure:* it used to enhance migration on the one hand and to restrict commuting on the other.

For 10–15 years after World War II there had been still many villages in Hungary which were far from the railway network and without bus lines, some of them even without well-built roads. It was achieved only by the late sixties that 99 percent of settlements were connected to cities and other settlements in the country with dustfree roads and regular bus lines beside the less extensive railway network. Not considering now the comfort of public transport, transport in Hungary *does not only make possible today to commute betwen settlements but also affords the alternatives of migration or commuting and a choice between kinds of transport.*

Railway and bus traffic operate parallelly in many settlements. From the 1970s on the alternative of bus or private car also entered the scene. The surging development of non-public bus transportation* was a new and striking symptom of the 1970s. Characteristically, in 1978 the performance of public long-distance buses was 12.7 million passenger-kilometres as against round 10 million passenger-kilometres performed by non-public buses of companies and cooperatives (against 1.9 million in 1970).

There are, however, *material limitations* to the spreading of cars as means of commuting. Especially important is the striking difference between the costs of commut-

*With buses owned by the factories employing the workers. (Ed. note.)

ing by rail, bus or car and this difference is more likely to keep increasing than not, with predictable oil price trends in the foreseeable future. This is why one of the *most typical differences between the transport structures of Hungary and western countries on similar level of development is in the rate of using personal cars.**

If we set out from the aforesaid postulate, i.e. that commuting is a normal phenomenon not only in industrializing countries but also in industrially advanced ones then it becomes the main problem of the relationship between commuting and tranport whether the objective circumstances of this natural phenomenon are also "normal" or not. The main points we mean are the correspondence of travelling conditions with the country's socio-economic development level and whether commuting does not put the commuters between settlements at a substantial disadvantage vs. those going to work within the settlement.

Studies were already carried out to compare the transport infrastructures of different countries. However, such global analyses do not provide direct information as to the commuters' travelling conditions and circumstances. Comparative studies concentrated on commuting could not be found in the rather scarce literature. Bearing this in mind, tentative studies were made of agglomeration zones of a rural industrial centre in each of three socialist and three advanced capitalist countries. Weighing up the requirements of relative comparability the following countries, i.e. agglomeration zones were covered:

Hungary	– Győr
Czechoslovakia	– České-Budějovice
GDR	– Erfurt
Austria	– Linz
Switzerland	– Winterthur
Italy	– Udine

Here we have to omit description of the applied method. We only note that the comparison of railway and bus traffic was carried out considering the number of lines belonging to the agglomeration zone; scheduled distance, number of stops, different indicators of running speed, and intensity indicators based on frequency of service.

According to several indicators relating to the comparison of the railway transport of commuters and by the main indicators chosen as representative of the transport opportunities of commuting, the ranking of railway transport circumstances of commuters took the following shape *(Table 3)*

The justified reservations following from the tentative character of the methodology of comparison notwithstanding, it may be inferred that there are rather considerable differences in the transport conditions of commuter traffic in the six agglomeration centres under study and that the *conditions of commuting by rail are much more*

*Public transport fares are low because they are heavily subsidized. (Ed. note.)

Table 3
Ranking of commuters' transport conditions by rail

Country (zone)	On basis of			
	No. of all stops	Corrected running time	Intensity of connection	Summary score
Switzerland (Winterthur)	3	1	1	1
Austria (Linz)	1	2	3	2
GDR (Erfurt)	2	4	2	3
Italy (Udine)	6	3	4	4
Czechoslovakia (České-Budějovice)	4	5	6	5
Hungary (Győr)	5	6	5	6

disadvantageous in Hungary, that is, in the region of Győr, than in Winterthur and Linz topping the list.

Naturally, the statistical methods will be hardly suitable to analyze the comfort of travelling which is predominant from the point of view of commuting circumstances. But if we accept the professional opinion of transport experts and add to it the relevant sections of the Hungarian literature on sociology and especially publicists' writings as well as – from another side – the mass experiences of tourists going abroad then it may be quite clearly established that the *comfort of Hungarian railways and especially of workers' lines is far behind that of other countries.*

In spite of the decrease shown in the number of commuters by rail during the last years in Hungary commuters and people travelling by rail are still in the order *of hundreds of thousands and of millions,* resp. Moreover, examples of many countries show how early it was to hold a funeral oration over the railways in the 1950s. Through general modernization, railway transport regained ground in several countries already before the energy crisis. The *present renaissance of railway transport* opens up new vistas. Fast and comfortable railway transport could successfully rival not only with private vehicles but even with buses and especially in commuter traffic. *Railway transport can offer more advantages* than other means to utilize the travelling time whether for having a rest or for entertainment, learning or cultural purposes.

Thus it stands to reason to study more closely the development opportunities of public railway transport also from the aspect of commuting, even if the financial conditions do not appear to be available in a short term.

A comparison of bus transport was carried out by a method similar to the said one but in lack of data only four zones were covered. The following was found (see *Table 4*).

In Hungary the standards of bus transport are much better than the conditions of commuting by rail. This difference is further increased by the fact that the international

Table 4
Ranking of commuters' transport conditions by bus

Country (zone)	On basis of			
	No. of all stops	Corrected running time	Intensity of connections	Summary score
Hungary (Győr)	1	1	2	1
Austria (Linz)	2	3	1	2
Czechoslovakia (České-Budějovice)	4	2	3	3
Switzerland (Winterthur)	3	4	4	4

comparison was made only of public vehicles while in commuting also not regular means and especially not regular bus lines play a role and their share is particularly high in Hungary. However, the ranking computed on the basis of the aggregate scores of rail and bus transport is scarcely modified by that.

Table 5
Summary ranking of rail and bus transport

Austria (Linz)	1
Switzerland (Winterthur)	2
Hungary (Győr)	3
Czechoslovakia (České-Budějovice)	4

The above comparisons inform about the "transport technical" conditions of commuting. In the course of the study these were set against the demand for commuting (on the basis of the absolute number of commuters) also involving the other means of transport into the study. In lack of data this comparison could not cover more than three agglomeration zones, namely, Győr, Linz and České-Budějovice. This part of the analysis – which, considering the more general objective of our study, shall not be scrutinized here – affirmed the otherwise trivial inferences drawn from the comparison of national transport conditions. For illustration's shake it is noted that while in the agglomeration zone of Győr only 2.7 percent of the commuters used "other" means, this figure was 47.5 percent in the zone of Linz. In lack of local information it is concluded on basis of national data that in the Győr zone the share of motor scooters was higher and of cars was lower from this small number of "other" vehicles. In the Linz zone the majority of commuters go by car. Otherwise, this fact also indicates that the transport conditions of commuters in economically advanced countries *are much more advantageous than what is expressed by the comparison of rail and bus transport standards,* in part because – apart from costs – it is a great advantage of private vehicles that they reduce the total travelling time, including time spent on waiting, to minimum and in part because public transport is

not so crowded on this account. That is, commuters there enjoy much better comfort in public transport even in the case of identical technical parameters.

This tentative international comparison of transport conditions of commuters also underlines the conclusion that it is not the phenomenon of commuting that is negative, but the disadvantageous circumstances are negative in which *commuting, an essentially positive socio-economic process,* is taking place. The improvement of the situation of millions of commuters demands a powerful development of village infrastructures and in particular, of the more directly influential transport, especially of public transport by rail.

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О МАЯТНИКОВОЙ МИГРАЦИИ

Я. ТИМАР

В начале статьи дается определение понятия маятниковой миграции населения между местом работы и местом жительства как одного из основных типов территориальной мобильности, рассматриваются истоки этого явления в общественно-экономическом развитии. Затем приводятся данные, характеризующие развитие маятниковой миграции населения в Венгрии за прошедшие три десятилетия быстрой индустриализации. На основании статистических данных, автор анализирует основные особенности этого явления, состав населения, относящегося к этой категории, а также рассматривает это явление с точки зрения обеспечения рабочей силой отраслей и регионов. Автор указывает, что быстрое развитие маятниковой миграции в 70-е годы постепенно замедлилось, его характер и роль изменяются.

Автор не согласен с часто высказываемыми в венгерской литературе взглядами о «чрезвычайно высокой степени» распространения этого явления, подчеркивающими его негативные стороны и высказывающимися за его ограничение. В противовес такому подходу, в статье указывается на неизбежность возникновения этого явления и на его исторически позитивную роль, а также на то, что на основе международных данных масштабы распространения этого явления в Венгрии не слишком широки. По мнению автора, справедливо критикуемые негативные социальные последствия маятниковой миграции в первую очередь являются следствием того, что развитие транспорта отстало от общественно-экономического развития в целом. Для подтверждения этого автор, применяя особый метод, сравнивает транспортные условия шести стран с точки зрения маятниковой миграции. Он констатирует, что среди шести анализируемых стран железнодорожный транспорт Венгрии стоит на последнем месте. Однако степень развития автобусного сообщения из четырех проанализированных стран в Венгрии наиболее благоприятна для этой категории населения. Вместе с тем, принимая во внимание первоочередное значение железнодорожного транспорта и использование личных автомобилей, развитие транспорта в стране не удовлетворительно.

Итоги экспериментального международного сравнения подтверждают вывод о том, что не само явление маятниковой миграции является негативным, а те условия, прежде всего относительная отсталость железнодорожных пассажирских перевозок, в которых она происходит. Поэтому автор считает особо важным улучшение инфраструктуры небольших населенных пунктов, а также — с учетом его косвенного воздействия — улучшение транспортных условий.

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S. PÁSZTOR

HOW OPEN THE HUNGARIAN ECONOMY IS: AN INTERNATIONAL COMPARISON

World economic changes in the 1970s and the following international revaluation of the performance of the Hungarian economy gave rise to extensive debates in Hungarian economic literature. A key-issue of these debates has been the measure of the openness of the Hungarian economy. This is, however, no unique phenomenon either in the world economy or among socialist countries. The measure of economic openness is a necessary consequence of Hungarian economic conditions, thus it cannot be evaluated in itself. Nor do its problems result from a previous overestimation of the external linkage, but are consequences of an autarkic development policy and practice neglecting the requirements and possibilities of the international division of labour.

On the notion of economic openness

The notion of economic openness is not uniformly interpreted in economic literature. In my opinion first of all the participation in the international division of labour is meant. This participation may rely on economic necessity and economic rationality. If it is based on the former then the given country makes up for shortages appearing at a national economic level through international economic channels, that is, the given country is dependent on participation in the international division of labour by force of its natural conditions.

Participation in the international division of labour is based on economic rationality if by means of the growth rate of the given national economy – and thus its end consumption – permanently exceeds what could be achieved without it. While these two motives of participation in the international division of labour can be theoretically separated, this definitely cannot be done in practice. Participation in the international division of labour results, in general, in economic interpenetration and mutual economic dependence for the participating national economies, but even a unilateral dependence of national economies is not a rare phenomenon. However, unilateral dependence is not a necessary consequence of the international division of labour, but can be explained by special reasons. Precisely on this account the measure of economic openness and the degree of dependence cannot be regarded as identical notions.

We can speak about economic dependence if a national economy – with diversified structure – participates in the international division of labour only because of economic necessity. Thus it not only lacks surpluses of non-reproducible goods (as raw materials, foodstuffs as well as technology necessary for the modernization of the economy), but is

not even self-supplying in these. The supply market is outside its own integration sphere and its monopolization is extended also to the manufacturing industry. From dependence on external circumstances that kind of dependence is different which occurs, when a national economy cannot adjust itself to world economic requirements for various reasons, i.e. it makes itself dependent.

Nowadays national economies having reached a high or at least a relatively high level of economic development are all dependent on the world economy without exception. The higher level of economic development a national economy reaches the greater the degree of its dependence will be, but this is, at the same time, a mutual dependence. Namely, it could not have reached the given development level without an efficient participation in the international division of labour – i.e. without mutual dependence. (Precisely this fact is expressed also in contemporary theories on foreign trade which – as distinct from previous ones – do not appear separately but as parts of growth theories. Economic growth is inseparable from specialization and participation in the international division of labour, i.e. they have become notions mutually supposing each other.)

It results from the measuring method of economic openness that once the diversified structure of a national economy has developed and conditions of economic growth are practically given, then differences resulting from deviating development levels cannot be indicated. The indicator of economic openness refers to the necessity of participation in the international division of labour and is a consequence of objective potentialities* of the production structure. But it does not indicate whether this participation is efficient or not. Therefore, also countries with different levels of economic development may belong to the same groups formed from the viewpoint of economic openness.

Measurement of economic openness

For indicating the measure of openness the ratio of export sales receipts in the given year to the national income produced in the same year had been previously used in Hungarian economic literature, (of course, export sales receipts converted into forints by using the foreign exchange multiplier and national income computed at current prices). In practical economic usage this ratio was considered as an intensity ratio. "About 40 per cent of our national income were exported in the early 1970s" – several such statements were made differing from each other at most only in wording, although the relationship between part and whole cannot be construed in the given case, since numerator and denominator are not of identical dimension. While national income in the Marxian interpretation covers the new value created in a given year ($v + m$), export price receipts contain also another element, namely, the equivalent of constant capital (c). On the other

*Natural conditions are only a part of these potentialities, but we shall speak about this later on when analyzing the Hungarian economic structure.

hand, it is not easy to find an indicator with economically acceptable content that would be statistically easily computable.

The intensity of foreign trade is acceptably and relatively easily computable with the following indicators*:

$$(1)\ \frac{\text{net exports}}{\text{value added}} \quad \text{or} \quad (2)\ \frac{\text{net imports}}{\text{domestic use}}$$

These can be formulated also in other terms:

$$(1)\ \frac{\text{exports} - \text{import material content of exports}}{\text{end use} - \text{imports}}$$

$$(2)\ \frac{\text{imports} - \text{import material contents of exports}}{\text{end use} - \text{exports}}$$

The indicators show (1) what share of the yearly value added (which is depreciation + new value) is realized in foreign trade and (2) what is the import material content of domestic use. When making computations the main difficulty is to work out the net exports and net imports, respectively. They are, namely, impossible to compute without an input-output table. Of course occasional aggregations (supposing sectoral homogeneity) result in inaccuracies of non-negligible extent precisely in the case of foreign trade.*

In the interest of easier and mainly more "up-to-date" as well as continual computability certain concessions can be made by computing other ratios:

$$(1)\ \frac{\text{Exports or imports}}{\text{end use}}$$

$$(2)\ \frac{\text{exports or imports}}{\text{value added}}$$

The difference between the two denominators is imports, that is, end use is the total of value added and imports. To decide which of the above ratios may better approach the values of the previously mentioned indicators is possible only within wide margins of error. Since the accounting of national (domestic) performances is made in western countries according to the System of National Accounts, while in socialist

*More can be read about this problem in Iván *Szegvári*'s paper. [1]

*It was shown that the import content of exports is different from that of domestic inputs. In studies published in Közgazdasági Szemle (1, 2, 3, 4) also several other computational difficulties are mentioned.

countries according to the methodology of National Economic Balances, it has to be taken into consideration in the course of international comparison with the indicator of openness applied what comparison is made possible by the data supply of our partners. In the case of socialist countries exports or imports/national income while with western countries exports or imports/GDP are the indicators that can be most easily and reliably computed. In international comparisons not the absolute value of openness but the order of countries is decisive. This order will not basically change in consequence of a uniform change in the base of comparison and, what is even more important, groups of countries are not mixed, that is, not a single country will get into another group of countries concerning openness just because of changing the base of comparison. This results also from the statistical definition of the indicators. These ratios cannot be interpreted as intensity indicators, they only express that given yearly exports or imports correspond to a certain amount of national income or GDP.

However, I would not like to over-emphasize the necessity of international comparison. With this I only point to a basic feature of the Hungarian economy, namely that it belongs to the group of the most open countries of the world economy resulting from its conditions. Among possibilities for economic development autarky cannot even be mentioned, a choice can be made from various modes of active adaptation – determined not only by development policy – else adaptation will be passive. An active adaptation requires not only the knowledge of our place in international comparison but also of the exact measure of economic openness and of facts influencing it which cannot be expressed by a single indicator or can not at all be formulated in an indicator.

Hungary's economic openness in international comparison

Hungary's economic openness in 1978 was 39.3, 26.7 and 48.1 per cent on the basis of the ratios exports/GDP, exports/end use and exports/national income, respectively. Let us look at the corresponding indicators in the case of other (western, socialist and developing) countries.

In Table 1 the figures in brackets beside the names of countries indicate the place taken by the individual countries in the same group of countries on the basis of their exports/GDP ratio in 1974 or 1975. Though, in fact, groups of countries differing from the viewpoint of openness* were not mixed yet within the individual groups some important changes in position took place. Reasons for such changes can be the following:

– growth dynamics of exports and GDP, respectively, deviated from each other as against the previous year (1974 or 1975) and/or

– this occurred in the case of other countries while in the given country previous growth trends remained valid (that is, it was overtaken by others or these others lagged behind).

*These groups were separated in the table by a greater space.

Table 1

Order of twenty OECD-countries according to economic openness

	Country	Export/ GNP	Export/ GDP	Export/ end use	Year of data publication
1.	(1) Belgium	46.7	47.4	39.0	1977
2.	(3) Ireland	46.6	46.7	29.7	1977
3.	(2) Holland	40.9	41.1	28.6	1977
4.	(7) Switzerland	26.5	27.6	21.5	1978
5.	(11) Finland	27.4	26.9	21.6	1978
6.	(6) Sweden	25.2	24.9	20.2	1978
7.	(4) Norway	25.1	24.5	18.0	1977
8.	(13) Great Britain	23.6	23.7	18.8	1977
9.	(8) Canada	23.6	23.1	18.9	1978
10.	(10) Germany (Fed. Rep.)	22.2	22.3	18.7	1978
11.	(5) Denmark	22.1	21.9	17.1	1977
12.	(12) Italy	21.5	21.5	17.7	1978
13.	(14) New Zealand	21.1	20.7	16.7	1976
14.	(9) Austria	20.6	20.4	15.7	1977
15.	(15) France	17.0	17.1	14.4	1977
16.	(16) Australia	14.6	13.1	11.5	1978
17.	(17) Yugoslavia	–	13.1	8.1	1977
18.	(18) Japan	11.9	11.9	10.7	1976
19.	(19) Spain	8.9	8.8	7.8	1977
20.	(20) USA	6.8	6.9	6.9	1978

Figures in brackets indicate the order of countries in 1974–1975 on the basis of export/GDP.
Source: 1979 publications of International Financial Statistics

In Table 2 some data of the seven countries with a change in position by more than one place are presented, which more or less explain the modifications in the order.

When jointly analyzing both tables it can be stated that, as compared with their position in 1975, (in case of Denmark and Austria in 1974) Finland, Great Britain, Canada and Switzerland are placed better, while Norway, Denmark and Austria are farther back. The countries moving forward could all improve their terms of trade, while those falling back had deteriorating terms of trade without exception. The considerable change in the position of Switzerland can be attributed, however, not so much to its improving terms of trade, but rather to the fact that Denmark fell back from the fifth to the eleventh and Norway from the fourth to the seventh place. It is worth pointing out specially Finland where the growth rate of production was the slowest. Because of this also its imports considerably decreased as against 1975. Slow growth was accompanied by

Table 2

Some data of Western countries most changing as regards economic openness
(in percentage)

Country	GDP		export		import		terms of trade
	at current prices	at unchanged prices	at current prices	volume	at current prices	volume	
Finland	133.5	101.9	173.8	138	115.5	84.0	150.5
Great Britain	136.5	105.0	165.7	118.7	151.5	108.9	109.4
Switzerland	109.2	103.5	125.0	131.0	123.4	138.0	101.3
Norway	127.4	110.1	122.5	126.0	135.7	120.0	90.3
Denmark	126.7*	103.1*	128.8	103.8	131.7	109.4	97.8
Canada	141.2	103.4	157.8	133.0	142.7	111.4	110.6
Austria	129.3	138.5	121.3	110.2	141.9	126.2	85.5

Volume data as well as data at unchanged prices are related to 1974 or 1975.
*These data refer to 1976 unlike in the previous table.
Source: 1979 publications of International Financial Statistics.

the fastest export dynamics, while, at the same time, the rise in price level lagged behind that of Canada. (The price level indices of the countries, enumerated in the same order as in the table, were the following as compared with the base year: 131; 130; 105.7; 122.9; 136.6; 119.2;).

At the same time, it is also a fact that for foreign trade the year 1975 is not the most fortunate basis, because in this year the export volume of Finland decreased by about 21 per cent as compared with 1974 and even export sales receipts were somewhat less, though it is true, that the volume of import stagnated and current inputs increased by 9 per cent. GDP computed at unchanged (1975) prices increased by 0.9 per cent, while imports decreased by yearly 4 per cent between 1975 and 1978.

Coming back to Table 1, it has to be noted that under normal circumstances such considerable changes in order could only rarely be met in 3–4 years. It can also be seen from the table that changes in the denominators of the quotients do not considerably modify the order of openness, that is, it is almost the same whether GNP, GDP or end use are chosen for base of comparison. Figures also indicate a polarization of the world economy by economic openness. From this aspect national economies with diversified structure can be ranked into three groups:

– the group of very open or hardly closed national economies whose openness is about 40–60 per cent on the basis of export/GNP;

– open national economies with an openness of 12–20 per cent and

– relatively closed or hardly open national economies whose openness is under 10 per cent.

Table 3
Economic openness of European socialist countries
(In percentages,
on the basis of export/national income and import/national income
quotiens, respectively.)

Country	Export/national income			Import/national income		
	Total	Socialist	Non socialist	Total	Socialist	Non socialist
Hungary (1978)	47.5	28.9	18.6	58.3	30.4	27.9
Bulgaria (1977)	38.9	31.1	7.8	39.1	31.3	7.8
GDR (1977)	28.9	21.6	7.3	34.4	23.6	10.8
Czechoslovakia (1976)	28.0	20.8	7.2	30.0	21.0	9.0
Poland (1978)	17.4	10.6	6.8	19.8	10.6	9.2
USSR (1977)	8.5	4.9	3.6	7.7	4.4	3.3

Source: National statistical annuals, CMEA statistical yearbooks.
Note: Romania's national income could not be determined, thus the indicator of openness could not be computed, either.

Out of these limits the 60 per cent upper limit is regarded as absolutely hard. The about 40 per cent total consumption results only in a small part from production according to local habits and from the fact that certain products can hardly bear the costs of transport. It is justified much more by the developed diversified structure of the national economy as well as by the repercussions on material production of the unproductive sphere (e.g. education) closely (and mutually) connected with it. Since these groups of countries are of different quality from the viewpoint of openness, indicators showing extreme values will not meet, either. (In case of the middle group the order of magnitude of 15 per cent seemed to be the lower limit in 1974–1975. Generally, some reduction took place in the quotients of export/GNP. Thus, a joint movement could be experienced that touched this threshold. But, under previous, more stable world economic conditions this joint movement was directed upward and was more uniform.)

The next major group of countries examined for economic openness is the group of socialist countries. The analyses are limited to European socialist countries. The order of magnitude of their economic openness can be determined on the basis of the ratios of exports/national income. The most reliable data in this respect can be obtained from national statistical annuals, since conversion inaccuracies can be avoided in such a way. Apart from Hungarian openness (48.1 per cent in 1978), the Polish (31.9 per cent in 1978), the Czechoslovak (46.6 per cent in 1976) as well as the Soviet (8.5 per cent in 1977) figures of openness could be determined on this basis.*

*In converting the figures in foreign exchange zlotys and crowns into current zlotys and crowns I relied on the computations of Mrs. Gy. *Hajdu.*

In one of his articles [2] J. Szita presented export intensity figures of socialist countries for 1973 on the basis of data of national income. The then 42.8 per cent export intensity of Hungary was taken for a basis and that of other countries was related to this. Expressed in percentages the following order can be obtained: Bulgaria 50.4; Hungary 42.8; GDR 30.8; Czechoslovakia 30.8; Romania 23.5; Poland 22.3; Soviet Union 7.7 per cent. The order presented in Table 3 where also the direction of their openness is indicated was obtained through several conversions – made after all into transferable roubles similarly as with J. *Szita.*

The two orders of countries are identical except for Hungary, but measures considerably deviate. This may be largely attributed to the fact that since 1973 each socialist country revalued its national currency against the transferable rouble. In the knowledge of these data how should the openness of socialist countries be quantified? In case of three countries (Bulgaria, GDR and Romania) no exact measure is known, when ranking into groups of countries only estimations can be made. In my opinion the most open among socialist countries is Hungary followed by Bulgaria with an about 8–10 per cent difference (according to the ratio export/national income). Both countries belong to the group of very open countries of the world economy. On the other hand, the USSR and the United States of America represent the other extremity, the group of hardly open or relatively closed countries.* The other socialist countries can presumably be ranked into the widest group of national economies with diversified structure, but certain countries (for example, Czechoslovakia) may take a medium place between groups of open and very open countries, respectively.

Finally, I am going to present indicators of economic openness of some countries considered as developing ones according to our present terminology. In Table 4 countries are presented then corresponding data of South-Korea are given (those of Hong Kong and Taiwan in the Pacific area are: export/GDP = 89.3 and 47, respectively),* Australia, New-Zealand and Japan can be found among capitalist countries.

It is not worth determining any order of openness for these countries, since the higher degree of openness of some of them does not necessarily mean that they are better participating in international division of labour than those with a lower degree of openness. It may also mean that their economic structure is hardly diversified as yet, that is, their export structure is basically a monocultural one, consequently, their imports are very diversified.

*Spain can be found in this group of countries at present but does not really belong here.
*Source: Monthly Bulletin, 1979.

Table 4
Economic openness of some developing countries

Country	Export/GNP	Export/GDP	Export/VF	Year
Indonesia	24.5	23.6	20.8	1977
Malaysia	49.4	47.7	39.3	1978
Singapore	132.1*	130.9*	48.7	1978
Thailand	18.8	18.7	15.0	1978
Philippines	14.4	14.4	11.8	1978
South-Korea	27.6	27.6	20.8	1978
Iran	32.0	31.7	26.9	1977
Saudi Arabia	73.8	72.4	57.5	1977
Kuwait	78.3	78.3	55.5	1976
India	6.7	6.4	6.0	1976
Turkey	10.5	10.8	8.7	1978
Mexico	–	5.7	5.3	1977
Brazil	7.2	7.1	6.6	1978
Argentina	5.9	5.7	3.5	1975
Venezuela	26.7	26.7	20.8	1977

Source: International Financial Statistics, June, 1979.
*Singapore has a considerable amount of re-export, that is why its figures are over 100 percent.

It can be seen even from the above that the indicator of openness – similarly to other economic indices – cannot be interpreted without the economic environment. Economic environment is realistically, palpably reflected in the national economic structure. That is why examination of relationships between economic structure and economic openness is of special importance.

On the connections between Hungarian economic structure and economic openness

It is well-known that after World War II economic structures of autarkic character had developed in the European socialist countries, thus also in Hungary. Disregarding the analysis of the concrete historical situation only the final result is important for us now. Namely, each country had chosen autarky coupled with the model of direct plan instructions and that instead of multilateral relations a bilateral exchange of commodities was characteristic of CMEA-cooperation, where one of the parties was almost necessarily

the USSR under such circumstances. Autarkic endeavours can be enforced only in a model of direct plan instructions and mainly with bilateral international relations. (This latter is, therefore, enforcement of national economic autarky at a higher CMEA-level.)

At present, the main problem lies in that the state of autarky created at that time and which struck roots in views is permanently trying to reproduce itself and everyday practice furthers this reproduction. Even our views concentrating on partial fields remunerate it under changed domestic and international conditions. The main characteristics of Hungary (area, population, scarcity of raw materials, geographical location) query this autarkic – and, precisely on this account, highly diversified – economic structure anyway and would do so even if it were supported by adequate domestic raw materials and energy basis. Maintaining such an economic structure is irrational, since it neglects supply with production factors and thus makes all production factors more expensive. This means at the same time that an autarkic economic structure gives preference also to the utilization of scarce production factors through its permanent reproduction.

The price of autarky is too high and not worth "paying" also because it cannot be consistently maintained if one of the production factors, the raw material and energy basis is missing, since natural autarky is based precisely on the availability of all production factors. In another approach: we have only a consumption and production structure of autarkic origin. Distinction between autarky and autarkic character can be made on the basis of the availability or lack of natural factors and precisely on this account this difference is a fundamental, qualitative one.

One of the pillars of autarkic economic structure in Hungary is, therefore, the country's deficient participation in the international division of labour. Structural deficiencies in up-to-date technology and intellectual capital have also urged for more intensive participation. However, these are of another nature than raw material and energy shortages which are absolute. The lack of a given production factor is considered absolute if it is scarce independently of characteristics of the given national economic structure and economic mechanism and this scarcity is considerable. On the other hand, a shortage is considered structural if it cannot be made independent of the character of economic structure and mechanism. In this sense the raw material and energy shortage of Hungary is an absolute shortage accompanied even by a structural shortage. Shortage of technology and connected shortages in semi-finished products and spare parts are in their nature such structural ones that appear by now already as absolute ones in the given system of conditions. This latter fact reflects well that the given system of conditions cannot be maintained at all or only with national economic losses.

Taking into consideration advantages resulting from participation in the international division of labour, maintaining autarkic conditions can be no rational economies in general, and surely not for Hungary. At the same time, their elimination is no easy task either, since everything that had once come into being ensures its own survival, and because it usually exists in all fields of the economy its inertia is enormous. This latter is so great that it creates a regulatory and institutional system conforming to itself, or even if it is not conforming, it will be made so through its effects.

On the basis of the characteristic features of the Hungarian economy it may be stated that without narrowing down the production structure, i.e. giving up autarky, its economic development will remain basically extensive, however high the degree of its openness should be numerically. If we expect foreign trade first of all to procure the fundamental shortage goods (raw materials, energy and up-to-date technology) then various attempts at modernization may only calm our conscience, but will not become carriers of intensive development as a part of the autarkic production structure and built into it. All that also implies, that advantages to be gained from the international division of labour are renounced, i.e. development of the Hungarian economy will lag far behind not only the desirable, but even the possible, and in international comparison we shall have to be satisfied with an even more modest place than at present. Pushing all that to extremes, we can say that participation in the international division of labour is a basic necessity for Hungary, and precisely on this account, it may mean increased defencelessness and not advantages based on economic rationality. If the present and future openness of the economy is not ensured by an economic structure rationally reckoning also with possibilities and advantages of the international division of labour – whose creation and maintenance suppose an adequately enforced market control –, but by an economic structure of autarkic character created and developed as a consequence of extensive industrialization and the direct control system, then development will remain extensive also in the future and will be accompanied by even more serious contradictions than previously.

Namely, "technological transfer cannot replace the inner economic instruments to be used for improving efficiency, because possibilities of technological and economic development are determined first of all by inner conditions created by economic policy and the system of economic control and management." [6]

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ОТКРЫТОСТЬ ВЕНГЕРСКОЙ ЭКОНОМИКИ В МЕЖДУНАРОДНОМ СОПОСТАВЛЕНИИ

Ш. ПАСТОР

Понятие экономической открытости может характеризовать степень участия отдельных национальных хозяйств в международном разделении труда. Это участие может строиться на экономически рациональной основе или (и) вынуждаться экономической необходимостью. Расширение международного разделения труда приводит к сплетению национальных хозяйств, к их взаимозависимости. В определенных условиях — независимо от фактической степени экономической открытости — может возникнуть и состояние односторонней зависимости.

При определении степени экономической открытости наиболее важной задачей является получение возможности для международного сопоставления, даже если избранный метод расчета допускает определенные статистические погрешности.

У стран с разносторонней структурой национальной экономики наблюдается поляризация в степени их экономической открытости. Среди них четко выделяются три группы: страны с весьма открытой экономикой (с долей экспорта в валовом отечественном продукте порядка 40—60%), страны с открытой экономикой порядка 12—20%, страны с относительной замкнутой, или слабооткрытой экономикой, степень открытости которой не достигает 10%. Венгрия относится к группе стран с наиболее открытой экономикой. В мировом хозяйстве в эту группу еще входят Бельгия, Ирландия, Голландия и Болгария.

Вместе с тем структура венгерской экономики носит характерные черты автаркичного развития, не только препятствующие использованию выгод международного разделения труда, но и не соответствующие и природным условиям страны. Более концентрированная структура производства и экспорта и благодаря ей более эффективные включение венгерской экономики в международное разделение труда требует существенных изменений в системе экономического регулирования венгерского народного хозяйства.

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IMPACTS OF WORLD ECONOMIC CHANGES ON THE CMEA*

The first part surveys the external world economic conditions that marked out for the East-European region in the seventies a development path different from the one reckoned with in the Comprehensive Program of the CMEA. In consequence, adjustment to the world economy became a central problem of economic policy in the majority of European socialist countries. The second part reviews the common internal problems of the CMEA member countries. It analyses the advantages and dangers of a restrictive economic policy, the sharpening of the so-called raw material and energy problem within the CMEA, the satisfaction of consumer needs and questions of agriculture as well as the importance of institutional factors. The third part surveys the answers given on integration level to the challenge of world economic changes, while the concluding part examines how integration might become an instrument of export-orientation.

"The world economic situation, the deepening economic world crisis and the rapidly growing oil prices together with the rates of interest resulting from the energy and monetary crisis had in many respects undoubtedly negative effects also on our country. However, it has to be frankly told that all this could have been overcome or, in worst case, its effects could have been considerably moderated if several deficiencies in our activity, among them even very serious ones, had not appeared both in the economy and in other fields, if in the control of socio-economic activity a series of faults leading to negligence in several fields had not arisen." [1]

"The growth of foreign trade has become increasingly a key-issue of the entire national economy, of our dynamic and steady development... It has to be stated objectively that the problem is not merely a sharpening of the anyway complicated situation. We have to cope with a new situation. Obviously, it is unavoidable to draw far-reaching conclusions from these objective changes and some issues have to be reconsidered. After all the main point is not the development taken place in export production and in the work on foreign markets *over the preceding period.* The decisive factor will be how this work and production are keeping abreast of the rate of international development and of requirements raised by international markets... The international market does not acknowledge our national inputs, only those corresponding to the level of inputs attained internationally." [2]

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"There are considerable structural disproportions in the national economy... Control of the economy and state administration, adaptivity of certain fields under changed circumstances all leave much to be desired... The export-oriented character of development of the economy has to be increased considerably. We have to make efforts that directions of export specialization and of the modernization of production capacities should be properly chosen." [3]

These parallel evaluations given by highest party and state leaders of European CMEA-countries – similar statements to which can be easily found also in Hungary and in other countries – formulate very concisely that adjustment to the changing conditions of the world economic division of labour and an economic policy control required by it have become key-issues of economic development in East-European countries. This creates new conditions for growth in individual CMEA-countries and, therefore, also several problems of their integration have become ripe for being reconsidered.

New developments in world economy – new external conditions

It would be a mistake to consider the intertwining of CMEA with other parts of the world economy as if it had begun in 1973 or in 1975. A considerable part of the literature on socialist integration is indeed characterized by the view *as if* processes within the CMEA *had been* independent of those taking place in other parts of the globe. In reality the CMEA had been established mostly because of external effects. Namely, as it is even explicitly referred to in the declaration of foundation, the overwhelming majority of trade had to be based on the member-countries owing to the political decisions rejecting the Marshall-plan and *under the pressure* of the cold-war embargo. It was then, that intra-regional trade then reached its maximum – and not under the trade-diverting and trade-creating effects of integration. External turnover fell to 10–15 per cent but the commodity pattern indicated that even at that time partly strategical articles were included – as for example, Swedish iron ore or nickel indispensable for the running of metallurgical capacities with the given technology.

In the period of "institutionalized" peaceful coexistence following the 20th Congress of the CPSU normalization of East-West trade – kept at an abnormally low level till then – began. However, it remained *within* the framework of the import-substituting economic strategy of the era, that is, demands of internal (*eventually* CMEA) markets continued to determine development targets, while export was aimed only at compensating the "most necessary", "unavoidable" imports. It is characteristic that deficits in the balance of payments, insignificant in present terms – amounting to some hundred million dollars – induced the economic leadership to restrict from time to time development projects (though this makes administrative competition for scarce funds always sharper) and that foreign-trade-symmetrical investment cycles, that is those reacting to changes in the balance of trade (payments) emerged in the economies of small CMEA-

countries. [4] The Comprehensive Programme, determining the tasks of cooperation for the long run, for 15–20 years, had also been elaborated in this spirit by the member-countries, between 1968 and 1971.

Two factors seem to be basically determinant for the Comprehensive Program: some remnants of the "reform spirit" of the mid-1960s and the regional approach. The former means that some elements of the control approach aimed at an active utilization of commodity (market) and monetary categories to be found to varying extent in all member-countries between 1965 and 1968 – and even more reflecting the international projection of related Hungarian and partly Polish expectations – were included in the Program that contained also such financial tools of cooperation which exceeded the level justified in relations between countries with economies based on plan directives (though mainly indicating their possibility and concealed in such formulae as "to be studied" and "to be examined"). The second factor means that external relations are embodied *first of all* – almost exclusively – in cooperation or observation agreements concluded with Iraq, Finland and Mexico as well as with some other countries with socialist orientation. However, formulation of a common external commercial policy pointing beyond this and similar to that of the EEC had not even been attempted. The main reason seems to have been that the majority of member-countries had not regarded it as an issue to be included in the strategic program of tasks to be solved jointly in the coming 15–20 years. This attitude simultaneously reflected – paradoxically – the residual character of relations outside the CMEA and a greater insistence on the national control of foreign trade than in the case of member-countries of the EEC. The Comprehensive Program – as it has already become clear by now – is first of all *manifestation of a political will* aimed at deepening cooperation and as such reflects the priority of forms of cooperation in physical terms justified by the control systems in the majority of member-countries. Namely, by the time the Program was adopted, by 1971, the recentralization processes had already become prevailing in the economy of all CMEA-countries except for Hungary (where this kind of development began in November 1972) and in their framework economic control and financial-technical solutions pointing to the development of a (market economy) mechanism of radically different quality and serving partly for transition lost their topicality. (One of the most evident examples for this is the project aimed at the introduction of the transferable rouble and the uniform rate of exchange of national currencies scheduled also by deadlines.) Thus, though the Comprehensive Program did not create special forms of cooperation in the 1970s that would have been qualitatively different from those in the previous decade (the practice of joint investments also developed in the 1960s), it still can be regarded as a basis for *any* proposal aimed at the development of integration and acceptable for all member-countries precisely because of its very thorough preparation and legal regulation at top level.

It is a specific paradox of the development of the CMEA that parallel with the elaboration and adoption of the Comprehensive Program also processes pointing beyond the program summarized in the foregoing took place: such was, for example, the *Budapest Call* issued by the communist and workers' parties of European CMEA-coun-

tries in 1969 starting the process of détente and culminating in the Helsinki Conference, or the *24th Congress of the CPSU* formulating the opening of Soviet foreign economy also at political level. The *foreign economic opening** proclaimed there – and parallel with this also in Poland – seems to be a proper decision also after the decade passed, since according to general economic history experience medium-developed countries cannot be exclusive or almost exclusive partners for each other in the capacity of suppliers of most advanced techniques, as advancers of capital required for the transformation of economic structure or as raw material suppliers without any limitation. Imports of Western technology – despite several contradictions analyzed elsewhere – have enabled faster growth and higher living standards for East-European countries than national or regional autarky. At the same time, in several countries foreign economic opening took place only in connection with the rapidly increasing indebtedness between 1973 and 1975 and it seems that in some countries improving efficiency ensured by foreign economic opening during the early 1970s became an alternative to the reform of the economic mechanism turned back practically in all member-countries.

CMEA-countries were faced with fundamental changes in the world economic situation at this stage. The problem was not first of all the quadruplication of oil prices (or considering the entire period between 1973 and 1980, their tenfold increase), but the long-term, irreversible processes that marked out new ways of economic development for all the three groups of countries of the world. Therefore, it is proper to speak about *a new stage of world economic development.*

It does not seem to be superfluous to sum up what is meant by this notion in the present paper interpreted on the basis of Hungarian economic literature, first of all of [5, 6, 7, 8, 9, 10]:

1. A transformation of the international industrial division of labour took place both in space and in product pattern. Following the parallel ripening of industrialization in both the developing and the socialist countries an excess supply of structural character has developed on the market of several products (and its continuation in the long run can be prognosticated). It is remarkable from the viewpoint of the export plans and development strategy of CMEA-countries that developing countries are no longer merely suppliers of raw materials and primitive mass products (as supposed by theories based on a mechanical application of some old theorems also to the new situation and thus proclaiming the impossibility of industrialization in developing countries in the capitalist world economic environment), but have an important part also in the excess-supply of such sub-branches as the manufacturing of cars, ships, electronics, metallurgy, production of synthetic fibres and toys, petrochemistry and others. This problem is closely connected with the phenomenon of structural unemployment: without retraining those working in removed branches may not get any job in the given developed capitalist country within reasonable time. At the same time it may be reckoned with that entering the market of certain products in

*The foreign economic opening of Romania, going on since 1965, is very illuminating, but as regards the development of the CMEA it was neither authentic, nor decisive.

which there is excess-supply – which constitute the bulk in volume in the export of CMEA-countries – will be impeded also by "job-protection" that will further sharpen international competition.

2. The economic policy practice followed in developed capitalist countries since the 1930s that wished to attain stimulation of the economy and higher employment by increasing the money in circulation – theoretically based on the Philips-curve – has totally failed now. Namely, as soon as the basic assumption that workers and employees fight against a fall in their nominal wages and not against that of their real wages loses its validity, both the stimulation of the economy through money creation and the practice of increasing exports through devaluation become more difficult. Namely, the situation of 1974–1975 and even more that of 1980–1981 differ from the one in 1929–1933 partly in that available capacities are practically fully utilized (apart from some sectors in the state of removal and opposing it) and these capacities are not enough for full employment of the population. That is, the state has not to stimulate for the utilization of existing capacities – according to Keynes' theory – but for the establishment of new capacities. This, however, requires stimulation for investments and venturing spirit, i.e. ensuring the profitability level for the long run, reduction of uncertainties connected with large-scale changes in price level, relative prices and rates of exchange as well as – resulting from the nature of crisis starting from the state of the balance of payments* – *an export offensive directed towards solvent markets* (i.e. a simultaneous limitation of domestic use and within this of consumption). This cannot be ensured by public works pushing efficiency requirements into the background or by other state expenditure of improductive nature, since this is – just as in the case of socialist countries – not only an investment task, but postulates the exploration of marketability reserves to be found mostly only in the micro-sphere.

It can be added to this, that the state – apart from newly industrializing countries hardly showing any signs of advanced (post industrial) capitalist development in their social structure – is no determinant or predominant factor in the conflict between trade unions becoming a socially and politically organized power and employer's organizations, but a weak intermediary one. Therefore, the mechanism of social partnership supported in some developed capitalist countries probably also by historical and national factors seems to be suitable for escaping from *stagflation* requiring social consensus to endure "pains" concomitant with the restriction of inflation. However, if such social consensus cannot be attained under the effect of historical, political and economic factors, the possibility of continued galloping inflation and the spreading of protectionism aimed at maintaining workplaces cannot be excluded either, though at the present level of interdependence this latter seems less likely.

*Attention should be repeatedly drawn to the fact, proved by Tibor *Erdős* from among Hungarian authors, that the contemporary recession is of exogenous origin (and not connected with the reproduction of domestic fixed capital or with market problems), and therefore, it cannot be treated even in principle in the closed national economic model in which *Keynes'* concept was formulated.

It is a specific paradox of world economic adaptation that while in Western countries successfully adapting to the structural rearrangement of the world economy direct intervention of the state* into the development of the competitive sphere has gradually diminished as a rule from the mid-1970s on (and, this direct intervention has not increased where it was not significant previously either, e.g. in Switzerland, FRG, USA), this process – apart from some exaggerating *projects* of the British tory government – is not characteristic at the same time of the social sphere taken in a broad sense. There the security of existence created with the system of instruments of the "welfare state" remains and, completed with the stabilizing effect of the "black" (second) economy – estimated at about 30 per cent of GNP in Italy, for example, – this is an explanation for the fact that unemployment of a previously inconceivable extent can exist in developed capitalist countries for some longer period without social explosion.

3. The world-wide slowing down of economic growth – as distinct from what happened in the 1930s – has not led to an overall protectionism characterized by tariff war, competition in currency devaluation, foreign exchange limitations and the system of bilateral clearing that would have resulted in the *reduction of* world trade. According to 1980 GATT data [11] the output of the manufacturing industry increased by 6 per cent annually between 1963 and 1973, export by 10.5 per cent, while between 1973 and 1979 the yearly increase of production amounted to 2, that of export to 6 per cent; that is, the export elasticity of production did by no means diminish, but increased from 1.75 to 3. Agricultural world export increased to the same extent by yearly 4 per cent on the average between 1960 and 1973 as well as between 1973 and 1979. The only relevant difference could be observed in the increase of the export volume of oil products: this amounted to yearly 10 per cent between 1960 and 1973 while to 0.5 per cent between 1973 and 1979. The volume of world trade did not decrease, only its growth rate slowed down from the yearly 8 per cent in 1960–1973 to 4.5 per cent between 1973 and 1979, and that in such a way that it increased by 6 per cent in 1978 and by 7 per cent in 1979 (meaning a 25 per cent increase in value at current prices). These data unambiguously refute that to speak about a general wave of protectionism would make any sense. (Though there are some circles proposing this as a remedy, despite the fact that precisely trade restrictions becoming general could lead to sharpening of market problems on an international level and to overall recession.) Some tariff or non-tariff restrictions really affecting some large volume export goods of CMEA-countries do not prove the existence of general protectionism.

4. In the system of international relations the economic sphere is attributed a growing importance. This results from the interrelations between military and economic power. Efficient development of the "peace economy" is a basis for the eventual success

*The role of *indirect* regulators conforming to market conditions and oriented toward competition has not decreased but rather increased, the best example for which is the system of export promotion as well as economic rehabilitation attached to very strict profitability and reconstruction conditions (Chrysler, British Leyland).

of "war economy". This is so because the development of military power relations requires ever greater economic efforts, and burdens imposed on economic development as a result of these efforts are especially great in the case of uneven economic power relations.

5. Following from the 'globalization' of world economic processes regional frameworks prove to be narrow. This has brought national or global solutions into the fore in the contexts of energy policy, financial policy and intra-industrial division of labour, and, parallel with this, devalued the role of geographical, political and historical factors in choosing a partner.

6. The situation of an important group of developing countries, of the "descending branch" with an ever increasing population, called the fourth world, becomes more and more hopeless. While they form an increasing part of world population – being in majority already at present – their weight in world economy is ever decreasing and their share in world trade is under ten per cent, reflecting also the large economy and autarkic development character of China and India.

This rather long enumeration has been necessary to illustrate that CMEA-countries have to accommodate themselves not to some occasional change in relative fuel prices – whose effects could be eliminated in a dynamic economy in two or at most in three years –, but to a world with a radically changing structure that will surely never come back to the "old track", even though merely the outlines of the new form can be discerned. This does not justify isolation from other parts of the world, since it would lead to conserving backwardness, but makes elasticity and adaptivity the most important – in the case of small CMEA-countries almost the *only* – value of economic strategy from the viewpoint of both the individual countries and the entire socialist integration.

The importance and objective character of changes in exogeneous factors cannot be disputed. At the same time – as A. N. *Kosygin* pointed out at the 34th Session of the CMEA – changes in the conditions of reproduction raise new requirements connected not only with external factors, and socialist economy has to adjust itself to them. [12] Similar ideas were formulated by Leopold *Lér*, Czechoslovak minister of finances who pointed out that the 14th Congress of the Communist Party of the ČSSR had drawn attention to the exhaustion of reserves of extensive development and to the necessity of intensive development already in 1971, i.e. prior to world economic changes. Thus problems of management resulted not merely from changes in external conditions. "Otherwise those permanently referring to the ever scantier raw material, energy and labour force bases and thus trying to excuse themselves for not fulfilling their fundamental tasks are not right at all. The most serious problem is caused by the low efficiency of our economy. . ." [13] That is: difficulties of the present situation result . . . mostly from the poor planning and control of investments, import, personal incomes and of the introduction of new technology. Therefore, in the 1980s technological change, saving of labour and raw materials have to be accelerated and the efficiency of investments improved by an overall amendment of the mechanism of planned economy. . . Perfecting the functioning of the economic mechanism is at present at least as responsible and fundamental a task as is

determination of the strategic trend of economic development. Practice has proven that the economy cannot be shifted to the intensive way of development without an elastic economic mechanism as well as the necessary independence of enterprises and associations". [14]

Following from the above the deficient adjustment to world market experienced up to now cannot be interpreted in isolation from the internal economic policies and economic mechanisms of socialist countries. Namely, changes in the terms of trade of individual countries have to be sharply separated from the rearrangement of relative world market prices, since the former depend also on the dynamism and structure of exports and imports, while they are not independent of economic policy and economic control solutions either.

"Inner" factors determining the development of the CMEA – common problems of the member-countries

World economic adaptation and restrictive economic policy

The most important new problem of CMEA-countries is, therefore, – also according to the judgement of the top leadership –, that of foreign trade, though changes in exogeneous factors have brought to light and made sharper only previous contradictions of inner management, economic policy and the economic mechanism.* Foreign trade problems are culminating first of all in indebtedness: total gross indebtedness is estimated at 75 thousand million dollars according to Western sources.[15] From this amount the debt of the USSR of about 13 thousand million dollars has to be obviously deducted, since this is insignificant for one of the biggest gold and oil producers of the world. Soviet indebtedness shows, moreover, a decreasing trend for two years. Thus we obtain the amount of about 62 million thousand dollars mentioned by Western sources under the title of "Eastern Europe". This amount is not too big in absolute terms by international comparison, since Brazil alone had a debt of 50 thousand million dollars in 1978. However, its structure by terms of expiration is very unfavourable, on the one hand, and its distribution among the individual CMEA-countries is very uneven, on the other; it means very different burdens for Czechoslovakia, Bulgaria or Poland, respectively, expressed in percentage of yearly exports to the West. However, the fundamental problem lies not in this considering precisely the example of developing countries – but in that credits were raised by the member-countries in a considerable part not for modernization of the economic structure required by new conditions, but for covering deficits in the balance of payments. [16, 17]

*"What we have not done up to now of our own accord, is forced upon us by life, by the hard realities of management, by the ever more difficult external and internal conditions of development" – was pointed out in the context of adjustment to world market terms by Ferenc *Havasi*, secretary of the Central Committee of HSWP in December 1980. [23]

The trouble is not caused by the fact of making use of foreign capital which is a general practice in case of medium-developed countries forced to structural transformation, but by the inadequate development of export capacities. As a consequence, continuation of credit raising remains necessary, but it means less and less a net utilization of resources. However, if foreign resources serve for the conservation of structure and not for the improvement of complex national economic efficiency, then this will lead to liquidity problems, later on to spending a part of national income on the amortization of burdens resulting from the deterioration in the terms of trade and on debt service, and, finally, to a concentrated and intensified appearance of problems postponed by credit raising (structural adaptation and connected social costs).*

Thus, application of restrictive economic policy becomes necessary in the first half of the 1980s, and that in a dual sense: on the one hand economic growth has to be slowed down – this is necessary because of the elasticity (i.e. inelasticity) of import that can hardly be changed with the given order of organization and priorities. On the other hand, even from a slowly growing national income *the part to be used domestically can be increased more slowly than the national income created,* since debts can be reduced only by the value of the difference between these two amounts. This strategy leads to a decreasing share and volume of investments – according to plans – beside Hungary also in Romania, Czechoslovakia and Poland. This implies partly renouncing or postponing planned investment projects and partly reducing the internationally abnormally high rate of accumulation of over 30 per cent to an acceptable level.

Reduction of the rate of accumulation will practically mitigate tensions between demands for investment and available capacities and, by revealing free capacities, it may promote the practical determination of concrete fields of possible reductions, what is more, even force these reductions, and thus points to structural transformation. This – the transformation of production structure – is namely the essence of things, without which restriction would only result in a process reproducing itself at an ever lower level. [18] Restriction in itself is only a forced measure of business policy, since, if the mechanism of capital allocation stimulating for and ensuring the regrouping of investments necessary for adjustment to world market is not created and the practice of liberal trade policy does not ensure the possibility of eliminating shortages resulting from the abolition of previously uneconomical production by satisfying domestic needs through imports, then the forcing effects of restriction will not be positive.

What is more, there is also a danger that

a) restriction will thus bring about shortages, or deepen previous ones;

b) it will be reduced practically to a return to the anti-import policy of the 1950s;

c) it will impede or even make impossible both a successful export orientation and the planned maintenance of living standards.

Namely, in lack of an objective standard and selection automatism it is likely on the basis of previous experiences of socialist control that the practical realization of reduc-

*This is the so-called "debt-trap".

tions will be of general character, undistinguished and equally concerning all fields (though this would be contrary to the declerad aims of individual countries). Thus no money will remain for the priorities, but, on the other hand, unpreferred and losing activities and enterprises will not decline, either.

d) However, in this situation the reflex of import-substitution in the raw materials industries will become stronger as a forced step of development policy. This will draw away money, beside export, also from the development of services which is in the state of lasting backwardness.

e) It is clear what development of living standards is enabled by an economy being in such a situation and thus the vicious circle is closed.

f) With unchanged conditions enterprises disposing of scarce resources are unavoidably in need of the asistance of central authorities since their result (profit) is basically a function of their relationship to central authorities [19] and they are interested in increased bargaining instead of boosting exports to the West. This results in a redistribution of national income according to bargaining power that has an unambiguous effect on export capacities in western relations.

On the so-called raw material and energy problem

Beside the problem of adaptation the so-called raw material problem has become sharper from among common concerns of European CMEA-countries in recent years. It manifests itself first of all in the decelerating increase of Soviet deliveries, in the stagnation or minimal increase of most important items between 1981 and 1985 and, within this, in more and more strictly determined compensation obligations. Some theoretical economists explain this situation by the fact that in their view "there is an absolute raw material shortage in physical terms", and as regards cooperation in the field of raw materials difficulties arise because of the "inadequate interestedness" of the USSR and because of "undertaking the sacrifice of advancing capital." [20, 21] But, in reality, this problem is typically that of the economic mechanism.

First of all it is expedient to declare again that in the given economic mechanism raising the problem of "capital saving" (or its opposite: "capital sacrifice"), furthermore of "inadequate interest" taking clearing exchange relations and mutual linkages into consideration starting from the fact of low international prices makes no sense. [22] Namely, development possibilities of the Soviet oil sector (and of other branches of raw material production) are not connected with low or high CMEA-prices, since these latter are made identical for producers with domestic prices in the framework of the system of foreign trade price levelling. By the way, it is also likely that if prime costs of Soveit oil extraction increased to 1.6-fold during the entire 1970s [24], while CMEA oil prices rose to 3.5-fold even between 1975 and 1978, then it can be supposed with good reason that an improvement in export efficiency of such an extent (and going on ever since then) would cover also surplus costs of transportation. (It should not be forgotten, either, that

Soviet oil export to the West followed the OPEC price level rising to tenfold in the 1970s. Therefore, the decelerating increase of Soviet deliveries and their stagnation after 1981, respectively, are not connected with inadequate interest in export, but with a decelerating increase of Soviet oil production. This is well indicated by the fact that in Western relations (where nobody speaks about interest problems) the *volume* of Soviet oil exports was practically stagnating for several years and in 1979 even decreased by 10 per cent, while for 1980 another about 15 per cent reduction was expected. [25] But, parallel with this, deliveries to CMEA-countries are further increasing (in a considerable part against payment in convertible currency and in various not traditional constructions). What is more, for the year 1980, serving as a basis for the next five-year plan-period, Poland and the USSR have agreed on the delivery of 1.1 million tons of oil above the volume fixed by quotas.* Thus, socialist countries are given preference by the USSR also further on and stagnation of its deliveries is connected with its internal production possibilities.)

Production is slowly increasing, demand is great, nevertheless, there is no "physical shortage"** not only because this notion cannot be interpreted in a commodity producing economy (demand for a given product is not independent of price), but firstly because a decreasing growth rate of extraction can be observed with an extraordinarily material-intensive production structure both in micro- and macro-sense. This aspect, *valid for all member-countries,* is well illustrated by the fact that while world oil production increased by yearly 5 per cent and consumption by 2 per cent between 1973 and 1978, within this in the OECD-region altogether by 1.8 per cent during 5 years (from 1.955 to 1.990 million tons), consumption of the European CMEA-countries increased by 30 percent during the same period [26], which well demonstrates that the process of adaptation to new relative world market prices did not even begin practically during these 5 years (it began only in 1979–1980). Therefore, we can speak rather about over-consumption, while about shortage *only relative to the demands of economic institutions and structures if these are maintained in unchanged form* (it is a different thing if this makes any sense).

Problems of use are shown by the statement that while the USSR is the biggest energy producer of the world, disposing of one fifth of the total energy resources of the world alone, still, according to an authentic evaluation at the end of May, 1980 "there are several difficulties in the development of energetics. Rapidly growing demands for energy are satisfied only with tensions. Measures like limitation or sometimes even temporary shutting down of large consumers often become necessary. All this causes perceptible damages to the national economy". [27] That is why the Central Committee of the CPSU

*This agreement has been reached prior to the summer upheaves and does not include soviet aid granted to Poland at late 1980.

**This expression does not mean here shortage in certain goods often occurring on the market of socialist countries, when a product cannot be bought at a given price, but according to the terminology used by a part of Western economists it postulates the existence of such physical scarcity that is not indicated even by the system of world market prices (despite monopoly prices).

dealt with the energy problem at a special meeting in June, 1980. Here the speaker, A. P. Kirilenko, Secretary of the Central Committee drew attention to the fact that several industrial and agricultural plants were wasting energy, there were deficiencies in determining energy norms and that the practice of realizing a too great number of investment projects at a time has to be eliminated. [28]

This meeting was no separate initiative, but fitted into the series in whose framework the Central Committee of the CPSU reviewed and sharply criticized all ministries one after the other using great amounts of raw materials and fuel. For example, the resolution of the Central Committee of the CPSU on metallurgy, machine building and the construction industry pointed out that though the quantity of metal production was increasing, aggregate demand was not satisfied, and decisions aimed at reducing too high metal consumption were not successfully realized. The resolution emphasized: though the volume of production in ferrous metallurgy was increasing, the technology applied was outdated and supply with products of good quality was insufficient. Machine building enterprises were manufacturing heavy products also further on, even in the field of such material-intensive products as bridges, tractors, presses and excavators. Material-saving technologies were introduced at a slow rate and the Planning Office planned material and energy demands relative to the "base" just as before. [29]

Low efficiency of material and energy utilization, i.e. high material and energy intensity of production are characteristic not only of the USSR, but first of all of Czechoslovakia, the GDR and also Poland from among more developed member-countries of the CMEA. This problem was already dealt with from many aspects by Czechoslovak economists in the 1960s and recently Růžena *Vintrová* has shown in an international comparison that the orientation of the system of incentives and of structural policy towards the heavy industry led to the development of production structures with comparatively very high material inputs (see *Tables 1* and *2*).

It is remarkable from the data of *Table 1* that the economic development of Hungary is characterized by the lowest energy intensity within the CMEA, approaching the West-European level, while that of the GDR is characterized not only by high energy consumption corresponding to the CMEA average, but also by very high steel intensity that seems to be surprising knowing the natural conditions and comparative advantages of the GDR.

Table 2 plastically reflects the previously indicated trend that in CMEA-countries' adaptation to new relative prices is lagging behind that in other countries.

Therefore, high material intensity is no technical necessity, nor is high energy intensity. It would be thus unjustified to calculate "real economic" or "technological" energy demands in national economic planning by extrapolating trends of the previous period *ex ante,* independently of economic policy and the economic mechanism as a first step, then to determine on this basis the "remaining" share of investments. Material intensity of production – the Czechoslovak author points out – is so high because of the technologies applied, the unjustified high share of material intensive branches of the heavy industry, first of all of metallurgy and the heavy chemical industry and, last but

Table 1
*Energy and steel consumption per unit of gross social output in 1970**
(Czechoslovakia = 100)

Country	Energy	Steel
Bulgaria	105	75
Hungary	79	76
GDR	104	95
Poland	105	91
USSR	100	109
France	55	69
FRG	69	91
Great Britain	76	67

*Comparison of gross social output was made with the so-called *Jánossy*-method.
Source: R. Vintrová: Materialoyomkost' proizvodstva v stranakh SÉV. Voprosy Ékonomiki 1979/5, p. 96.

Table 2
Changes in steel consumption per unit of national income in some countries
(yearly increase or decrease in percentage)

Country	1971–75	1956–75
Czechoslovakia	−1.5	−0.1
USSR	−0.7	−0.8
GDR	−4.2	−1.5*
Poland	−0.9	+2.6
Hungary	−1.9	−0.5
France	−7.7	−2.8*
FRG	−7.4	−3.5*
Sweden	2.0	0.2
USA	−3.7	−2.3
Japan	−6.6	+2.3

*Average of the years 1961–1975.
Source: cf. **Table 1**, p. 99.

not least, because of the interestedness in gross product resulting from the economic mechanism.

It is obvious that all European CMEA-countries have to choose some energy saving way of economic development. Tools to be used for that may be stimulation for the introduction of material saving technologies, enforcement of real prices of natural

resources in price policy and elimination of volume indicators (gross and net value of production or production realized) from the system of incentives, finally, utilization of structural policy and possibilities for the international division of labour for reducing the material intensity of production, mainly in small CMEA-countries. [30, 31]

It is obvious that the importance of a policy aimed at the transformation of economic structure can hardly be overestimated here. "Though savings to be achieved in energy consumption have their obvious limits, possibilities of increasing useful results of production are practically unlimited. We are here in a *conflict of objectives* – the analysis of Politická Ekonomie points out – ensuring one-sidedly the supply with raw material and energy from domestic and foreign resources. The way of solving the conflict has been reflected up to now in the unfavourable development of investment intensity, since the securing of these resources either domestically or from abroad does not provide enough possibility for investments serving as alternative to ensuring these resources and for the innovation threshold to be crossed." [32]

Some further problems

Meeting consumer demands and the possibility of spending money have become an issue concerning the population of every European CMEA-country. Speaking about market shortages first secretary of the Polish United Workers' Party, Stanislaw Kania has pointed out: "Nobody can assure the necessary supplies for the consumer market in Poland these days." [33] "It os difficult to explain) Vasil *Bilák,* Secretary of the Central Committee of the Communist Party of the ČSSR said in his speech – why there have not been enough bicycles, sleds, skis, electric bulbs, flashlight batteries, porcelain ware, stockings, lentil or bean . . . The shortage in some goods gives scope to bribing, speculation, boarding at the expense of the entire society . . ." [34] The Romanian head of state Nicolae *Ceauşescu* pointed out at a meeting of consumer, artisans' and agricultural cooperatives: ". . . We have to frankly admit that results are not in harmony with plan targets. This refers especially to services. They do not correspond, yet, to demands of the population . . . There are shortages in the manufacturing of products required by the population as well as in that of more precious articles . . ." [35] Shortages in consumer goods are not to rare phenomena in the USSR either and central press organs publish relevant criticism regularly indicating even names of responsible persons and enterprises interested. The unbalanced consumer market also has a part in the introduction of a new three-stage system of consumer prices in the GDR this year. The essence of the new practice of price formation is that the state subsidizes only prices of the most fundamental primary necessities, prices belonging to the medium – biggest – category have to fully cover costs and even ensure normal profits, while the third, highest stage is to be developed in order to create supply differentiated according to use value and quality, and more consistently apply the principle of performance so that, according to E. *Honecker:* "he who gives more for society and thus obtains higher income should also have the possibility to buy for it." [36]

In other CMEA-countries other methods are applied. For example, in Bulgaria it was declared by the December, 1977 Order of the Council of Ministers that uncultivated plots of large-sclea agricultural farms have to be distributed among those applying for them; furthermore, auxiliary farms have to be organized with industrial enterprises in order to improve the supply of works' kitchens. By the middle of 1980 60 thousand hectares of land have been distributed among 300 thousand households in the framework of this measure officially called self-supplying movement. [37]

In Romania "the drafting of an order is in process according to which all citizens having some plot *are obliged* to keep animals and poultry should they live either in town or village." [38]

This supply situation is partly connected with the relative backwardness of agricultural production and its large dependence on weather and foreign fodder despite the fact that several countries – among them the GDR and Czechoslovakia – have officially proclaimed a policy of agrarian self-supply. 1979 was an especially troublesome year for the agriculture of the CMEA-countries when production decreased and the increment obtained in 1978 was practically used up. Thus the gross production value of agriculture exceeded that of 1975 only by 8 per cent.

As a summarization of factors examined in the foregoing – and influenced also by harvests reflecting effects of extraordinarily unfavourable weather – an unplanned slowing down of economic growth took place in 1979. It could not be regarded as a frequent event from an economic history viewpoint that while the growth rate of GDP amounted in OECD-countries to 3.3 per cent in 1979, that of CMEA-countries was only 2.4 per cent. [39]

Therefore, Oleg *Bogomolov*'s diagnosis can be accepted according to which in the 1980s *a further qualitative development of the economic mechanism will be put on the agenda in every CMEA-country.* According to his train of thoughts man and human initiative will become major production factors since real economic factors of growth are limited. In other words, at present not "real economic", but organizational-efficiency factors have a determinant part in development. Therefore, transformation and modernization of the sectoral structure are required and, together with equilibrium requirements, that makes only a slower growth realistic. He emphasizes that according to experience activations of the social factor requires a relevant transformation of the economic mechanism and the development of factory democracy. Therefore, it is a common feature of CMEA-countries that they develop their economic control and management systems in the direction of real producer and consumer prices, performance wages and the independence of enterprises and associations. [40]

If this requirement resulting from objective relations is met – which can by no means be regarded as an automatic process – then also qualitative changes and reform of the mechanism of CMEA-cooperation will become possible. And that this is really a condition of further progress turns out from how integration may contribute to export orientation.

How did the CMEA-integration react to world economic influences

Under the effect of changes in oil price CMEA-countries changed the practice of price formation. Introduction of the principle of sliding prices allowed relative CMEA-prices to deviate less from world market prices, while assuring at the same time a gradual transition for raw material importers. It could not solve – owing to problems of the system of foreign trade and domestic prices already mentioned – the stimulation of fuel production; in other words, by price changes only a regrouping of national incomes could be achieved, but stimulation of supply through higher prices has not been attained.

By elaborating five special-purpose programmes – adopted by the 1978 Bucharest and the 1979 Moscow Sessions of the CMEA – major trends of cooperation have been determined until 1990. The special-purpose programmes do not mean exclusively and not even primarily joint investments, but many-sided general agreements specified later in bilateral contracts. Their elaboration is a task to be solved yet in a considerable part. The special-purpose programmes – despite expectations inspired by a part of literature – will not be accompanied by "gigantic movement of assets". Though joint investments realized between 1976 and 1980 in the framework of the coordinated plan of multilateral integration measures are regarded as a part of the special-purpose programmes, what is more, also application of investment contributions can be expected to some extent between 1981 and 1985 – first of all in the fields of the extraction of iron ore and nuclear energy – this form of cooperation leaves for the time being several problems to be solved yet. Therefore, not this form but agreements on specialization and cooperation will have the most important part and expansion of these agreements will provide the main contents of special-purpose programmes; new investment projects will be started only occassionally. [41, 42] The special-purpose programme will not lead – as we have seen, for objective reasons – to the increase of Soviet fuel deliveries after 1981, either.

Because recentralization processes took place in the economic mechanism of member-countries, the realized way of "protection" against world economic changes was so-to-say given from the institutional side, namely to increase the autarky of national price systems as desired by anti-inflationary policy. Besides, some less developed countries have joined the CMEA; these countries are, for the time being, not too much interested in hardening the financial terms of mutual trade. These two factors together resulted in a situation that there was neither interest in nor a possibility for the realization of measures envisaged in the monetary and financial chapter of the Comprehensive Programme. What is more, it seems that conditions for the real transferability and convertibility of the unit of account used by all member-countries and thus affecting a very wide range of interests and requiring their harmonization will not be created even in the next decade. Countries for which it is justified by the present level of intertwining of world market and CMEA-market may proceed on the way towards convertibility of their national currencies.

As a manifestation of the nature of bilateralism limiting international trade, and since the common currency ensured no adequate scope of movement for the deviating interests of commodity producers, trade between CMEA-countries mediated by Western firms largely increased between 1973 and 1975. [43] First of all with the purpose of short-circuiting this phenomenon trade settled in convertible currency has developed between CMEA-countries, amounting at present in case of some CMEA-countries, e.g. in that of Hungary, even to 10 per cent of the total mutual turnover. This way of settlement, though it makes trading conditions harder, increases the economically justified measure of mutual trade and in this sense has a positive role. At the same time it is obviously of a complementary nature, namely, a pragmatic short-circuiting of the problems mentioned, and postulates that no change of qualitative character can be expected in the entire mechanism of cooperation. Thus, it cannot be evaluated as a conceptional breakthrough, either, since even if settlement in dollars became general – with all other conditions of the mechanism unchanged – this would result only in changing the name of the unit of account of the present clearing system.

In the majority of CMEA-countries the task of adaptation to world economy has become a central issue of economic policy and thus also of stimulation for foreign trade. As a consequence of parallel shortages and parallel delivery obligations against convertible currency, reflecting also effects of parallel development strategies, delivery delays were more frequent in the period 1977–1979 and internal CMEA-turnover became harder. This manifested itself firts of all in the strengthening of quotas specified in physical terms and in linkages, as well as in bilateralism, furthermore in the frequent settlement in free currency of *increments* of quantities of mutually exchanged commodities; the growth rate of mutual turnover slowed down. On the basis of general world economic processes it seems that increasing the volume of turnover *at any price* is not desirable either in principle, or in practice. Therefore, it should not be considered as an unfavourable phenomenon if this earlier often enforced priority is pushed into background. This can be stated not only from the viewpoint of efficiency of the individual national economies, but also from that of the development of integration, since the development level or success of an integration are not qualified by the share of internal turnover even in principle. And, according to what was determined in the Comprehensive Programme – and since then at CMEA-sessions – maximation of mutual turnover has never been formulated in the case of the CMEA as a criterion of optimum. The success of socialist integration is characterized, namely, by how much it contributes to economic development in the individual countries. Therefore, the real concern for the CMEA-countries is not caused by the decreasing dynamics and share of internal turnover, but by the necessity of simultaneous adaptation to two markets of different quality and systems of requirements, which is a very serious problem from the viewpoint of the internal mechanisms, mainly practically. [44] Namely, world market impulses can be translated into the language of an economy based on plan directives only with difficulties and delays, while – on the other hand – transformation of impulses determined in physical

terms in a manner conforming to the market can be regarded as a very poorly elaborated sphere of problems even at theoretical level.

From this also the question arises that if the most important task of individual member-countries is adaptation to the world economy, then how can integration assist them in its realization.

Integration as a tool of export orientation

The idea – proclaimed by economists for several years – that in this situation the main field of integration may be cooperation on third markets has already been formulated in several member-countries also at political level. [45, 46] However, it is more difficult to outline what this integrational cooperation among CMEA-countries would mean. Since this field belongs to the less elaborated ones, at present the greatest possibilities for constructive proposals on the directions of further development are given here.

These proposals are based on the connections indicated above, namely, that – under the conditions of the slowly widening international division of labour because of limited real economic production factors as well as for various other reasons – in the 1980s an *impulse to economic development* may be given for Eastern European countries only by *changes of systemic factors*. As a matter of fact, the system of instruments of the socialist international economic cooperation functioning at present is *practically identical* with what was developed thirty years ago for realizing the economic strategy of isolation from a *global* division of labour and for the international extension of autarkic economic mechanisms based on plan directives. However, both the economic policy priorities of the member-countries and the system of external and internal conditions have radically changed since then.

Major trends of the reform of the cooperation mechanism of the CMEA were formulated in the mid-1960s [47] and analyses made ever since then supported not only the correctness, but even the growing urgency of these proposals in the new system of world economic conditions. The following proposals postulate evolution in this direction, but taking into consideration that qualitative changes in the CMEA-mechanism are *not* likely, at least in the medium run.

1. A most urgent task seems to be to conclude an "umbrella-agreement" with the EEC Commission which, then, could be a basis for further agreements between the parties concerned. At present both the USSR and Western Europe are politically interested in the establishment of an agreement institutionalizing, as it were, the normalization and maintenance, respectively, of East-West relations, even if the Commission – being defensive for both personal and institutional reasons – is not likely to be more enthusiastic about such an agreement at present than it was previously.

2. Demand for a global transformation of the international monetary system as well as changes taking place in the structure of international monetary organizations make

necessary and possible that CMEA-countries become IMF and World Bank members. This is motivated not only and not even primarily by obvious financial advantages, but by the possibility of participating in international monetary cooperation and decision-making that is a declared endeavour of Hungary and also a very important precondition of making the forint convertible. For international monetary cooperation the same statement holds as for financial problems of the CMEA in general, namely, that the situation of member-countries is different. Therefore, two practical solutions can be imagined: either a decision made at CMEA-level that would be carried out on the basis of the principle of interestedness (namely, with the participation of countries interested in the solution), or the countries concerned would make their own national decisions. At present it seems that the second solution is more viable.

3. Under the present conditions joint development and the estabilishment of producing capacities for export can be only a form of lesser importance for cooperation on third markets. Experiences up to now with the international economic organizations of the CMEA and joint investments indicate that, resulting mainly from the underdevelopment of the monetary sphere, it is very difficult to mobilize the rather numerous interests, not too ready for compromises, for expedient and mutually acceptable solutions based on economic considerations. Over and beyond that investment resources will be scarce in all member-countries in the years to come. Since international investment usually involves greater risk than a national one – or at least it looks so for decision-makers – it is not likely that there will be plenty of assests available for these joint projects. Therefore, in direct export first of all general contractorship, final assembly and occasionally established joint enterprise, moreover the improvement of non-price competitive factors seem to be perspectivic methods. It is obvious that there is no country that would compete with its prices from its own will, this happens under pressure. But this can hardly be the main method of increasing export revenues in an ever keener competition, when competitors have undefeatable advantages as regards raw material basis, specific wage costs and commercial policy treatment, especially with the strengthening of job protection. Therefore, the joint establishment of such market-organizational elements whose costs cannot be borne in general by the export volume of any Single CMEA country could be a promising solution. Such could be the establishment of joint market research institutes (on fully commercial basis) in Western Europe, but even more in Japan, in the USA and other non-traditional markets, or the running of commercial house(s) for the joint marketing of goods exported by socialist countries. Through the latter competition through prices and trade marks accompanying compensation deals could be avoided, what is more, even competition among each other could be regulated on the basis of business considerations. It is conceivable and it would be viable to run joint service stations for example in the vehicle-building industry.

4. Internal monetary relations ought to reflect the globalization of world economic processes. This would mean development of the convertibility of national currencies: convertibility of the currency of one or more socialist countries would largely decrease difficulties arising with productive joint ventures.

5. CMEA-institutions were established in a period when the idea of plan directives extended also to international level did not seem fully unfeasible. However, it seems to be even more important that also in the working style and aspirations of these agencies bureaucratic and administrative attitude is prevailing – partly as a consequence of their organization resembling that of a sectoral supervising authority. This manifested itself during the elaboration of individual special-purpose projects, when such large-scale cooperation programmes were worked out in physical terms that would have required investments exceeding all real possibilities, as it was stated later.

In the development of CMEA-institutions it would be expedient to take two clearly established results of integration theory into consideration, namely, that 1. the national framework will not be replaced by a regional organization of the economy and 2. the realization of an international directive planned economy is impossible within reasonable time.

It follows that *the work of CMEA-institutions should be oriented towards assisting business practice and their administrative character ought to be restricted.* CMEA-intitutions would thus transform from the international planning bureau and international sectoral ministries that they presently are into an international chamber of commerce or an international marketing and information centre. It is well-known how little enterprises of the individual CMEA-countries know about the activity of enterprises in the partner countries, which alone is an obstacle to cooperation. By gathering and spreading such information to be used in decisions on practical business policy CMEA-agencies could promote direct production cooperation also on third markets.

The list could be continued, but it is clear from the foregoing that by realizing these proposals the CMEA may largely increase its contribution to economic growth in individual countries. As against this, the autarkic CMEA conceptions – formulated from time to time in Hungary even at present – considering the development of socialist integration as an alternative to the global division of labour have no real basis. The "real economic" possibility of regional isolation cannot be justified from the aspect of either capital, or technology, or raw materials or agriculture (fodder); over and beyond that no related interest of our CMEA-partners, first of all of the USSR can be observed. When evaluating endeavours aimed at "replacing" Western imports by means of CMEA-cooperation – existing ever since the CMEA had been founded – also the practical experience has to be taken into consideration that in the last few years precisely an import-substituting process of opposite direction has taken place: goods that could be previously obtained from CMEA-partners (e.g. raw materials) have now to be purchased for convertible currency. And, since the expansion of internal CMEA-turnover is also impeded by the lack of commodity funds realizable on the world market, an export-oriented investment policy *considering world market requirements* is needed even in the interest of the development of socialist integration. [48] As a consequence only such conception can be realistic that realizes the division of labour within the CMEA, between East and West as well as between East and South so that they should be built upon each other. And in this case the CMEA will best contribute to economic development in member-countries, if it becomes an instrument of the global division of labour and integration into the world economy.

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ВОЗДЕЙСТВИЕ ИЗМЕНЕНИЙ В МИРОВОЙ ЭКОНОМИКЕ НА СЭВ

Л. ЧАБА

Согласно официальным оценкам стран-членов СЭВ, приспособление к мировой экономике стало центральным или одним из центральных проблем экономической политики, однако этот процесс идет медленнее, чем необходимо. При принятии Комплексной программы социалистической интеграции еще не учитывалось наступление нового этапа развития мировой экономики, который во многих отношениях качественно отличается от более ранних этапов, а это приобретает решающее значение для ряда стран СЭВ. Иначе, чем ожидалось в начале 70-х годов, сложились и внутренние системы управления экономикой стран СЭВ. Автор рассматривает, что нового внес нынешний

период мирохозяйственного развития и в какой степени усилилось воздействие имевших место уже и раньше внутренних факторов.

Во второй части автор рассматривает общие проблемы, определяющие развитие стран-членов СЭВ. Он дает обзор некоторых аспектов задолженности, рестриктивной экономической политики и процесса приспособления, указывая, что сущность этого процесса заключается в приспособлении экономической структуры к требованиям мирового рынка, без чего рестриктивная экономическая политика вызывает лишь общественные напряженности. Анализируя сырьевую и энергетическую проблемы, автор указывает, что сохранение советских поставок на уровне 1980-х годов является результатом объективных факторов, а дефицит сырья и топлива в большой степени возник из-за материалоемкой структуры производства и ведущий к расточительности материалов системы стимулирования, и поэтому не носит объективного характера, а может рассматриваться лишь в аспекте стремления к сохранению данной структуры. В связи с проблемами народного потребления, сельского хозяйства и темпов экономического роста автор указывает на центральное значение институциональных факторов.

В третьей части автор более подробно останавливается на реакции интеграции СЭВ на мирохозяйственные изменения, в том числе на вопросах целевых программ, инвестиционных взносов и взаимных оборотов в свободно конвертируемой валюте, и ставит вопрос о дилемме двойного, одновременного приспособления к двум различным в организационном отношении рынкам. В заключительной части дается анализ того, каким образом может интеграция стать орудием экспортной ориентации. Основной областью сотрудничества СЭВ в перспективе может стать сотрудничество на третьих рынках, однако для этого необходимо качественное изменение традиционного инструментария сотрудничества. Пока же это не будет осуществлено, целесообразно ограничить государственно-административный характер органов СЭВ и усилить их ориентацию на предприятия. Поскольку нет реальных для условий осуществления региональной автаркии (в отношении капитала, техники, сельского хозяйства, сырья и т. д.), то СЭВ может способствовать экономическому росту стран-членов СЭВ лишь тогда, если станет средством включения в мировую экономику.

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TRENDS OF SOCIAL DEVELOPMENT IN ADVANCED CAPITALIST COUNTRIES UP TO THE TURN OF THE MILLENNIUM

The author analyses those already existing processes in the development of advanced Western countries which he considers as irreversible ones. Such are: the overwhelming weight of the service sector in employment, the expansion of education, changes in the structure of employment, the increasing vulnerability of economic structure to social and armed conflicts and a few other factors. The author examines the likely consequences in the coming decades: reform of the traditional industrial division and organization of labour, changes in the role and functions of the modern state and in the order of social values.

The drawing up of forecasts is – in spite of their wide and spreading popularity – one of the most ungrateful tasks, since forecasts are usually not fulfilled, either because they are wrong, or because they are good. (Fortunately, it is not usual to reproach those making them ulteriorly.) As a matter of fact, every forecast applies the principle of *ceteris paribus:* it takes certain factors for given or unchanged. If a forecast correctly assesses and signals the consequences of some process (e.g. the scarcity of supply of some resource with a certain growth rate of production and consumption), society usually finds some way for changing the "otherwise identical" conditions and the forecast does not come true.

The opposite case is, of course, more frequent, when a forecast is wrong because it assesses incorrectly the way in which some socio-economic process will take place: it takes for given, unchanged or unchangeable factors and conditions which are not such perhaps even at the date when the forecast is made. There are two basic types of deficient forecasts. The first simply projects, extrapolates present trends into the future. It needs no proving what pitfalls this procedure hides, since even the demographic forecast – which no doubt relies on the most reliable statistical data basis and which, in addition, looks back upon the longest historical tradition – causes at population censuses sometimes rather great surprise to those who have drawn it up.

The other basic type projects the desires and requirements of the present into the future. And even if the attainment of this future picture can be supported with a mechanical extrapolation of prevailing trends, a later waking up to realities, their taking into account, adjustment to them and the elaboration of real and effective action programs proves to be a very painful, difficult and dragging process. Let us think e.g. of the twenty-year socio-economic development programme of the Soviet Union accepted in 1961 by the 22nd Congress of the CPSU, which provided for an annual average growth

rate of national income of 8,4 per cent and for one of 9,6 per cent of industrial output up to 1980!

Forecasting social development tendencies is, however, even more difficult than making prognoses for technology or economy, since there are even fewer points to hold on. Attainment of some level of technological progress or even of economic development level does not directly determine social relations, the changes in the institutional system of society. The relationship is here much looser and, mainly, more indirect. We may though measure with greater or smaller exactness – and even prognosticate – the development of material factors in living and working conditions (personal consumption, supply with housing and public utilities, working hours, educational level and the like), but we have only faint knowledge in what direction and with what force the *order of values* of society is influenced by changes in the material conditions of human existence: namely, the relationship of people to each other, to work and leisure, to the institutions of society and to the natural environment, to the common intellectual treasure of humanity – culture and science.

It is easy to see even without any proof of philosophy of history that social values have huge conservative powers and, if they resist economic and cultural development, they may doom to stagnation whole civilizations, as shown by the example of the so-called Asiatic mode of production or by that of the pre-Columbian American societies. Retrograde opposition to modernization may end up also in our days in such spectacular explosions which we could witness in Iran, or it may perpetuate the instability of the socio-economic system as can be seen in the Turkey after Kemal Atatürk and in several other countries of the Middle East.

But the typical case is that the development of the forces of production, the changes in the conditions of material existence of society sooner affect the values and modify them than changes occur in ownership relations and in the institutional system of society. Since we have to do with a gradual, slow, as a matter of fact: imperceptible, change to which rather literature and other arts prove to be more receptive, to a certain extent sociology, but not the science of history or politology (not to mention political economy), society usually becomes aware of this process when the new orders of value become victorious with stormy speed and shocks in the form of revolutions or radical reforms. But the preceding "quiet" periods are usually not the years of stagnation but those of successful social and economic development, when this "quantitative" development produces gradual changes in the face of society, makes its prevailing norms of operation, power structure and institutions obsolete and alienates from them the most mobile and dynamic strata of society.

Thus, the key to the foresight of future is an understanding of the present. The only possible mode of forecasting social development is to search for those already existing processes which we consider as irreversible. We have to take into account also those impacts of theirs which are hardly or not at all perceptible today, because the unfolding of slow "quantitative" processes and of their consequences needs time.

Our analysis discusses a group of developed capitalist countries which can be well delimited both geographycally and in social respects. Its conclusions, the forecast tendencies are, however, not immaterial, in some cases not even foreign to the socialist societies either. We do not mean convergence in the vulgar sense or tendentious "cross-talk". We examine processes taking place in different social media, in different political and social institutional systems, on different levels of economic and technological development, but all of them are rooted in the development of the forces of production, thus their releasing causes and mostly also their contents are the same. Though in different form of appearance, their societal and socio-psychological consequences concurring in direction have to be sooner or later reckoned with also in the socialist countries. Not to speak of the so-called demonstration effect which unavoidably appears and which can only be strengthened by the millions of threads in international contacts.

Irreversible processes affecting social relationships

Preponderance of the service sphere

The most conspicuous structural change in the economies of the developed industrial countries in the last quarter of a century has been that industry and, in general, sectors producing goods (agriculture, mining, construction, manufacturing) have lost their preponderance in employment. The historical turn when more than half of the population (more exactly of the employed persons) work in the sphere of services first occurred in the United States, Canada and Australia at the end of the fifties, then about two decades later, in the mid-seventies in the countries of the European Economic Community and Japan.

And this ratio is increasing, even at an accelerating rate. In the USA at the beginning of the century three out of ten employed persons worked in services, in 1929 four, in 1956 five, but in 1970 already six and according to some estimates in 1980 seven. It may well be expected that by 1985 eight out of ten persons employed will be working in the service sphere. As stated by a comprehensive staff study for the Joint Economic Committee of the Congress of the United States: "We are fast approaching the time when only 20 per cent of the labour force will produce all of our agricultural and manufactured goods." [1]

The composition of the service sector is, of course, highly mixed. Definition of service activity, its delimitation from activities producing goods, is a constant subject of debates, which are as old as political economy itself. Instead of the many unstable criteria let us now follow the pragmatic usage which in Western countries and in UN statistics classifies as services all "other activities", that is, all what falls outside the scope of the so-called primary sector (agriculture and forestry, hunting and fishing) and the secondary sector (mining, manufacturing, construction, electricity, gas and water supply). It is a common feature of all these activities that they do not produce new material goods, and

the exertion of the activity coincides with its use, though this latter criterion does not apply to every case.

What is the reason for and how far is such a surge of the service sphere necessary? Is this process valid for every kind of services or for only a part of them?

Current explanation perceives the phenomenon as its own reason. It establishes, namely, the undeniable fact that the ratio of the service sector starts growing at a certain level of economic development and points out a rather close correlation between per capita national income and employment in services. E.g. Daniel *Bell* refers for explanation to the Engel Law. Similarly as with growing personal income the ratio of outlays on food and other prime necessities is diminishing and that on durables and drinks and tobacco is growing, in his opinion also the purchase of services belongs to the same category (entertainment, travelling, sports ect.) and is rising accordingly. He gives the same explanation for the fact that people spend more on health, education etc. [2] These inclinations and tendencies are real by all certainty, but it does not follow from them in itself that needs for services have to grow *faster* than the consumption of material goods. At least this is no logical proof.

The explanation is provided by the different degree of efficiency of work performed in the service sphere. Even if there are a host of justified doubts arising in connection with the measurement and measureability of service performances, it is certain that per capita performance is growing very slowly in the great service branches. The reason is that human labour can be replaced or facilitated here only to limited extent by machines. E.g. the thorough computations of the American researcher Victor *Fuchs* have shown twofold and threefold differences in the growth rates of productivity between indutrial, agricultural and service work in the US economy for the period of 1929–1965 [3].

We may conclude on the decisive role of productivity differentials also from the different weights of the various kinds of services. Thus e.g., the number of people employed in transport, communications and public utilities declined in the United States (US statistics handle them, unfortunately, combined) according to historical statistics even in absolute terms for a long time after 1920. It attained the earlier value only half a century later, in 1968 – while its ratio, of course, continued to fall. [4] It should be, though, quite obvious that demand for these services and also their performances increased during this time to their multiple. But in these branches the productivity of labour is rising – without any doubt – at a speed exceeding even that of industry. As against that, employment in the "classical" personal services has been rather stable within the total in the United States for a hundred years, and has started to diminish definitely in recent decades.

The highest growth rates are, however, attained in those in which expanding demand is coupled with a restricted possibility for raising "productivity". Such are the health service, education, research, public administration, trade and financing. The great turn having taken place in recent decades in advanced capitalist countries in the sectoral distribution of employment may be attributed to them. Simultaneously, it was the

running up of these activities which created the conditions of and the background for the steep rise of productivity in the sphere of material production.

In the United States (and probably also in the other advanced industrial countries) employment has been rising fastest in education (both public and private) and now amounts to 8 per cent of the total labour force. In the health service, employment has been rising since World War II at 5 per cent per annum and its ratio attains today already 7 per cent of the total, that is, their number is almost the double of that in agriculture (6.3 millions against 3.4 millions). Education and the health service employ in the United States almost three quarters (14.3 millions) of the manpower in manufacturing (20.6 millions) [5]. Western Europe and the other advanced industrial countries have not yet attained that, but are going along the same road, with a time lag of about fifteen years.

Thus, the main reason for the changes is the different development of labour productivity and this explains the shifts in employment ratios both between the sectors producing goods and services and, within the latter, among the individual service branches. Since changes in the composition of final use are much smaller, we may conclude that 1. we have to do with *objective tendencies rooted in production;* 2. *changes in employment, working conditions and circumstances are much more important and more rapid than those taking place in personal consumption, living standards and the way of life,* although it is usual to stress the latter when the changes in living conditions are examined in western countries.

The preponderance of the service sector in employment does not imply social changes in itself. It is even doubtful whether it is justified to speak about a "post-industrial" society, about "deindustrialization" – in the wake of the terminology introduced by Daniel *Bell,* Herman *Kahn* and others. As a matter of fact, the share of material goods in the total consumption of the population does not dramatically decline (it is a different matter, that it does decline in the *spending of their incomes*). As a matter of fact, industry, and within it manufacturing, continue to be predominant in the production of material goods; the technology delivered by industry, the methods of industrial business organization continue to determine the development of the other sectors, services included. Nevertheless, its preponderance involves – directly and indirectly – several modifications in the mode of functioning of the capitalist economy, starts changes in the social organization of labour, in working conditions and in labour relations, in the composition of workers, in their economic and political organization.

The spread of services has a stabilizing effect on *business cycles.* Demand for services, and the number of those employed in services changes, namely, only to minimum extent under the effect of business fluctuations, it is almost insensitive to them.* This may be explained by several causes. Services cannot be stored, or accumulated, demand for them can be held back or delayed only to slight extent. A great part of those employed are independent (small craftsman or tradesman, small entrepreneur); they

*This was pointed out in the Hungarian literature already in the early sixties by Ferenc *Molnár* in his analysis of the reproduction process in the United States. [6]

cannot fire themselves; and can give up their existence only with difficulty under the impact of market fluctuations. (This is otherwise a phenomenon well known from small-scale agriculture.)

And finally – today perhaps the most important reason – the non-market, non-commercial sector is steadily growing within services. Education, the health service, scientific research, public administration and defence, welfare and social care, environmental protection etc. are mostly or entirely financed by the state and other public funds. In addition, also the role of non-governmental, but at the same time non-profit institutions is growing (foundations, trade union insurance, pension funds atc.). According to estimates, in the United States one third of those working in services (that is, one fifth of total employment) were employed at the end of the sixties by the non-commercial sector [7]. This ratio has been further growing since then.

The spread of services has a deconcentrating effect on the *structure of the economy by enterprises and establishments,* and that in a double sense. On the one hand, there are only limited economies of scale in the service sphere. In retail trade, catering and hotels there are though various "chains" and "networks" which exploit the advantages inherent in centralized procurement, transportation, marketing, etc., but the "establishments" themselves, that is the units directly serving the buyers and customers are usually not big, because concentration would make "spreading", the access to the buyer, the satisfaction of (frequently individual and occasional) demands difficult. Even in the non-commercial sphere – education, health service, scientific research – smaller units within the large institutions (departments, groups) are usual, their independence and complete autonomy in performing their tasks is a necessary principle of organization, since a large staff rather hinders than helps the success of interpersonal cooperation and creative initiative.

On the other hand, in a number of service branches independent enterprising requires relatively small capital and therefore – as against the sectors producing goods – the process of capital concentration is very slow, personal and family enterprises are widespread. In consequence, in the service sector the enterprise or establishment with small staff continues to predominate. As has been correctly stated by Hungarian scholars into the subject: "the wide opportunities in the tertiary sector created a situation in which the small economic units, doomed to long agony, have proved viable in 'updated form' as enterprises sucessful also in new areas". [8]

As regards impacts, the most important one is perhaps that on the *composition of employees.* The expansion of the service sphere increases above all the ratio of non-manual, white-collar workers, since the most dynamically growing branches (education, health service, research and development, public administration, financing, mass communication etc.) expand mainly the characteristically white-collar jobs. It may be explained mainly with the expansion of the service sector that the share of white-collar workers has exceeded 50 per cent of total employment in the United States since the mid-seventies.

Another great change is the growth of female employment. Since working conditions and physical requirements in the service branches traditionally enabled a greater

resort to female labour, expansion of services increases in itself the demand for them. In addition to other (demographic, educational etc.) factors not discussed here, this has also a great role in the sharply increasing ratio of working women in the advanced industrial countries. E.g. in the United States the ratio of women employed rose in the last quarter of the century from 30 to 40 per cent (in 1977: 40.5 per cent). [9] Previously it took 60 years to attain a similar change in terms of percentage points! It is difficult to overestimate the importance of this change in the existential conditions of women for their actual emancipation and its impact on the life of society.

The expansion of the service sector involves changes also in *the working conditions* of employees. Not only in the sense that difficult manual work or that performed under unhealthy circumstances is eliminated or pushed into the background. As distinct from industry, services are characterized instead of the man–machine relationship mostly by man–man relationship, even if mechanization and automation, telecommunication radically transform many services. Work more or less preserves its personal nature; since its products do not take material form (apart from paper and magnetic tapes), they cannot be stored, the chain between the person performing work and the user may be relatively short, the worker can have direct survey over the destination and meaning of his work, in one word, the "alienation effect" characteristic of modern large-scale industry asserts itself to lesser extent in the service sphere.

Conditions of the *union and political organization of workers* also change. The industrial labour force is the traditional basis of the worker movement. The diminishing ratio of industrial employment, the boosting of trades and areas which earlier fell outside the movement, the large-scale employment of women create a new situation and demand a new approach, policy and organizational methods from the traditional organizations and parties of the working class. If they cannot adjust to the new situation in time, the consequence may be even a decline in their membership and influence.*

The expansion of education

Expansion of education is a well known process ever since the industrial revolution, appearing first of all in making primary education compulsory and general. It is also well known that the level of qualification is gradually rising in every country, in consequence of the fact that the new generations are usually better educated, that is, their members are learning in greater proportion and longer than the older age groups. From the aspect of trends it is thus not the general qualification level of society that is decisive, but the

*A warning example may be the case of the US trade union movement: in 1955 the two great trade union federations, the AFL and the CIO had on their amalgamation 16.8 million members out of 68 million employees. In 25 years employment increased to 105 million, that is, by 36 million, while the trade unions registered only a 3.2 million increase in membership, and now they have still only 20 million members. [10]

degree of education of those entering adult age. Well, it is precisely in this field that a change has taken place in the last two decades in the advanced western countries which, due to its extent, may entail qualitative changes in the coming decades not only in the composition of the labour force, but in the image of society itself. Let us first consider the numerical data.

Table 1
Enrolment ratios for the second level of education, in percentage of the corresponding age group, 1960–1975

Country	1960	1965	1970	1975
United Kingdom (up to 1970: aged 12–18, from 1970: aged 11–17,	67	66	73	81
Austria (aged 10–18)	50	52	72	76
Belgium (aged 12–17)	69	74	82	84
Denmark (aged 13–17)	65	83	94	77
France (aged 11–17)	46	56	75	85
Netherlands (aged 12–17)	58	61	75	90
Federal Republic of Germany (aged 15–18)	39	60	92	90
Norway (aged 13–18)	53	64	84	88
Italy (aged 11–18)	34	47	61	71
Spain (aged 11–16)	23	38	56	73
Switzerland (aged 12–19)	26	37	48	52
Sweden (aged 13–19)	55	62	72	..
Australia (aged 12–17)	51	62	69	72
Japan (aged 12–17)	74	82	87	92
Canada (up to 1975: aged 14–19, from 1975: aged 12–17)	52	62	66	94

Source: UNESCO Statistical Yearbook, 1977. Paris, 1978, pp. 128–176.

Certainly because of difficulties in statistical observation, international statistics publish figures only on enrolment. The number of those completing secondary studies is, obviously, considerably smaller. In addition the data on those enroled for secondary education from a given age group comprise also those who do not attend secondary schools but participate e.g. in apprentice training or other courses. (In Hungary e.g. 39.5 per cent of those aged 14–17 years learn in secondary schools, but in addition 40.5 per cent of those aged 14–16 years participate in skilled worker training. [11] This is reflected in the above quoted international statistics in the enrolment for secondary education of 63 per cent of the 14–17 years age group in 1975 in Hungary.)

Nevertheless, as regards tendencies, it turns out even from these data that the ratio has grown to one and a half or twofold since 1960, and in the countries starting from a

lower level (FRG, Italy, Spain) to an even greater extent. It is similarly unequivocal that in countries which are in the vanguard of economic development, (Japan, FRG, Canada, Netherlands, Norway, France) the value of the indicator is highest, around 90 per cent, which seems to imply that about three fourths of the young generation acquire secondary school-leaving certificate or corresponding qualification. (Only the data of Switzerland show conspicuous deviation from this tendency, which may be explained by the particular social system of the country and its conservative traditions.)

Table 2
Enrolment ratios for the third level of education, in percentage of the age group 20–24, 1960–1975

Country	1960	1965	1970	1975
United Kingdom	8.50	11.75	14.07	16.66
Austria	8.01	8.97	11.76	19.20
Belgium	9.09	14.84	17.49	22.01
Denmark	10.39	13.70	18.28	29.69
France	9.83	18.20	19.50	24.29
Netherlands	13.18	16.75	19.51	25.93
Federal Republic of Germany	16.26	18.85	32.77	29.67
Norway	6.87	10.71	15.91	22.15
Italy	6.61	10.70	16.69	25.48
Spain	3.95	5.55	8.91	20.77
Switzerland	6.63	8.44	9.98	13.82
Sweden	9.04	13.09	21.34	27.98
Australia	13.11	16.02	16.62	23.40
Japan	9.45	12.90	17.01	24.69
Canada	16.03	26.33	34.59	38.99
United States of America	32.07	40.18	49.43	57.64

Source: UNESCO Statistical Yearbook 1977, Paris, 1978. pp. 128–176.

But the real change which might be said radical has taken place in *higher education.* It may be seen from *Table 2* that the enrolment ratios for higher education increased in one and a half decade to two or threefold in every developed industrial country, to fourfold in Italy, and to fivefold in Spain. If we take into account that in these countries members of very populous age groups born after World War II entered the universities, it should be clear without separate data, that the increase in the number of students in absolute terms was four or fivefold! This dynamics exceeds even the growth rates of every kind of "economic miracle".

As a result of this dynamic process today already one fourth or one fifth of the young attend universities or other institutions of higher education in most of the

developed countries. But it seems as if the United States preceded in this respect even these countries by 15–20 years (similarly to the expansion of the service sector); more than half of those aged 20–24 enroled for higher education. (It is interesting that Canada, with a ratio of almost 40 per cent, is about halfway between the USA and the other countries.)

Which are the springs of this process, and to what extent can it be considered as irreversible?

Of course, this process – spectacularly accelerating in recent decades – had and is having its economic basis, since rising qualification of those working is a source of intensive economic growth. Demand for highly qualified labour soared particularly in the period following World War II. Beyond the general business upswing structural transformation of the economy played a great role in it, since it was the industries requiring sophisticated technological knowledge and much research that became the centres of growth. In the fifties and sixties there was a great excess demand for specialists in almost every developed country. Also their social prestige and income have increased.

Of course, expansion of education must not be explained with merely narrowly interpreted economic reasons, even if a close correlation can be shown to exist between the levels of economic development and education, and between the acceleration of economic growth and the growing proportion of school enrolment.* This correlation may be explained, namely, also with such interrelations that a higher development level not only demands, but also facilitates for society and individuals to spend more from a greater income on education and training. The modern state has become active also in the field of education: it created a series of universities, lavishly allocated subsidies, grants, stipendia etc. It was pushed in this direction – expressing the wishes of wider masses earlier excluded from higher education – by various liberal, reformist and left-wing parties and movements.

But in the mid-seventies the situation changed in the advanced capitalist countries. Slower economic growth, reduction of public expenses reduced the market demand for specialists, a general relative excess supply emerged, even if in some areas demand for specialists remained unsatisfied.

This discrepancy is characteristic first of all of the United States, although, if in milder form, the unemployment of intellectuals is also known in Western Europe. This is so mainly in those countries which are struggling with economic stagnation or the difficulties of structural transformation or with both (Britain, Italy, France). The transitory solution is that young graduates take jobs not corresponding to their qualifications (as clerical workers, salesmen, operatives etc.). Because of the difficulty of finding jobs and relatively diminishing earnings the attraction of intellectual careers weakens and thus the number of those continuing their studies is growing only more slowly or is stagnating,

*Therefore, knowing international tendencies, Hungary's lag in respect of higher education is conspicuous, whether we consider the 1975 enrolment ratio of 11,67 per cent of those aged 20–24, or the present participation rate of 8,8 per cent of those aged 18–22.

even diminishing. (According to some sources the ratio of students in higher education has already reached its peak in the United States and got stabilized at that level.) In the next years the population of cohorts entering the age of higher education diminishes because of demographic reasons anyway, thus the "excess supply" of intellectuals will be absorbed, and vanishes.

But this – as a matter of fact forced – adjustment of the "supply side" will hardly reverse the process of expansion of education. There are much more weighty arguments for the growth of the "demand side". It has, namely, become clearer and clearer since the mid-seventies that – facing on the one hand the dearth of the conditions of economic growth and, on the other, the competition of some "Third World" countries attaining spectacular export successes – the industrialized countries can stay in the vanguard of economic development only by fully relying on the exploitation of a single production factor: the growing knowledge, expertise and experience of their scientists, engineers and workers. Although we do not share the today fashionable, this time quasi-economic edition of the theory of *"Untergang des Abendlandes"* which presents an apocalyptic picture of society stricken by energy and raw material shortage, and languishing under the impact of environmental pollution, but there is no doubt that the world economic and ecological conditions of economic growth are in a process of change, and that these changes have led to a revaluation of the "human factor". If namely, as distinct from the trends of the former fifty years, the capital-intensity of production development is not diminishing but increasing, then, coupled with the earlier prevailing tendency of growing capital-intensity in scientific research, the main growth resource of the developed industrial countries will be indeed human knowledge.

But highly qualified manpower fits into the established social order with difficulty, both in the traditionally organized workplaces and in society in the wider sense. It needs no separate proof how decisive university education is for the development of the human and political consciousness of young people. Sociological researches have proven the otherwise obvious fact that the university makes students more liberal, less respectful of authority, less dogmatic, less ethnocentric and showing greater interest for political questions. At this age the influence of parents and of the home is weakening, they spend their university years in a relatively closed youth subculture and during these years they become receptive to new intellectual currents, values and norms of behaviour. And the new feature of the present situation is that the university students and graduates are no longer a numerical minority in the Western countries and their action – as we have known from 1968 – can directly shock the established society.

Other factors

Changes in the structure of occupations. This is perhaps the best known process from among those which take place in developed industrial societies. In connection with the changes in the sectoral structure of the economy we have already mentioned the

spread and preponderance of white-collar occupations. In itself, this process means no change in class relations, not even in labour relations. This is, namely, so broad a category that it comprises both the owner of a department store (if he participates in management) and the errand boy; the nuclear scientists and the bus driver, and the row may be continued at will, in an optional combination, almost *ad infinitum.*

It will be more expendient if we examine the weights of more-or-less homogeneous occupational groups. To stick to the example of the United States, in the first two decades of this century the strongest occupational group within the labour force was that of the farmers, while outside agriculture that of semi-skilled workers, (the numbers of unskilled and skilled workers did not lag much behind). This situation may be considered as typical of the stage of extensive industrialization. As was shown by the computations of D. Bell [12], relying on historical statistics, to the extent the ratio of agricultural workers declined, that of semi-skilled workers (operatives) was rising, attaining a peak of 20,4 per cent in 1950. At that time, owing to mechanization, the ratio of unskilled workers dwindled to 6,6 per cent, while the third place was taken, close behind the 14,1 per cent ratio of skilled workers, by the category of clerical workers (12,3 per cent). A decade later, by 1960, these two latter groups changed places but the semi-skilled workers were still leading.

But what has happened in the last two decades? This is shown in *Table 3,* presenting the absolute figures for the individual groups and the changes in their order by size.

Thus the order was unchanged still in the mid-sixties, but a new group appeared among the "major" ones, which closely approached that of the craft and kindred workers. This was the mixed group of professional, technical and related workers, which, by grace of statistical practice in Western countries also comprises such "intellectual" occupations as professional sportsmen or circus performers, yet is mostly composed of specialists with indeed higher qualifications, – natural scientists, engineers, physicians, jurists, economists, etc. – For reasons already discussed, this category has been fast growing and became by 1970 the third largest group, preceeding the slowly growing group of craft and kindred workers.

But the radical shifts took place in the mid-seventies. The stagnating group of operatives lost its first place held over half a century, and was overtaken first by the clerical workers and then by professionals. These two categories combined now make up already one third of total employment. Thus, development of the forces of production and of the social division of labour has led in the most powerful country of the capitalist world to a situation where the ratio of those performing productive work in the traditional sense and those performing intellectual and clerical activities has turned into the reverse of what we have known from the history of human society up to now. This implies at the same time fundamental changes in the stratification of society, it modifies the inner composition of traditional social classes and their power relations.

The increasing vulnerability of modern economic organization to social and war conflicts is a direct consequence of the deepening social division of labour. Should this

Table 3

Staff and order of the largest occupation groups in the USA, 1965–1978

Occupation group	1965		1970		1972		1975		1978	
	thousands	order	thousands	order	thousands	order	thousands	order	thousands	order
Employed persons, total	71,088		78,627		81,702		84,783		91,846	
of which:										
professional and technical	8,872	4	11,140	3	11,459	3	12,748	3	14,252	2
clerical workers	11,140	2	13,714	2	14,247	1	15,128	1	16,600	1
craft and kindred workers	9,216	3	10,158	4	10,810	4	10,972	4	11,853	4
operatives	13,345	1	13,909	1	13,549	2	12,856	2	14,026	3

Source: Computations based on Statistical Abstract of the United States 1978, p. 418.

refined texture of the division of labour be torn at any place, the whole society may get in a short time into a state of complete dissolution. Paradoxically, present-day society can protect itself against natural disasters (floods, fires, earthquakes) very quickly and in an organized manner, even if it cannot always avert them, and can successfully make up for their consequences, while if a few hundred, sometimes a few dozen people put down work, they can almost paralyse the life of economy and society for a longer time. Let us think only of the strike of flight-controllers, which the western countries are usually powerless against and know only one single solution: to fulfil their demands. But many similar examples could be quoted and all would only illustrate that, owing to the growing complexity of global economic and social functions innumerable "bottle-necks" have developed in the social division of labour. If they get closed: normal life becomes impossible to an extent that had been inconceivable at lower stages of development.

The 35 years of rapid economic growth and development without war is similarly a new phenomenon in the history of the 20th century, and has become in itself a factor in forming society. During this time in the developed industrial countries almost two generations have grown up who do not know the devastations of war in their own country and – apart from the Korean and Vietnam wars of the United States and some rearguard actions of a few European countries in their colonies – they have not been in danger of life. Rapid economic growth entailed such growth in real incomes, in living standards, that for the younger generations in developed countries privation and misery are practically unknown notions: these are pushed to the distant edge of their world and society. All that, of course, influences the view of life, the order of values and priorities of new generations.

But why do we consider this effect as irreversible, when rapid economic growth and the period of unbroken rise in living standards has come, according to all indications, to an end?

On the one hand, a slower rate of growth is not identical with falling living standards; this was shown in the lean years of the seventies when stops, declines and slower than earlier upswings alternated but, on the whole (perhaps with the exception of Britain) living circumstances continued to improve in the developed countries, even if at a slower rate than earlier.

On the other hand – and this is what we consider as decisive – the order of values of a society is not shaped by momentary changes in circumstances, but by the previous development of society. Sociological investigations have proven the interesting interrelation that from among the factors influencing the order of values of a generation is the material and environmental circumstances of the young years (8–12) that have the greatest impact on shaping personality. The second is education and current income follows only as third. The impact of the latter is stronger on a lower level of development, but weakens with its rise. It is the age-effect that proves to be weakest (that is, the effect of growing age on changes in the order of values). This was pointed out also by public opinion researches made in the population of 7 West European countries in 1973

according to a uniform method [13]. Thus, the order of values of the next decades will be shaped also further on – unless it is affected by grave shocks owing to war and other reasons – by the peaceful and relatively successful economic development of the last three and a half decades.

Likely consequences

Reform of the traditional division of labour and organization of work in large-scale industry

Everywhere in the world the prevailing organization of factories is the child and inheritance of that stage of industrial growth when the building out of mass production occured by placing beside machines the manpower squeezed out from agriculture, flowing into industry and trained in a hurry. The "classical" formulation of its principles of operation was given by Frederick W. Taylor at the beginning of the century. His theory provided guidance as to how to squeeze out the maximum performance from the low-paid, hardly trained and in its bulk first-generation workers.

The methods are common knowledge: analysis of the work process and breaking it down into parts; making a worker perform the possible smallest number of partial tasks; standardization of time inputs and movements on the basis of time and motion studies; individual payment by results based mostly on the pure piece rate; the building out of a rigid supervising and checking machinery; separation of the activity defining the tasks (planning) from execution etc. Taylor's principles were best embodied by the conveyor belt invented by Ford, similarly at the beginning of this century, and it was work beside the conveyor belt that made the mass production of standardized products truly possible, and with it a sudden increase in the productivity of labour. But the performing of impersonal partial tasks is only *a partial utilization* of human labour power, because it claims only a part of human talents. Therefore, this kind of work organization aiming at the fullest exploitation of the worktime also entails unforeseen, undesirable or even opposed effects. The worker becomes uninterested in mechanical work. If the employer does not claim his intellectual talents, the worker will not initiate, will not innovate, nor does he wish to improve the efficiency of his labour. Indifference, apathy, frustration leads to growing absenteeism, increasing labour turnover and truancy.

But dissatisfaction with work has become an alarming problem in developed countries in the last one or one and a half decades. The disparity between improved living circumstances, the high education of manpower and the work organized according to old principles has become conspicuous. For solution experimenting with the "humanization" of work started already in the early sixties: it was attempted to trust workers with less of monotonous, mechanically performed work and with more of tasks that are varied, requiring greater professional knowledge and involving greater responsibility. From among the experiments carried on in many countries in highly different ways even the successful ones had the ambiguous lesson that it is not enough to look for a medicine

curing the harmful effects of traditional large-scale work organization, but the basic principles of work organization itself have to be subjected to revision.

Developments in the seventies in the North European countries, above all in Sweden, but in other Scandinavian countries as well, seem to indicate that the conception promising solution is already emerging. Its substance is in a developing division of labour within the work organization of large-scale establishments *without deepening the division of labour between individuals,* without increasing further the fragmentation of jobs, but *starting an opposite process by making jobs more complex.* The method consists in forming autonomous or semiautonomous groups working together and organizing their work independently (possibly producing a clearly separable *product*), which become basic units of the division of labour within the factory, instead of the individual.

In the practice of factory organization this leads to two basic changes (called by many "revolutionary"): 1. to doing away with the conveyor-belt in assembling the finished product and 2. to the replacement of the principle of horizontal or functional plant organization by a vertical one based on the product.

1. There are two known methods for *doing away with the assembly line.* One has been employed in Sweden and in several establishments of other Scandinavian countries, when they abolished the movement of the conveyor-belt independent of the worker, together with the fixed position of the worker along the assembly line – in the literal sense – and in the production process based on the division of labour – in a figurative sense. With this cooperation, mutual help and substitution have become possible within the group of workers working together, without having to renounce the advantages provided by the assembly line (solution of transporting materials, standardization of parts and operations etc.). The other method has been started in Japan and is taken over therefrom by other countries (also by Sweden [14]). It is not the assembly line that is eliminated, but the man working beside it and his tasks are replaced by industrial robot-machines controlled by micro-processors. Thus, work organization in large-scale industry makes a complete circle: the mechanical activities to be performed by man are now really entrusted to machines.

2. Modern technology allows *to shift to a plant organization relying on the product principle,* which extends the logic of forming autonomous groups to the large industrial organization itself. It wishes to attain that the basic organizational units of a modern factory (plants, workshops) should not be engaged in some phase or partial process of the production process, or in turning out some part of the product, but should as far as possible perform a complete production cycle, *releasing a finished product or an independent part of it.* Such a unit, called product-shop, would be a factory within the factory and would realize an enlargement of tasks: it would expand the tasks fulfilled by the organization, it would link production with the auxiliary-supply functions, it would decentralize the control of responsibility for production. Since such a shop would comprise 2–5 production groups, that is, 75–200 persons, the purpose, meaning and organization of production would be clear and surveyable for all; coordination and control would become simpler. All that would create the possibility for workers of

shaping their working conditions directly and continuously, for meritory participation in the control of production.

It is an important advantage of the product shop over the functional organization of production, that it would shorten the production cycle in time and space, since work-pieces would not migrate from a workshop or store-room into the other. Inventories, the stock of goods-in-process would be smaller, the tying up of circulating capital would diminish. This facilitates in itself the change of products. And if we only reflect that a few dozens of people accustomed to each other can shift to the production of some new product much more easily and quickly than a production machinery of many hundreds of people, it becomes understandable that the small size of the product-shop becomes indeed desirable for many in the West not merely because of the currently fashionable slogan: "small is beautiful". Whether the advantages deriving from flexibility and the reduction of demand for circulating capital counterbalance the greater demand of a product-shop for machinery and thus for fixed capital, depends obviously on the concrete situation in which labour, that is the behaviour and attitude of living and working people, play the decisive role. From the viewpoint of efficiency this may be decisive if only for the reasons that because of the high share of wages costs in cost accounts in advanced capitalist countries today a "stable" and "trouble-free" labour situation may in itself make major investment inputs pay.

Thus, in the last resort, the idea of product-shop wishes to *realize the advantages of the erstwhile artisan workshop by making use of the possibilities provided by modern technology and the modern large-scale enterprise.* Not for philantropic reasons, not because of backward nostalgy, but because of rational business considerations it wants to make the immense industrial dinosaurs capable of survival: of adaptation to the quickly changing market situation and to the growing complexity of labour relations. It seems that the logic of adaptation transforms not only the plant but also the *enterprise* organization. The Swedish Employers' Confederation points out in an analysis e.g. that the tendency of decentralizing the management of large industrial companies, prevalent for some longer time, has now met with new forms of work organization in plants, and that this leads to a break with the idea of a specialized functional organization. Accordingly, the present tendency is that a large company should consist of complete, integrated "sub-companies". The sub-companies again, would be made up of integrated, self-contained product-shops and within them production groups similarly organizing their day-to-day operations independently would be operating. Thus, what would remain to the centre of the large enterprise are mainly financing operations and the control of technological development policy. [15]

But of the organizational chain large company → sub-companies → product-shops → autonomous groups today at most the first (upper) and the last (lower) links exist in reality. The first is well known from the practice of big concerns which delegate considerable autonomy in management to their affiliates. The last form has been operating – though experimental in nature – for more than a decade in many West European and North American establishments. The middle link of the organizational schema – we

may say its decisive link – exists, however, only as a concept, on the "drawing board". It still has to prove its viability. But even until then it cannot be treated as a mere phantasy, since the idea itself relies on present development tendencies and strivings, and has found acceptance in a rather wide circle of Western experts.

In early 1980 e.g. the Advisory Council on Research and Development (ACARD) appointed by the British government published its report on the expectable consequences of technical progress on the British economy in the eighties. It states, among other things, that the automation of small-series production will introduce great changes in the methods of industrial production: "Computers will enable small workshops to make a wide range of products, each envolving a small production run, at costs much closer to those of the mass assembly line. As with new materials, the longstanding tendency for new technology to lead to greater uniformity of products will be reversed", so the London *Economist* sums up the important conclusions of the forecast. [16]

The summary study of the common West European futures research project concluded some years ago formulated still in more cautious terms: it saw in the decentralization of large-scale industrial organization only one of the possible trends, because the economies of scale speak for large units, but the flexibility of small firms is also a cost-reducing factor. But, beyond these efficiency aspects in the closer sense, the study called attention also to a social aspect: namely, that with growing size control becomes disproportionately complicated and "there is an increased vulnerability to strikes and other forms of disorganization." [17]. Thus, in the last resort the industrial organization has to adjust to the present labour force, the present social conditions, and these modify the traditional concept of the efficient functioning and viability of the enterprise. Therefore, in the decades facing us transformation of the century-old large-scale industrial organizational structure will be on the agenda. The technological conditions for change have been already created by technological progress, but the reasons are to be found in the changes in the composition and quality of the labour force of society, in the institutional system of the developed industrial countries and in their systems of values.

Institutional changes

The most important institutional change of the last half century in advanced capitalist countries has been the hugely increased economic role of the state. This reflected a change in the relations of production of modern capitalism, the building out of state monopoly capitalism. Instead of the erstwhile function of "night-watchman" the state now considers its task to maintain and regulate the general framework of the reproduction process. This comprises control of the business cycle (decisively with the tools of fiscal and monetary policies), assuring of the reproduction of labour (education, the health service, labour safety, social and welfare care) and creation of the physical elements of the infrastructure for production and for the population (transport and communications, other public utilities). For this purpose the state budget concentrates

about one third of the GNP or even more. The question is whether this role of the state will increase and expand in the next decades or precisely opposed tendencies will gain the upper hand, or perhaps new functions will appear and come to the fore?

Around the mid-seventies, right after the shock of the 1973 price rise and the oil embargo, and the prophecies of the Club of Rome, the assumption rather widely accepted in the West (but also in Hungary) was that adaptation to the shortage of energy and other raw materials, the reorientation of investments, increased conservation of materials would need direct intervention of the state, governmental prohibitions and prescriptions, with the direct allocation of scarce resources, and this would make it necessary to expand the economic role of the state, to narrow down the scope of the market, to replace methods of market economy with direct government planning and regulation.

This assumption has not seemed to hold in the four or five years passed since then. There were indeed (short) periods and countries when and where administrative restrictions and government allocation were effected and, mainly measures of this type were designed for the case of eventual emergencies. All things considered, adjustment to the changed world economic conditions demanded the developed industrial countries to increase the efficiency of production, to counterbalance the leapfrogging energy and other import bills with efficient exports, to adjust flexibly to the requirements of external demands. So far those countries have been able to meet these requirements the best whose enterprises did not get government subsidies to maintain their outdated production patterns, but were exposed already to the development pressure of market competition. Also in all industrialized countries, without exception, government economic policies have been directed in recent years at fostering this climate of competition and not at weakening it. They hope to accomplish the readjustment of economic structures, the efficient use of natural resources growing scarce mostly not through direct interference but by applying indirect market control instruments channelling and stimulating the enterprises.

It is characteristic from this aspect that in spite of the concern about energy supply – as shown by a recent study made in the Budapest Institute of Business and Market Research [18] – there has been no major shift in the structure of investments in favour of the energy-producing sector (except in countries, e.g. the United Kingdom, where there are oil reserves). As a matter of fact, for the developed industrial countries poor in raw materials it is more advantageous to improve the effectiveness of use, than to concentrate resources on the increase of energy production. For the former the expansion of state interference, introduction of a central governmental allocation can be expedient only for the short run, i.e. transitorily.

In the second half of the seventies in the West actually there evolved – against expectations – a neo-conservative, neo-liberal trend, exacting the winding-up of government interference, the cutting back of public expenditures, strengthening of the private sector, explaining it with the very task of adjustment to the changed world economic conditions. The blow was the heaviest for losing state companies, governmental subsidies to lagging industries and, not least, for the so-called welfare state, that is, public

allocations on welfare and social purposes, social insurance schemes and other attainments of the workers. This neo-conservative wave has swept over the advanced countries from Sweden to Portugal and from Britain to Australia and in its wake the politicians fluttering the flag of free enterprise have come to power, replacing the reformist governments of social-democratic hue.

Can we conclude from this that adjustment to the new world economic conditions will entail in the developed capitalist countries a reduction of the welfare and social functions of the state, otherwise they would be doomed to stagnation, to failure in the world market competition and, in the last resort, to impoverishment, similar to that in some Latin American countries, e.g. Uruguay? Hardly, if at all. Of course, stagnation might happen to one or another country or region but by all certainty because of more numerous reasons and not merely because of the redundancy of welfare expenditures.

As regards the present situation, the social-democratic and other reformist parties have failed mostly because just they happened to be in power in a period when the capitalist economy was going through its worst slump and depression of the last forty years. They could not find remedy to the new jeopardy, stagflation, i.e. inflation coupled with stagnation – and they paid dearly for it. But this happened to the Tory Heath Government in the UK, and later to the short-lived Clark Administration in Canada, too. Whereas in the Federal Republic of Germany and in Austria, where perhaps the most successful economic policies have been pursued among the West European economies social-democratic governments were and are in power. Thus the replacement of governments is not too revealing as far as the future is concerned.

There are two interrelated facts that account more than any speculation, namely, that 1. in spite of changing governments and programmes the welfare and social activities of the state have remained essentially intact in the advanced capitalist countries, and 2. in spite of economic shocks, inflation, unemployment, falling living standards unprecedented ever since World War II, the socio-political system of contemporary capitalism has proved to be astonishingly stable.

The first statement implies, however, a controversial state of affairs which is explained by the second one. The contradiction lies in the fact that the governments which did not only declare but have mostly carried out cuts in state expenditures, abolishing tutelage over the market sphere, relieving tax burden on private capital, freezing of wages or ceilings on wage rises – as did the governments of Raymond Barre of France, Mrs. Margaret Thatcher of Britain or of the Swedish conservatives and liberals – as a matter of fact have not touched pensions, and welfare allowances (unemployment benefits have been even expanded), established by the "welfare state". What is more, as it is a general practice in western countries to maintain the purchasing power of pensions and allowances through "indexing", i.e., automatic balancing of the depreciation of the currency, the consequences of business fluctuations are borne almost exclusively by the active employees. In countries like Britain, where the real value of wages and, in general of personal incomes, was falling for some longer time in the mid-seventies, pensioners were the only stratum whose real income did not fall between 1973 and 1977. [19]

Preservation of the social and welfare functions of the state, that is, the fact that the burdens of economic recession and structural readjustment are not (or to small extent only) passed over to strata unable of regular working is a sufficient enough reason in itself why the atmosphere of "social peace" was not disrupted in the seventies and why the exponents of rigorous economic retrenchment are still able to gain the confidence of voters at all (who consist today in a great part of pensioners). Even the extreme advocates of "free enterprise" consider social and welfare expenditures as a minimum price worth paying for social and political stability. The growing vulnerability of developed industrial societies, the powerful trade unions and left-wing parties as well as their mass support make it impossible to run a Pinochet-type of "free enterprise" economic policy. What can be done in the outskirts or "backyard" of the capitalist world, can no longer be done in its centre, since the existence of the entire world system would be at stake.

The relative stability of the socio-political system of capitalism amidst the economic shocks of the seventies was shown by several phenomena. The point is not only that political crises laden with revolutionary situations did not come about but also that deterioration in the economic situation was not reflected in a higher number of strikes in the major countries compared to the early seventies or the sixties, which period is often claimed to be a "golden decade" (apparently forgetting the Vietnam war, the racial riots in American cities, the May of 1968 in Paris and the "hot autumn" of 1969 in Italy). A rightward shift is taking place in the political sphere but it strengthens rather the traditional bourgeois centre parties than the right-wing extremes; fascist parties have lost room and ground not only in West Germany but also in Italy, Greece, Spain and Portugal. The rekindling of terrorism in the West European countries is, as a matter of fact, also indicating a stabilization of the situation, namely, that the rightist and leftist extremities have been virtually squeezed out of the social and political movements into marginal position even if they occasionally manage to attract public attention and disturb public life by spectacular actions.

The political and ideological background of this relative stability is beyond the scope of this analysis. As far as the economic reasons are concerned, the unchanged functioning of the "welfare state" was, of course, not the only factor. It was of great importance that economic recession did not lead in general to a fall in total employment, mostly in consequence of the changes in composition already discussed. Since the number of employed labour did not abate, the growing army of the unemployed was recruited mostly from people entering work but not finding jobs, mostly from the youth, the unskilled etc. (In Western Europe the sending home of redundant foreign guest workers also relieved the situation.) Since dismissals did not affect the "old guard" of workers, but mainly the marginal strata, the trade unions did not venture strike bouts. Anyway families could relatively easily afford to keep the unemployed, mostly young people. This was made possible also by the reserves stockpiled during earlier decades of steady growth in living standards, and also by the social and welfare activities of the state.

On basis of the aforesaid it is supposed that even if economic growth might slacken and the terms of international competition might get tougher in the coming decades, *the*

"welfare state" will not be dismantled in advanced capitalist countries. It may though happen that, if only for the sake of fighting inflation, the financing of social and welfare expenditure from the budget will be curbed.

But the ineffectiveness up to now of methods to fight inflation, more precisely stagflation, makes it likely that the *economic control functions of the state will be modified.* Up to now the state has interfered with the economy mainly by means of fiscal and monetary policy; that is, the state managed boosting business activity in the desirable direction, and the transformation of pattern through influencing and channelling the companies' market activities and business policies. In one field, however, this method proved to be unsuccessful, namely, in the control of wages and prices, because of the new pattern and workings of the labour market.

For almost half a century now economic policy based on Keynesian foundations has considered sailing between the Scylla of inflation and the Charybdis of recession to be its main task. Its starts from the assumption that one evil has to be used in skilful dozes as a panacea against the other evil. That is, the remedy to inflation and soaring prices is curbing of business activity, checking of market demand, reduction of production with some consequential unemployment; while depression and extensive unemployment must be helped by boosting demand and by raising prices. The new phenomenon of the seventies, stagflation, has spectacularly demonstrated that this mechanism, which could work in earlier times, has failed.

The explanation can be found, in all certainty, in the changes having taken place in the structures of capitalist economy and society. Above, it has been already mentioned that a growing number of the employees does not turn out goods, what is more, they find, jobs in a non-profit, non-market sector. Their incomes do not depend directly on the course of market activity and their indirect dependence thereon is asserted through many gears and with a fair lag. The state's interference with business activity, i.e. the expansion or containment of the market demand apparently does not affect much the wages, salaries and incomes of those working in this sector, nor does it affect the demand they raise. Thus, the market methods of government interference are no longer sufficient to control the wage level of workers.

Nor is it possible any more to control the wages of employees working in the market sector in the way assumed earlier. In the mid-thirties when the *General Theory* was written, Keynes still argued that only money wages were "rigid", since workers resisted their reduction, but not of real wages. Today, however, also real wages are "rigid" in this sense. As a matter of fact, the labour market is not atomized today, but is to a certain extent organized. The unions, even if amalgamating only a smaller part (e.g. in the United States or in France only one fifth of the workers), do have the power to safeguard the level of real wages and of employment already attained. Moreover, nowadays they are able to achieve further advantages irrespective to the fluctuations in business activity because of the increased vulnerability of the economic system. And the terms of employment they achieve cover every worker whether members of the union or not.

Thus, the changed nature of the labour market makes it equally impossible for the government economic policy to hold back wages and employment indirectly by interference with market conditions, or to hard-sell to unions unacceptable collective agreements through confrontation. In the seventies, there have been many such attempts, but the outcomes have been usually miserable for each party: the wage rises won in protracted strikes, and with great sacrifices were wiped out by galloping inflation; the uncompetitive industries or plants saved from winding-up were not worth much in maintaining the employment level, because they pushed the entire national economy into stagnation, and this has resulted in growing numbers of unemployed in several countries.

Therefore, the feasible and probable solution cannot rely on the free play of market forces, but should be based on direct arrangements between the parties concerned. As neither party is able to force such an arrangement upon the other one, and especially to have him observe it, the arrangement must be based on common decision and common interest and it must be voluntary, that is, of the consensus type. The maintaining of mutual concern and consensus in turn requires the arrangement to cover not only wages but also prices, and to continuously and jointly provide for its observation. Since the formation of prices and wages is inseparable from the controlling of business activity, cooperation must also cover the decisions concerning employment, structural policy, investments and external economic activities. Objectively, this is the only way in the framework of contemporary capitalism to break the price-wage spiral and to put an end to stagflation.

In this logical schema the outlines of the economic policy attempts called "concerted actions" in West Germany, "social contract" in Britain, and "tripartite cooperation" in Austria, the Netherlands and the Scandinavian countries, are discernible. From among them, the Austrian experience has been soundly successful as shown by the small extent of price rises and low rate unemployment, and by a steady economic growth. The venture of the British Labour Party has been a downright failure. Irrespectively of the given – formal or informal – way in which cooperation between the unions, employers and the state is instituted, the economic control functions of the state are also changing. It does *not only maintain the general frameworks of the functioning of capitalist economy but takes active part in decision-making about and checking upon the concrete aspects and actions of this functioning.* However, as the stress is on participation and not on impositions, restrictions or instructions, the state is becoming virtually a third "social partner".

The role of trade unions also undergoes a qualitative change: they develop from a "social" partner into "economic" partner and in exercising their functions of representing and safeguarding of workers' interest they undertake responsibility for the efficient and undisturbed running of the capitalist economy. In return, however, they should have a say in and an influence on the distribution and use of the national income, on maintaining the purchasing power of wages and incomes, on the shaping of employment conditions. But participation in macrolevel economic policy decision-making would only

complement in most western countries the forms of participation in enterprise decision-making, institutionalized since World War II in some form, and more or less functioning.

Of course, also the situation of *capitalist entrepreneurs* is changing. They have to sacrifice a part of their freedom of decision-making in return for economic stability, and they do not easily resign to this. This is the reason why an odd situation like that after the last British elections can happen when the annulment of the "social contract" due to the fall of the Labour Government, that is, the end of price and wage control made trade unions and capitalist businessmen equally happy. Of course, the question remains whether inflation topping out in a year's time or the strike of steel workers lasting several months (not to mention the rest), would still be considered to be a desirable alternative for the miscarried "social contract". Return to the latter is probably only a matter of time (perhaps under an other Labour government).

It is rather widespread in Western literature to identify the tripartite decision-making consensus on economic matters with advancing towards the *corporate state.* The term is misrepresentative, not only because of its ominous ring, but also because of its content. Of course, it is a common feature that the fascist corporate ideology also aspired at cooperation and reconciliation of classes. But how? By subjecting the trade unions and the corporations of employers to the totalitarian state and party. Unions practically ceased to exist; naturally, the capitalists benefited from the defencelessness of the working class, but their freedom of action was powerfully curtailed by the restrictious and autarkic endeavours of dictatorships. Nowadays however, the characteristic feature is that the state is not in a dominating but rather in a subordinated position to the capitalist monopolies and trade unions. The fact that most West European governments are coalitions and are permanently instable eloquently prove this. The state is not able to force its partners but is bargaining with them, playing essentially the role of mediator between them.

Institutionalization of the tripartite cooperation in economic policy therefore appears to be necessary and, thence, likely, because in the present framework and power relations of contemporary capitalism there is no other alternative. Other alternatives such as fascist dictatorship or a revolutionary switchover of socialist type would already amount to transformation of the social system, but owing to the above discussed stability of the present socio-economic system cannot be reasonably reckoned with in the coming decades anyway. In the tripartite cooperation, in this particular "corporative state", the role of governmental specialized machineries would grow, while that of representative democracy, of the political parties would decline; on the other hand, trade unions would appear as independent power-policy centres, closing up in this respect to the long existing representations of interests of Big Business. It is, of course, probable that this change would involve a growing politicization of the internal life and activities of unions, and the activity of political parties would be increasingly transferred to this arena.

Changes of values and some implications

Economic and technological developments in recent decades, rising living standards and educational-qualification levels, changes in employment and working conditions have led to shifts in the order of values in the advanced industrial countries. These shifts are usually summed up by stating that instead of and beside rising material welfare it is the improvement of the quality of life which is more and more put into the fore. This is a process with rather blurred outlines and comprises a great many things.

Thus, e.g. the Standford futurologist Willis *Harman* believes that the following changes in values are characteristic today:

– rejection of material achievements, status goals, conspicuous consumption as central activities giving meaning to life and adoption in its place authentic behaviour, self-development and expression, deeply satisfying human relationships;

– instead of self-discipline, hard work, well regulated and rationalized emotional life, emphasis on spontaneous response to experience, self-expression, individual autonomy and integrity;

– rejection of the primacy of economic values, when these result in the domination of man by the dehumanizing effects of rampant technology and the depersonalizing consequences of large bureaucracies and, instead, concern with beauty, sensitivity towards the realm of feeling and emotions;

– restricted loyalty to one's own family, firm, country, with emphasis on responsibility to the total human community;

– rejection of work-dominated life, strict separation between work and play, and concern with wholeness, integration of work, growth, and play. [20]

Herman *Kahn* lists the "new" points of emphasis and the "old" traditional values which are pushed to the background. He shows equally 13 items in both categories. These partly coincide with, partly differ from the changes believed to be important by Harman or others. Some of the "new" priorities deemed important by Kahn: risk aversion; comfort, safety, leisure and health; public welfare and social justice (including equality of result); happiness and hedonism; family values. Some of the "eroding" traditional levers: religion, traditions and/or authority; defense of the nation; the "Puritan ethic"; the "martial virtues": duty, patriotism, honour, heroism, glory, courage, loyalty, pride etc. [21]

It does not make particular sense to dissect the orders of value established by various authors, since they contradict not only each other, but, not infrequently, also themselves.

Thus, while Harman speaks of weakening loyalty to the family, Kahn emphasizes the growing importance of family values. Or, if Kahn's statements about risk aversion, efforts at comfort and safety are true, this would rather correspond to respect for authority and adherence to traditions and not to its opposite. Otherwise, Kahn seems to forget that six years earlier, in a lecture delivered at an international conference in 1970 he denoted as one of 18 (!) characteristic features of the "post-industrial" society

developing in the USA by the year 2000: "Learning society – emphasis on latest knowledge, imagination, courage and innovation, deemphasis of experience, judgement, caution, and perhaps wisdom." [22]

But the evaluations interwoven with emotional elements have a congruent "common" domain which reflects a real process. And this is *the diminishing importance of material conditions of existence in shaping the living and working conditions of people.* For the customary concept of relationship between social existence and social consciousness this conclusion might seem a startling absurdity, but only until one does not take account of the changes having taken place in social existence. The founders of historical materialism wrote already in their first work systematically expounding the new *Weltanschauung,* in the *German Ideology* that „. . . life involves before everything else eating and drinking, housing, clothing and various other things. The first historical act is thus the production of the means to satisfy these needs, the production of material life itself . . . – The second point is that the satisfaction of the first need, the action of satisfying and the instrument of satisfaction which has been acquired, leads to new needs . . ." [23]

Although the "first need" has far not been satisfied for everyone in the developed countries, it has for the overwhelming majority of the population. And this is why the efforts of the "consumer society" to create incentives for further development of the economy and society by remaining in the accustomed circle of the "first need" have led to a blind alley. In the developed countries today the "second historical act" is on the agenda – not only the creation of material life, but satisfaction of the new needs related to a meaningful life. These new needs are usually not directed at the consumption of further material goods, people do not want *more,* but (also) *something else* and in a *different manner.*

The diminishing importance of material conditions in the way of life of people does not mean that the scope for social conflicts gets narrower and that these conflicts become mitigated in the contemporary capitalist society. There can be no doubt, of course, that material welfare, higher living standards have in themselves played a mitigating and moderating role in consequence of which economic recession and stagnation have not led to graver social shocks in the seventies. But it would be a wrong conclusion to think that relatively high living standards, the dwindling sphere of material production and expansion of the service sphere, preponderance of white-collar workers among employees strengthen – at the same time – the conservative order of values and right-wing political trends.

Throughout the history of mankind the basis of a conservative order of values has always been provided by the cultural and management monopoly of the ruling classes of the time (of course, beside the monopoly of power). We do not wish to enter now into the discussion whether the changes taking place in the composition and stratification of employees change the class relations of capitalist society (in our opinion: they do). But it should be quite obvious even without that: wherever we would draw the frontiers of the capitalist class, the scope of qualified people (strata) performing intellectual activities and having the necessary knowledge for control is much wider in present-day capitalist

society. Thus, the ruling class has finally and massively lost its erstwhile monopoly of education and control, even if its members enjoy advantages in this respect. This, however, entails that the bases below the "traditional" system of its values have become much unstable: ever wider strata of society regard it less and less of their own.

Which are these strata? The setting does not coincide with the traditional social classes. Sociological investigations have proven – quite in agreement with empirical facts – that the carriers of change are the young educated age-groups of white and blue-collar workers, whose formation falls entirely to the decades after World War II. Since critical attitude towards the traditional order of values is growing with a higher level of qualification, those discarding the traditional values can be found in greatest proportion among the most educated strata, that is, among white-collar intellectuals. This is why ideologues like D. *Bell*, R. *Aron* and others proved to be false prophets, who expected (in the sixties) the "end of ideology", the disappearance of conflicts with ideological contents, the end of radical anti-capitalist movements owing to the diminishing ratio of manual workers and the increasing one of white-collar employees. Even the neo-conservative wave emerging in the second half of the seventies cannot be explained with the preponderance of white-collar employees, but – as we have seen – with other temporary factors.

The strata carrying changes in values do not represent either new ideologies or separate political trends (unless we consider the romantic anti-capitalism of some groups of "environmentalists" as such). Since, however, they oppose the hierarchical systems of institutions and the control methods based on authority, and desire a change in the existing social order, they thus potentially strengthen the left-wing reformist and radical movements.

In the next decades the socio-economic systems of capitalism, its production and political institutional structure have to adjust to the shifts in values. This will entail many kinds of changes. Such is the reform of the traditional division of labour and work organization in large-scale industry; but such is the expansion of participation in decision making – determining the work and living conditions of workers –, which will become an increasingly important arena in the fight of democratic forces for structural reforms of capitalist society. Thus, adjustment to the new order of values implies not merely the following of new fashions in clothing, or new ways of spending leisure time, not even an increased protection of the natural environment, or putting an end to the wasteful use of material resources (of course, these also), but first of all democratization of the economic and social life, which obviously comprises transformation of the relations of production and, within that, of ownership relations.

Whether the socio-economic system of contemporary capitalism is capable of such evolution cannot be judged today definitely. The answer is probably yes, since a failure of the evolutionary road involves great risks.

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ТЕНДЕНЦИИ ОБЩЕСТВЕННОГО РАЗВИТИЯ В РАЗВИТЫХ КАПИТАЛИСТИЧЕСКИХ СТРАНАХ ДО КОНЦА НЫНЕШНЕГО ТЫСЯЧЕЛЕТИЯ

Л. САМУЭЛИ

В статье анализируются ныне действующие, уже существующие процессы, которые автор считает необратимыми в развитии развитых капиталистических стран. Таковым является, в частности, постепенное преобладание сферы услуг среди занятий людей, что произошло в течение семидесятых годов во всех без исключения западных странах. Другие необратимые процессы, рассматриваемые в статье: очень большое расширение среднего и высшего образования, изменение профессионального состава рабочей силы, растущая уязвимость экономики от социальных и военных конфликтов и некоторые другие.

Среди вероятных последствий этих процессов, ожидаемых в ближайшие десятилетия, автор указывает на преобразование традиционального разделения труда и организаций производства в фабрично-заводской промышленности, которое не будет углублять индивидуальное разделение труда путем дальнейшего дробления, фрагментации круга деятельности работников, а, как раз наоборот, будет способствовать противоположному процессу — усилению комплексности трудовой деятельности. В организации производства это поведет к двум коренным изменениям: 1. к упразднению конвейера в сборке готовой продукции, 2. к замене горизонтального принципа организации производства вертикальным, т. е. поиздельным принципом организации, благодаря которому цехи современного завода превратятся в мастерские по выпуску готового изделия или его самостоятельного узла с более-менее полным циклом производства. Эта форма сочетала бы преимущества мелкого кустарного производства былых времен с использованием достижений современной техники и возможностей крупного предприятия.

В отношении институтов капиталистического общества маловероятно, что в ближайшие десятилетия произойдет свертывание «государства благоденствия» несмотря на замедление темпов экономического роста и обострение международной конкуренции. Однако, весьма вероятно, что из-за безрезультатности применявшихся до сих пор методов борьбы с инфляцией, точнее, стагфляции видоизменится деятельность государства по регулированию экономики — оно будет не только гарантировать поддержание общих рамок функционирования капиталистической экономики, но и примет активное и прямое участие в решении конкретных проблем этого функционирования на базе установления института трехстороннего сотрудничества профсоюзов, предпринимателей и государства, в котором государство как бы становится третьим «социальным партнером». Установление такого сотрудничества в качестве прочного института представляется необходимым, а потому и вероятным выходом, т. к. в рамках современного капитализма другой альтернативы не имеется.

В порядке социальных ценностей, выражающем нормы общественного поведения и общежития, можно ожидать усиления стремлений к улучшению «качества жизни» помимо, а, отчасти, и вместо повышения материального благополучия, В предстоящие десятилетия общественно-экономическая система капитализма, структура его производственных и политических институтов должна будет приспособиться к сдвигам социальных ценностей, что подразумевает демократизацию общественно-экономической жизни, включая в конечном счете и изменение производственных отношений.

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REVIEWS

R. NYERS

SMALL ENTERPRISES IN SOCIALIST HUNGARY

In the present study I cannot give an economic history survey, only present the role of small enterprises in Hungary in the late 1970s. Still, I feel that in order to make the contemporary situation understandable I have to refer to some characteristics of development during the last three and a half decades that have considerably influenced the existence, functioning and social judgement of small enterprises.

Economic policy endeavours and effects, 1947–1980

All things considered it can be found that in the economic policy of socialist countries evidences are mixed in particular manner with search for best possibilities, that is with exploring activity. The main effort of economic realism has always been to consider without bias and consciously combine evidences with exploring activity as against economic idealism which is inclined to consider also methods and institutions applied in the course of exploring activity as evidences.

What are major evidences in the socialist economy? They are the following: replacement of private capital by public (state or cooperative) ownership of capital; establishment of a centrally planned economy; development of incomes related to and proportional to work performed; replacement of the contradiction between capital and labour by cooperation between public management and workers. And, as to the actual distribution of economic resources or the economic mechanism (the concrete system of planning, finances and economic organization), they are developed in socialist countries, thus also in Hungary with an exploring character (long-term systems building) on the one hand, and with a very practical one (short-term adaptation) on the other. Therefore, they can by no means be conceived of as evidences, that cannot be changed for reasons of principle.

Development of the Hungarian national economy after 1948 can be characterized as follows:

– Socialist transformation started in 1947 with the nationalization of banks and energy production, then continued with nationalization of big- and medium industry, wholesale trade and foreign trade in 1948 and 1949. For more than a decade private

farming remained predominant in agriculture, since socialist transformation of the latter (mainly by organizing cooperatives) took place in 1959–1961. Private small-scale industry and retail trade had not been nationalized; however, their economic weight and role considerably decreased in the wake of socialist transformation.

– The rate of economic growth considerably accelerated following the socialist transformation. It amounted to 5.7 per cent on a yearly average in the 25-year period between 1950 and 1975, and exceeded 6 per cent after 1968, which is threefold of the average of 25 years prior to 1945. From 1948 to 1965 industrialization was the determinant factor of dynamism, while ever since 1965 the joint growth of industry and agriculture has been characteristic. The share of those employed in agriculture decreased from 51 to 20 per cent during 25 years. The proportion of economically active population within the entire population increased from 44.2 to 47.5 per cent between 1950 and 1979 (which means full employment in Hungary). During the same period the number of pensioners increased from about 200,000 to 1,973,600 persons, i. e. from 2.2 to nearly 20 per cent of the population. As a result of all this, the Hungarian economy advanced in the ranking by development level of countries, reaching nearly the same level as Italy and Ireland as regards per capita GDP in 1973, but still lagging by about 20 per cent behind Austria and the socialist GDR or Czechoslovakia.

– One of the characteristics of enterprise structure of the economy is that it is of mixed nature from the viewpoint of ownership relations, since beside the preponderance of state enterprises cooperatives have also an important share and small-scale private enterprises have also persisted. Another characteristic feature is that concentration of the forces of production was asserted as a powerful process (sometimes even in a forced way and to an exaggerated extent). In the course of it a great number of small- and medium-sized socialist enterprises amalgamated into big enterprises where they were either liquidated or became suppliers in the closed system of big enterprises with a limited sphere of action. Cooperatives have become mainly medium-sized, but partly really big organizations in industry, agriculture and trade. New small- and medium-sized organizations were founded only in a minimum number, thus a specific gap was created in the organizational system of the economy impeding, after all, the high-level satisfaction of personal and public needs. Recognition of this problem was one of the characteristics of the 1968 economic reform when the period of gradual, but relatively show "adjustment" began.

– Considerable changes took place in Hungarian economic policy between 1957 and 1968, culminating in the 1968 economic reform. Until 1957 economic policy restricted the independence of enterprises, drawing away from them financial means and assets and allocating the same for the fulfilment of centrally determined partial tasks, which impeded enterprises in adaptation to the market and in the diversification of production. This practice had a restricting impact on the functioning of small enterprises, gradually ousting both socialist and private small-scale production and servicing from economic life. Economic policy partially changed after 1957 and radically from 1968 on. Since then the institution of socialist planned economy has been based in Hungary on the principle of enterprise independence, so that central planning and market mechanism are

organically combined with each other. This system already allows in principle that a sphere of small plants corresponding to needs should develop, but several difficulties arise in practice and the situation is not yet satisfactory in this field.

Types of small enterprises and their economic role

A comprehensive statistical survey of Hungarian small enterprises would encounter difficulties since they are very diversified, part of them are omitted from continuous statistical observation and information on them can only be obtained from occasional special surveys. Of course, all this makes an exact judgement of their economic role difficult, though not impossible, since balances of the national economy indicate major economic processes also in case of small enterprises. Several Hungarian economists – among them also the author of the present paper – have recently developed a view, according to which the national economic role and importance of small enterprises are a little greater than statistics can indicate, but somewhat smaller than would be desirable from the viewpoint of adequately meeting demands.

The first type of small enterprises is the small, also legally incorporated private enterprise based on family work which, however, may also have employees in addition in a limited number (two employees and one apprentice at most). Such small enterprises are run in almost every branch of the national economy (except for water management). According to data issued by the Central Statistical Office there were 109.100 private small enterprises on January 1, 1979 where altogether 167, 400 persons (employees included); i. e. 3.2 per cent of active earners of the national economy worked, furthermore, the national manpower balance indicates also 59,200 family members helping from time to time. This figure seems to be settled since no considerable changes took place between 1970 and 1979, though some decrease could be observed in the first half of the period, while there was some increase in its second part. The economic role of private enterprises as a whole (with an almost continuous inner professional re-stratification) is indispensable and their necessity is not disputed any more.

The second major type is represented by two existing forms of socialist small enterprise. On the one hand, independent state and cooperative enterprises with a number of workers between 5 and 49, are ranked into this category, and on the other, small economic units which, though having some independent sphere of activity, are functioning in the framework of some bigger enterprise. The number of independent small socialist enterprises is already very low in the industry at present, they almost disappeared from the Hungarian national economy during the three decades of enterprise amalgamations. According to a 1973 survey 242 independent small enterprises were run in this category, with a total of 15,258 employees. Their usefulness is charcterized by the fact that although their share in the total national employment figure was only 0.9 per cent and in fixed capital investments only 0.7 per cent, they produced 2.6 per cent of the country's GDP in the same year. There is no exact survey available on small plants (establishments) run in the framework of bigger enterprises, only a partial one, but this

Table 1
Small enterprises of the private sector in Hungary on January 1, 1979

	Number of independent small enterpreneurs	Number of employees	Employment in small-scale industry as percentage of total employment in the given branch	Percentage distribution of employment
Industry	30,000	40,500	2.3	26.0
Construction	17,900	25,300	6.1	22.7
Transport and communications	5,400	6,600	1.6	6.2
Trade	10,900	14,000	2.8	4.5
Water management	–	–	–	–
Services	12,200	24,100	2.6	11.7
Agriculture	32,700	56,900	5.5	29.3
Total national economy	109,100	167,400	3.2	100.0

indicates that in the construction industry and trade, what is more, even in agriculture the proportion and activity of small industrial plants are relatively important, since they display auxiliary activities deviating from and complementing the main activity of enterprises. Particular positive examples of socialist small enterprises are saving cooperatives as well as home-building and maintaining cooperatives which are rapidly developing.

The third type can be found in agriculture where labourers of the socialist sector carry on family farming on small plots as secondary activity beside their work in large-scale establishments. To this category of agricultural small-scale producers belong household plots of cooperative peasants, furthermore the so-called "complementary farming plots" of workers and employees. This type is very widespread, partly serving self-supply and partly commodity production. According to the Central Statistical Office there were 1,466,000 small farms in the country in 1978 and they contributed 36 per cent of the gross output of agriculture. Labour and capital inputs cannot be continually traced all over the country in this sphere of activity, but it would not even be realistic to compare the performance here with that of large-scale farms. As a matter of fact, the production structures of large-scale and small farms are different, furthermore household farming is based on preferential services of large-scale farms to a considerable extent instead of market purchase of means and materials. As much can be certainly stated that small farms are competitive with large-state farms in horticultural production and in several branches of animal husbandry. Therefore, their existence cannot be regarded temporary in Hungary though, resulting from their great market sensitivity, considerable changes occur in their production structure from time to time and also their total output is subject to greater fluctuations than that of large-scale farms.

Table 2
Number of household and complementary plots in agriculture

	1972	1978	1978 in percentage of 1972
Household plots with an area of less than 0.5 ha*	185	134	72.4
0.5 and more ha	597	566	94.8
Total	782	700	89.5
Complementary plots with an area of less than 0.5 ha	619	590	95.3
0.5 and more ha	280	176	62.9
Total	899	766	85.2
Altogether	1681	1466	87.2

*1 hectare = 2.43 acre.

The fourth type can be found in trade where leaders of shops and catering units with small staff have greater independence since 1968, including independent financing of current costs from receipts, free choice of goods and services bought and sold as well as the sharing of managers and employees in income. Such shops have become particular small enterprises, though only to a limited extent. The authorities envisage to further widen the independence of small shops and catering units in current management and maintenance. Thus their small enterprise character would become complete except for developments of investment character. The essence and advantage of this form are that the staff of small units are made better interested in meeting consumers' demands and, at the same time, also in a rational cost management.

The fifth type are individuals, regularly performing servicing activity with the purpose of obtaining complementary income beside their full-time job or income source. Here belong those pensioners and employees of large-scale plants who have also an official artisan's licence and work regularly. During the 1970s an increase in the number of both groups could be observed. In 1978 the number of pensioners acting as artisans amounted to 9178 and that of part-time artisans to 23,119. To this type belong also those private persons who let a part of their flats either temporarily or permanently through travel agencies. In 1978 more than 50 per cent of the country's 189,000 lodging places available for commercial purposes were provided by private activity in the framework of the so-called "paying guest service".

These particular small enterpreneurs utilize exclusively their own labour force and usually work shorter hours as compared with full-time employees. Their number and activity show an increasing trend also at present, since there is a growing demand in certain groups towards additional utilization of their labour force (young people and those with large families as well as in certain groups of pensioners) on the one hand, and there is considerable unsatisfied demand on the market of services on the other. Thus, these groups are stimulated even from two sides to start and maintain this kind of activity.

Of course, various kinds of other activities performed at home cannot be ranked into the sphere of small enterprises, should it be either hobby gardening or "do it yourself" domestic work.

The formation and development of small enterprises in socialist Hungary did not take place on the basis of central plans, nor is it a temporary factor surviving from the capitalist past, yet it is obvious at present that it is an objectively necessary category. In the comprehensive plan of the socialist transformation of society they found no place at all or only hardly any in previous periods (except for peasants' household plots). The attitude of the party and government agencies towards this activity has not always been the same during the last three decades: it fluctuated, ranging from elimination to toleration and support. All the three forms of attitude were predominant in some or another period of development. At present, political and legal support is characteristic on the whole, while the state tries to eliminate certain negative partial phenomena. However, from the viewpoint of ensuring economic conditions support is not adequate yet, certain useful activities are rather tolerated than supported by economic planning and control, while some other activities are already definitely supported.

Small enterprises in the industry

In the Hungarian industry a powerful concentration process took place between 1950 and 1980, production was concentrated in fewer and fewer industrial organizations, and simultaneously, the share of large-scale plants rapidly increased within total output. This trend was necessary and proper, since the industry inherited from the past had not been up-to-date enough for post-war Hungary, since it was too decentralized and worked with low productivity on the average. Backwardness was connected with the fact that though there had existed also internationally up-to-date large-scale production, its weight had been smaller than desirable both in employment and output. The process of socialist industrialization based on the extension of up-to-date large-scale production was advantageous and useful for society and promoted dynamic development of the economy.

Concentration of production at factory level had been accompanied by integration of smaller enterprises into bigger ones. This could be only partly approved and deemed necessary, it proved, after all, to be a partly forced process resulting in several difficulties. State agencies and cooperative associations insisted on amalgamations because they

expected from them more economical management in investments and higher efficiency in the utilization of fixed assets and labour. No doubt, this concept proved successful in several cases, but in certain fields of the economy also some drawbacks of enterprise amalgamations have been experienced and their number is growing. International comparisons indicate that Hungarian enterprises have usually more employees than in most developed countries, while as regards establishments (plants) concentration is not developed enough yet. This contradiction has a restraining effect on the efficiency of production.

Table 3
Concentration in the socialist sector of industry in 1978

	Number of		Average staff of			
			establishments per enterprise	enterprises	state	cooperative
	enterprises	establishments		establishments		
			heads			
Heavy and light industry	1190	7458	6.2	1248	359	53
Food industry	195	1802	9.2	1031	96	78
Total industry	1385	9461	6.8	1218	178	53

It can be seen from the table that a particularly great part of cooperative establishments belong practically to the category of small plants. Most of them do not work independently but are amalgamated into big cooperatives. The overwhelming majority of state establishments exceed small-scale size, some small establishments can be found only in the handicraft industry and some branches of the food industry (baking and milling industries, wine industry, etc.).

The problem that there are only few independently functioning (working) small- and medium-sized enterprises results from the exaggerated enterprise centralization. Plants run in the framework of big enterprises are rigid in adaptation to market demands and a considerable part of them make the mistake of striving for mass production under small-scale conditions with low or medium technological level. Their efficiency is therefore unsatisfactory. In Hungarian industry a greater number of such small- and medium-sized plants would be required which manufacture in up-to-date manner parts and components to be used in factories producing finished products as well as special consumer goods in smaller series for the population. On the other hand, the trend of striving after exaggerated self-supply in big enterprises at present should be stopped. Instead, production cooperation between big, small and medium-sized enterprises ought to be furthered, since this may result in higher efficiency than in the case of big enterprises of self-sup-

plying type, with several small plants. It is likely that in certain cases a part of small- and medium-sized plants could be made independent, while in other cases the introduction of greater independence and of self-accounting within the big enterprise might be successful. Government agencies are thoroughly examining this problem at present.

In the last decade industrial production in economic branches other than industry has further increased in Hungary. This is indicated by the fact that its share in the total industrial output of the country was only 6.9 per cent in 1971, while it increased to 9.5 per cent by 1978. In 1978 173.182 persons performed industrial activity in construction, agricultural, domestic trade and transport enterprises. The overwhelming majority of this activity was of small-scale character, only a smaller part of them can be classified into the category of medium-sized plants (having 100–500 employees). This refers especially to construction, agriculture and domestic trade where 1785 establishments worked with an average staff of 11 persons. These plants are run usually under less restricted conditions, somewhat more independently and elastically than industrial enterprises and this is also an explanation for their recent gradual advance.

Private small-scale industry has maintained its weight and share in the Hungarian national economy in the recent decade, while considerable and interesting changes took place in its inner composition. The private sector of the industry contributes to the country's national income to a decreasing extent. It still amounted to 2.6 per cent in 1970, while in 1978 only to 1.9 per cent. However, this indicator does not properly reflect the real role of the sector, since it does not express the structural transformation of private small-scale industry. As a matter of fact, the importance of this activity is growing in certain fields and decreasing in others. Expressing the activity by the value of gross output and the value of services, respectively, the following picture can be obtained:

Table 4

Share of private small-scale industry in the national economy

(in percentage)

	1970	1975	1977	1978
In the gross output of the industry	1.0	0.7	0.6	0.6
In industrial employment	3.4	2.6	2.5	2.5
In the gross output of construction	11.8	11.3	11.5	11.5
In employment in construction	21.2	23.1	23.4	23.4
In services for the population	42.5	43.8	44.6	45.9

The fact has to be taken into consideration as well that private small-scale industry produces in a structure deviating from socialist large-scale industry, meaning that it does not produce a considerable part of goods at all, concerning another part of products its

share is smaller than in the average industrial pattern, while it represents a much higher proportion in the production of some important articles. Its considerable share in home-building is characteristic, for example: in 1978 35,270 of the 88,153 flats built altogether in the country (i. e. 40 per cent) were built by the private small-scale industry in the form of family homes, utilizing also family labour to a more or less considerable extent.

The restratification of private artisans is also remarkable. It appears in the fact that the number of entrepreneurs in the private small-scale industry, exercising this activity as full-time occupation, decreased in the last 8 years (and within this period became stable in the last 4 years), while the number and proportion of artisans working as pensioners or part-time increased. The majority of pensioners come from previous artisans, while those performing this activity as part-time-occupation are exclusively such workers and employees who asked for and obtained trade licences while keeping their full-time job and work in their quality as artisan after regular working hours.

It is worthwhile to have one more look at the inner composition of private artisans' activity. It can be best expressed by the distribution of employment how private small-scale industry display its various activities.

Table 5
Number of artisans (1970–1978)

	Artisans of which				Employees of artisans	Total
	altogether	full-time	in pension	part-time		
1970	84.877	69.363	3.660	11.854	15.851	100.728
1975	86.820	60.102	7.373	19.345	15.906	102.726
1976	83.585	56.050	8.051	19.484	14.744	98.329
1977	86.702	56.561	8.732	21.409	14.724	101.426
1978	90.170	57.873	9.178	23.119	16.152	106.335

Table 6
Distribution of employment in small-scale industry, 1978

	heads	percent
Industry	53.477	49.5
Construction	37.264	35.5
Transportation	6.458	6.2
Personal services	9.136	8.8
Total:	106.335	100.0

Small enterprises in agriculture

Small-scale production has an important part in Hungarian agriculture, but it has to be pointed out immediately that it would be a mistake to consider it as an alternative to socialist large-scale farming, since it is evidently not. Hungarian experiences rather prove that large-scale and small farms can usefully work parallel to each other in the socialist system of agriculture if both forms are applied where they are most advantageous for the national economy. Small-scale production may be relatively widely applied in the agriculture of a socialist country, because with the tools of planned economy small farms may be effectively channelled to follow social purposes and, with an adequate division of labour this kind of pluralism is the most rational from the viewpoint of national economic efficiency.

Table 7
Percentage distribution of the gross output of agriculture between 1972–78

Year	Large-scale farms	Small producers	Altogether
1972	61.6	38.4	100.0
1975	63.7	36.3	100.0
1976	63.8	36.2	100.0
1977	63.7	36.3	100.0
1978	63.9	36.1	100.0

In 1978 64 per cent of the gross output of agriculture were produced by state and cooperative large-scale farms whose number amounted to 1555. 36 per cent of the value of output resulted from small farms whose number was altogether 1,466,000 (of this 700,000 were household plots of cooperative peasants and 766,000 other "auxiliary plots", in this latter category also the small number of individual peasant's farms outside cooperatives are included).

Concerning the distribution of agricultural area socialist large-scale farms are dominating and cultivate a considerably larger area than their proportional share in gross output.

Small-scale production thus appears in three forms. Firstly, as production of cooperative peasants on household plots, secondly, as "auxiliary plots" of workers and employees and thirdly, as traditional individual peasant's farms.

The question may be raised: what is the explanation for the fact that while small-scale producers utilize altogether 14.5 per cent of the cultivable land area they give 36 per cent of the gross output of agriculture?

Foreign observers not properly informed sometimes draw the conclusion that small farms have an advantage over large-scale farms. They are wrong, because no such

Table 8
Distribution of agricultural area in 1977

	Area in hectares	Percentage distribution
State sector	1,017,000	15.2
Cooperative large-scale farms	4,709,000	70.3
Household plots	510,000	7.6
Auxiliary plots of employees (in sectors other than agriculture)	302,000	4.5
Private producers	158,000	2.4
Altogether	6,698,000	100.0

conclusion can be drawn considering the different production structures of the two types of farms and their specific mutual connections.

What is characteristic of the output of agricultural large-scale farms and of small farms, respectively? Large-scale farms are the main producers of cereals and rough fodder, while small farms those of potato, vegetables and fruit, as can be clearly seen from the table below.

Table 9
Percentage distribution of the gross output value of plant growing in 1978

	Percentage of		Altogether
	large-scale farms	small farms	
Cereals, legumes	86.1	13.9	100.0
Industrial plants	87.7	12.3	100.0
Rough fodder	93.2	6.8	100.0
Other field crops	91.9	8.1	100.0
Potato	44.7	55.3	100.0
Vegetables	48.2	51.8	100.0
Grape	40.7	59.3	100.0
Fruit	42.7	57.3	100.0

The above figures well reflect the tendency of division of labour between the two producing spheres that has already well developed. It has, however, far not been completed, and process of specialization is still going on.

In order to properly understand the situation it has to be added furthermore, that cooperatives supply their members with grain and fodder at reduced prices. Therefore, a part of the value of large-scale production is realized in the animal husbandry of small farms. This is a very rational solution, but undoubtedly increases the output value of small farms and relatively decreases that of large-scale ones.

Some specialization can be observed also in animal husbandry, but it is not so marked as in plant growing and production shares of the two sectors are, especially in the main animal products (cattle, pig, poultry) more levelled.

Table 10
Percentage distribution of the gross output value of animal husbandry in 1978

	Percentage of		Altogether
	large-scale farms	small farms	
Cattle	66.6	33.4	100.0
Pig	42.2	57.8	100.0
Horse	67.7	32.3	100.0
Sheep	83.0	17.0	100.0
Poultry	55.0	45.0	100.0
Other	18.1	81.9	100.0

The above figures well demonstrate the practical experience that in the production structure of Hungarian agriculture both large-scale and small farms have some specific advantages in certain fields of production. Besides, there are some parts of agriculture where both large-scale and small-scale forms can be successfully applied.

Advantages and limitations of socialist large-scale farms are the following:

– In the production of cereals, industrial and other plants to be grown on large areas they are more productive than small farms, up-to-date technology can be better utilized with their big sizes, therefore they produce these plants relatively cheaper than small farms (economics of scale);

– They are able to develop large-scale animal husbandry and to establish other factories for further processing by means of which profitability of production can also be raised;

– With the given production structure they can ensure higher incomes for their workers than small-scale ones could if they produced the same products. This holds especially for hourly wages.

– The limitations appear on the one hand in horticulture and in breeding small animals – where large-scale farms have no efficiency advantage in the bulk of production

– and in the high capital intensity of large-scale animal husbandry, on the other, and this makes the introduction of large-scale production impossible.

Advantages and limitations of agricultural small-scale production are the following:

– It allows more efficient production in horticulture, with seasonal articles and in breeding small animals, because in these branches results largely depend on human care, attention, individual action, furthermore on the fact that worktime is subordinated to natural processes;

– It displays greater market elasticity than large-scale farming, it changes its production structure more easily and rapidly and this ensures for it advantages in the production of market-sensitive articles;

– Its further advantage is that it enables the utilization of fixed assets previously invested, thus exempting the national economy from investment; it can better utilize by-products in animal husbandry. Furthermore, unfavourably located areas uncultivable by big farms can also be drawn into cultivation.

– The limitations are partly of economic and partly of social nature. The economic limitation is that it has only partial efficiency advantages, while the social one is that the socialist large-scale farm can ensure more favourable living and working conditions for those working in agriculture than can individual peasant farming involving a more bound way of life and accompanied by greater risks. Thus, it would be disadvantageous for the majority of agricultural people to live only on small-scale production as main occupation.

After all, the maintenance and development of agricultural small-scale production are in the best interests of the Hungarian state since without this factor the general development of agricultural production cannot be ensured. This is already recognized by Hungarian economic policy at present, together with the fact that permanent economic relations have to be established between large-scale farms and small-scale household producers as well as between the socialist purchasing and sales network and the small-scale producers.

Small enterprises in trade and services

Prior to the socialist transformation of trade, in 1950, the shop network of Hungarian trade had been made up of 45,000 privately owned and 15,000 socialist (mainly cooperative) shops and catering units and data on turnover had also indicated similar proportions. In 1978 proportions became reversed: as against 54,890 units of socialist trade 10,800 units of private retail trade were functioning. The biggest commercial network is owned by the cooperatives with 28,990 units, while the number of state shops is 25,800, but the state sector has the largest share in turnover. In the recent decade both the network and the turnover proportions have remained practically unchanged, they may be regarded as settled.

While private retail trade had a 16.4 per cent share in the shop network and a 4.2 per cent one in the total staff of retail trade, its share in retail turnover amounted only to

0.7 per cent, thus making obvious that only smaller shops are run by private merchants. Private activity is not allowed in wholesale trade, in trade in pharmaceutical products and in foreign trade.

Practice proves that socialist commercial agencies are usually capable of supplying the population and enterprises with goods at acceptable costs and at adequate level both in monopolized branches and in the overwhelming part of retail trade. Though only in a narrow field, private retail trade proves to be also useful, first of all where family labour is used or commodities are purchased from small-scale producers and, in general, in goods with a wide range of assortment and small turnover. It can even be said that in all these fields it is more efficient than socialist trade. It is, therefore, a necessary part of the retail network of the socialist national economy, but only in an additional and a complementary role.

With the present lines of socialist retail trade the running of small shops with 1–3 employees and small catering units with a staff of 3–5 persons proves unsolvable, because they work with deficit on the one hand (central overhead costs are too high) and the lacking initiative of employees waiting for instructions from above impedes the creation of profitability conditions, on the other. Government agencies are thoroughly examining this problem and working on solutions to be applied in the next 5–6 years. Two possible solutions are coming to the fore, not as alternatives, but in joint application, namely:

– in a smaller part of cases shops and restaurants can be let to private persons for a longer period;

– in the major part of cases both managers and shop assistants are employed by the enterprise also further on, but may independently manage the assets entrusted to them and have to pay a pre-determined fixed amount of compensation for the centre. While observing state rules and regulations they develop the turnover themselves, purchase goods at their own discretion and collectively share in the incomes of the shop.

During the 30 years of socialist development passed up to now services showed only a slow and delayed development in the first part of this period and have come to the fore of economic policy to a greater extent in its second part. The contemporary situation is contradictory, since the network of educational, health and cultural services is extensive enough or at least satisfactory even by international comparison, commercial services approach the average of developed industrial countries, while the level of services for the population and personal services lags behind that of developed industrial countries. In Hungarian economic policy a trend has come to the fore recently, urging for a slower growth than previously in the production of material goods, but for a more continual and faster increase than at present in the field of services.

The servicing network of the socialist sector consisted of 16,251 service places in 1978, all of them economic units of small-scale character. The total number of employees amounted to 82,780, thus 5–6 persons worked in a service unit on the average. Cooperatives form 60, while state enterprises 40 per cent of the socialist sector. These smaller economic units are without exception specialized sections of some bigger enterprise or cooperative and their functioning is lacking adequate independence and elasticity

from the economic viewpoint. One of the important ways of improving supply may be if these small units were given greater independence by the enterprises they belong to, so that workers become better interested financially in successful work.

In financial services saving cooperatives are successfully functioning as particular small enterprises beside the enormous and centralized network of the National Savings Bank. Their number was 379 in 1975 with a staff of 5680 employees and 1,145,000 members.

In home building and maintenance, which is of great social importance, housing cooperatives, being also specific small enterprises, have had an ever increasing role during the last ten years.

Private enterprises have a great part in consumption services, illustrated by the fact that in 1978 they represented 40.3 per cent of all consumption services (rendered for state agencies, enterprises and the population), and 45.9 per cent of services for the population.

Table 11
Distribution of consumption services in 1978

	Million Fts	Percentage distribution
State enterprises	6207.5	29.0
Cooperatives	6494.4	30.7
Private handicraft	8570.9	40.3
Total	21,272.8	100.0

Table 12
Distribution of services for the population in 1978

	Million Fts	Percentage distribution
State enterprises	4074.7	29.4
Cooperatives	3420.8	24.7
Private handicraft	6349.6	45.9
Total	13,845.1	100.0

Some final conclusions

Hungarian experiences indicate that a certain scope for the functioning of small enterprises is required also in the socialist economy and this cannot be neglected. Without querying the thesis that concentration of productive forces is a general and regular

process in the socialist economy, it has to be emphasized that it cannot and should not be concluded from this fact that only big enterprises are justified and have perspectives. There are even two circumstances stimulating the functioning of small enterprises to a certain extent, namely, the requirement to increase economic efficiency, furthermore to improve the living conditions of the population as well as the supply with goods and services.

It is a national economic interest that furthering the activity of socialist small plants and farms and their increasing independence and elasticity should be major tools of ensuring the necessary activity and capacity of small enterpreneurs. Furthering the creation of new socialist, mainly cooperative enterprises and even their state support seem to be proper. All this is necessary because it would be practically impossible, both at present and also in the future, to rely exclusively or mainly on private activity in creating and maintaning the necessary small enterprise capacities.

Since the necessary small enterprise capacity cannot be ensured exclusively by socialist organizations, the existence of powerful and relatively wide-range private activities is also a national economic interest. Beside enterprises in private handicraft, retail trade and servicing, the maintenance and development of productive activity on household plots and small farms based on family labour are required (mainly in agriculture, services and housing). Purchase and sales problems of the latter can be solved by producers' cooperatives as well as by purchasing and supplying cooperatives.

Small farms can display socially useful activity only under balanced market conditions, therefore good commodity supply, prices and price policy corresponding to demand-supply relations, solution of supply with means of production, a taxation policy promoting production and imposing progressive but reasonable taxes on high incomes, as well as adequate market supervision by the state are of primary importance.

Small-scale production has to be continously encouraged, but also the danger has to be taken into consideration that some small establishments (and precisely the best ones) would develop in capitalist direction if state restrictions were missing. Therefore administrative and economic limitations aimed at preventing developments of that kind have to be maintained.

After all the future existence in Hungary of a developed socialist economy, applying the principle of pluralism in the economy, where – with the general predominance of state enterprises and the important role of cooperatives – possibilities for the existence of small-sized private enterprises are also ensured in certain fields of the economy, seems to be possible. The system of socialist planned economy can be built out in a way of proper functioning under the circumstances of pluralism and integrating private small-scale enterpreneurship.

K. SZIKRA FALUS

WAGE DIFFERENTIALS IN HUNGARY

The recent difficult economic situation in Hungary saw a renewed demand for effective financial incentives through proper wage differentiation.

Even a more differentiated wage scale, however, with a wider range of incomes does not result in more effective stimulation if wage differentials are random and economically unjustified, and not adjusted to performance standards or the labour supply. The main problem is thus the direction of the incentives. If this is given, their effectiveness depends on the degree of possible wage differentials. Even incentives in the right direction remain ineffective, if the attainable additional income is not in proportion to the extra effort or sacrifices demanded.

Income differentials – percentual differences between earnings – show a world-wide diminishing tendency. In Hungary income differentials (in official earnings in the state and cooperative sectors) have diminished at a particularly rapid and accelerating rate.

Table 1

Income differentials of full-time and part-time staff in the state and cooperative industry of Hungary

Sector of the economy	Index of differentiation				
	1970	1972	1974	1976	1978*
Industry	1.87	1.89	1.88	1.83	1.81
Building industry	1.87	1.82	1.81	1.76	1.74
Agriculture and forestry	1.77	1.74	1.76	1.72	1.63
Transport and communications	1.71	1.75	1.76	1.75	1.70
Trade	1.95	1.92	1.88	1.85	1.87

Source: Statisztikai Időszaki Közlemények. Vol. 421. Foglalkoztatottság és kereseti arányok 1976 (Employment and relative earnings in 1976), Budapest, 1978. Központi Statisztikai Hivatal, p. 17.

*preliminary.

The differentiation index expresses what multiple the average earnings of those earning above the average is of the average of those earning below the average. This index is highly sensitive, even a small decline indicates a levelling of earnings. As can be seen (in *Table 1*), it showed a decline between 1970 and 1978 in every part of the economy. The decline in eight years was almost as low as in the preceding 15 years. The shares of strata with the highest and lowest incomes show a clear levelling tendency.

Table 2
Share of total earnings of the lower and upper fifths of the working population ordered according to the size of average earnings

Year	Lower	Upper
	20 percent of employees	
1970	10.7	33.4
1972	10.8	32.8
1974	10.8	32.8
1976	10.8	32.5
1978*	11.2	32.2

Source: ibid.
*preliminary.

Income differentials according to performance

In state enterprises and institutions in Hungary one cannot earn considerably more by doing essentially better and more work than by doing poor and little work. The earnings of those in identical jobs usually differ only little in consequence of a difference in performance. According to a survey by the Ministry of Labour in recent years the dispersion of incomes in identical jobs has amounted to only 30–35 per cent of average earnings, a considerable part of this, however, was not related to actual performance but mainly to seniority and other factors only losely related to performance.

Wage differentiation adjusted to performance depends to a considerable degree on the kind of wage calculation used. If a production series is sufficiently large, if the quality requirements are not too high, and both quantitative and qualitative performance can be easily checked, a growth in productivity is best assured by wages growing in proportion to quantitative performance. This may be a piece-rate or such a performance rate where various properties of the worker which cannot be expressed in quantitative terms but which are important for the enterprise (experience in the trade, versatility, adaptability, etc.) are also expressed in the form of a basic rate increased or decreased depending on quantitative performance. The scope of piece rates shows a diminishing tendency because of changing circumstances all over the world. In the middle of the last century four fifths of the workers in England were paid piece rates, today this ratio does not attain even 30 per cent in Western countries.

For technological, technical and labour organization reasons the use of quantity-determined systems of wage payment is still justified in Hungary over a relatively wide field. In this context the number of those paid in this form is relatively low (56.6 per cent in 1978 in state-owned industry), and many of them are of the degressive type offering

limited incentives only. This is also related to the system of incomes control. Owing to progressive (cumulated progressive) taxation the part of enterprise income payable as wages grows more slowly than total enterprise income. This makes it difficult to apply powerfully stimulating forms of remuneration. It is not really possible to fully abolish this kind of degressivity in enterprise income regulation. It plays an important role in keeping the flow of purchasing power within planned limits, which is of great importance in a planned economy in general, and in our days in particular. It may, however, be expedient to reduce the scope or extent of degressivity.

Where conditions are given and workers do not closely depend on each other in the work process and their performances are of a discrete nature, it is expedient to pay individual (piece) rates. If, under such conditions, remuneration is still paid to a group – there are many examples of this in Hungarian industry – workers with outstanding (above-average) skills lose interest in greater efforts. On the other hand the number of processes is growing in modern industrial production where the work done by an individual worker depends directly on that of his mates and his work performance cannot be discretely measured. (This is true e. g. in the chemical industry, in highly automated productive units of the engineering industry, etc.). In such cases one should not insist on individual performance wages, but differentiate between smaller collectives according to the actual differences in work done. In this case it is not outstanding individual performance that improves total performance, but above all sound collective work and cooperation. This is best served by group-wages and the close community of interests created by it. Group-wages prompt participants not to tolerate truants. If the management differentiates among working groups (brigades) according to their real performance, then the distribution of earnings within the brigade can be usually left to the members themselves.

It is easy to understand that differentiation of wages – either among individuals or groups – meets with the greatest difficulty where performance cannot be measured precisely. In such cases the immediate boss and his judgement has to be given a greater scope and authority than now. He knows best the work of individuals, and his position and knowledge give him a proper overview over matters which provide a proper foundation for this judgement. Wage-payment is overcentralized on the enterprise management level. Middle and low-level bosses (foremen, production engineers or section heads) usually have no say in fixing the wage-rate of workers. It is a frequent complaint that the top management often does not even listen to their opinion.

The job of differentiating wages in keeping with performance is not popular anywhere, largely because of social pressures making for levelling. A role is played there by the socialist ideal of the social and human equality of man, as well as by the rapid approximation to each other of the needs of various sections of society – in consequence of the spread of education and a number of important social movements.

The collective spirit on the job generally makes for levelling, it puts a brake on both much higher than average, and much lower than average earnings, and is inclined to mitigate the acknowledgement of outstanding individual and group performance. The

objective basis for this is that at each workplace, those of relatively average skills and average performance make up the majority and thus influence local opinion. Not infrequently, also the local organizations, such as trade union branches, exemplify these levelling tendencies. This may deflect from his intention even a manager otherwise inclined to differentiate. Every kind of levelling is particularly harmful at workplaces where innovative work is expected. If there is no strong counter-effect opposed to the levelling efforts, outstanding persons will be restricted and mediocrity will take over.

The consumer price level also has an effect on the scope for income differentiation. The rise in the price level strengthens levelling tendencies. Since compensation for price rises cannot be "set" precisely according to individuals or families and since, for political and social reasons, it is particularly important to protect the lowest income groups against losses due to price rises, the result usually is that price rises are compensated to greater extent for low-income families and to a smaller one for the high-income families. This is so in Hungary as well as in other countries.

Compensation for price rises cannot be considered a bonus; under normal conditions it is the right of every one in Hungary. But under present conditions, when the world market has considerably devalued Hungarian products, not every worker can obtain the earlier real wages for his work, the price rise is general and there is no way to fully compensate for it. It should be obvious that a rise in wages compensating or overcompensating for price rises has to be given to workers of higher than average performance and the country is compelled to use defensive measures against the decline in real wages (living standards) as incentives. But this is considered only as a transitory emergency to be passed through as quickly as possible.

Skills and tough jobs

Diminshing wage differentials for qualifications (educational standards) and, parallel to that, growing wage differentials for difficulties inherent in the job (danger money, dirt money, etc.) are world-wide trends, observable in the long run in every country. This is related in part to a general rise in educational qualifications and to the fact that a growing proportion of training costs is taken care of by society, and in part to slow progress in mechanization and in the improvement of bad working conditions in certain areas. This trend asserts itself also in Hungary, but in a particular manner. While wage differentials according to the physical conditions of a job have steadily grown, wage differentials according to qualifications have very much diminished. The general acceleration of wage levelling discussed above may be traced back mostly to this process.

The latter is true of manual work as well. This applies even to the usual categories – skilled, semi-skilled and unskilled labour but even more so if more specific distinctions are made. Unfortunately, such data are available only for a short period, but they unequivocally point to diminishing differentials due to qualifications at almost every level *(Table 3).*

Table 3
Increase in per hour earnings of workers between 1973–76 according to the complexity of work performed
(1973 = 100)

Category of complexity	National average	Industry	Transport, communications	Trade
Unskilled worker	121	120	134	117
Semi-skilled worker	121	123	119	106
Semi-skilled worker doing complex work	122	122	127	106
Skilled worker doing simple work	122	119	134	105
Skilled worker	115	114	121	111
Skilled worker doing complex work	118	120	121	113
Skilled worker doing complex and complicated work	115	116	114	115
Total	114	123	127	121

Source: A special survey, covering 600 000 workers carried out by a commission of the Labour Research Institute, Ministry of Labour, in the Computer-technical Institute of the Ministry of Labour.

If we proceed along the scale of complexity of work performed we find a degressive growth in hourly earnings in the whole of the economy and in the three main sectors. Except for commerce, the hourly earnings of those doing more complex skilled work rose more slowly not only than those of unskilled and semi-skilled workers, but also more slowly than the earnings of skilled workers doing less complex work. It is worth noting that in industry – against common belief – the earnings of semi-skilled workers increased fastest and not those of unskilled labour. This is true both in the short and the long term. Only the earnings of the unskilled workers doing hard or unpleasant work increased at a high rate.

There is hardly a factory in Hungary where there are no complaints that highly qualified and experienced skilled workers earn less than semi-skilled workers – sometimes even unskilled workers – doing simple routine work. The result is job-dissatisfaction, indifference towards their work, they frequently leave the trade for which they were trained at substantial cost.

A sociological survey in a Hungarian motor vehicle works recently investigated attitudes to incomes. Maintenance workers, group-leaders and machine-setters with high qualifications and occupying key positions in productive work professed themselves to be dissatisfied with their earnings to a much greater degree than the semi-skilled machine operators in their immediate environment.

One of the causes is that a greater proportion of lower qualified workers gets piece-rates or some other type of performance wage which provides greater possibilities

for raising earnings. Time rates are characteristic for skilled workers doing more complex work. (The earnings of those getting time rates generally lag behind those getting performance wages. The earnings of the latter rise automatically with rising performance without special interference.) This obviously is not the basic cause. It is closer to reality, that Hungarian enterprises have to spend a greater part of the funds which centrally determined accounting procedures allow for wage rises on recruiting and holding on to scarce unskilled labour. Not much is left as a reward for skills.

The cause of the dwindling of skills differentials and of the growth of job unpleasantness complements is the great discrepancy between the demand for and supply of labour, particularly the chronic shortage of workers willing to do hard unpleasant work not requiring particular skills. (Of course, certain skilled work can also be physically demanding – e. g. mining, foundry work, the baking of bread, etc. – and in these trades there is a similar shortage of labour.) The number of those ready to do tough and demanding work under difficult conditions is declining much faster than the number of jobs of that sort. Increasing financial incentives are needed to fill such jobs. But the shortage of those willing to do hard manual work is basically a consequence of the *general* shortage of (excess demand for) labour. If one can choose among many kinds of jobs, men or women – understandably – do not queu up for tough jobs, and will only do them for special financial rewards. If labour shortages are general, they are as a rule most in evidence when it comes to tough jobs in difficult conditions.

The shortage of those willing to undertake hard manual work cannot be eliminated by wages policy measures alone, – this is only a palliative with harmful side-effects – but by changing the conditions of the labour market, by mechanizing to the greatest possible degree jobs requiring particular physical effort, by adequately improving the education system (structure of training), and by eliminating the great and excessive demand for labour.

The income of technical staff

The technical and managerial staff create the conditions of work within the factory by their developing, organizing and controlling activities. The operation and performance of the productive organization depend mostly on them. Innovation, product and technology growth, are in their hands. The experience of the socialist countries, the lessons from the history of the Soviet Union, testify to a close relationship between the rewards granted to specialists – including hard cash – and the results attained. Outstanding results are born in general if and when specialists are well paid.

Income differentials have dwindled in Hungary not merely among manual workers. Levelling is even stronger between highly qualified technical staff and those with lower qualifications.

These figures include also data referring to top technical staff with higher earnings. Without them the percentages would be even lower. The earnings of subaltern (i. e.

Table 4
Earnings of technical staff in industry as a percentage of the earnings of workers

Year	percent	year	percent
1955	172	1975	147
1958	158	1976	144
1960	157	1977	141
1964	154	1978	139
1970	151		

Source: A lakosság jövedelmének alakulása (Incomes of the population.) 1950–1980. Központi Statisztikai Hivatal. p. 48. – Foglalkoztatottság és kereseti arányok (Employment and relative earnings), Központi Statisztikai Hivatal. Various issues.

non-executive) specialists with higher qualification was, already in 1975, only 9.6 per cent higher than those of industrial workers in category 61, (meaning that they performed particularly complex skilled work under normal conditions). [1] Since then the difference has further diminished. Today the earnings of non-executive engineers hardly exceed those of skilled workers, not infrequently they are below them. This situation – owing to the massive demand for higher studies and the attractions of professional status – does not lead to a quantitative shortage of engineers, but it does produce quality problems and counter-selection. Apart from a few exceptions, it is not the most gifted who train as professional engineers and even those with fewer talents carry out their duties without enthusiasm, even showing dissatisfaction. They are forced to complement their income by employing a far from negligible part of their energies in the second economy. Accepting these facts means that they cannot really be disciplined for their job attitude and performance.

Changing the situation requires – as in the case of skilled workers – more than wages policy measures. The most important thing is to remember that what we need *are not so more professional men and women but rather more competent ones showing greater knowledge and a wider horizon – members of the engineering professions included –, that in professional training qualitative targets should be given priority over quantitative ones.*

Furthermore, a break must be made with an approach which, simplifying the really important task of creating and maintaining a balanced state between the financial situation of different social strata, imagines that it can cope by keeping the wages and salaries of manual and non-manual staff within an enterprise on the same, or almost the same level.

Some Hungarian enterprises pay close attention to white-collar and manual earnings and feel they have achieved something if the difference between them diminishes or

vanishes. It is only right, of course, that simple clerical work should not be better remunerated than manual work which perhaps requires as high or higher qualifications. Restricting the earnings of highly qualified staff for such reasons, however, damages the economy.

Managerial incomes

The earnings of highly qualified non-executive professional people largely depend on those of managers, the latter acting as a ceiling for the former.

The fixed salaries of executives, particularly of the higher ranks of management, have grown much more slowly than those of other staff. Supervising authorities did not, or only barely, raise their basic wages in recent years and put official limits on bonuses and perks. While the average incomes of workers and other staff increased by 39 per cent between 1968 and 1974 and by 30 per cent between 1973 and 1977, those of managers grew by 21 per cent in the first period and by 15 in the second. Since 1977 their earnings have grown even more slowly relative to those of other staff.

Table 5

Average earnings of various groups of enterprise executives and average wages of manual workers in state industry

Fts/month

	1975	1976	1977	1978
General managers, managers and their deputies	8308	8550	8921	9314
Heads of departments and their deputies	6862	6999	7483	7949
Heads of sections and their deputies	5511	5717	6068	6421
Manual workers	2790	2959	3531*	3741*
Earnings of general managers, managers and their deputies as a percentage of the wages of manual workers	298	298	253	249

*wages in September

Since, in recent years, the rise in the consumer price level has accelerated and – owing to the nature of their consumption pattern – this has reduced the real wages of those of professional status with higher incomes to a greater extent than average, the differences in real incomes have grown even larger. E. g. between 1976 and 1978 the money wages of manual workers increased by 13.6 and 11.9 per cent, respectively, the growth in real wages was 4.6 and 2.6 per cent. [1] Executives with relatively high earnings – among them managers – were affected by price rises to an even greater extent

This restriction on the increase in the earnings of managers had secondary effects putting a brake on the growth of earnings of lower-level executives and non-executive professional staff. At the same time, differences between earnings of managers on different levels dwindled.

It is usual to explain the restriction of the earnings of managers with political viewpoints. First of all it is argued that whenever there is a slowdown in the rise of living standards, lower earnings have to be raised first, since the raising of relatively high managerial incomes would provoke hostility. But the problem is more complicated. No doubt, the satisfaction of individuals considerably depends on their relative position, also on their earnings relative to others, also on their bosses. But it depends much more on the development in time of their own financial situation in absolute terms. Lack of an adequate financial acknowledgement of expert and managerial work may impair efficiency and economic growth which are conditions of the general rise in living standards. Workers are hardly compensated for the stagnation or fall of their living standards by a knowledge that those of their bosses are falling even more. The sense of justice of the masses is violated in Hungary not so much by the basic salaries of managers which, as shown in Table 5, are not excessively high but by the much higher perks of various sort which are rarely backed by honest work.

True, even if the relative, percentual, differentials of managers and executives are diminishing, the distance in absolute terms, in forints, and also in purchasing power, is growing. Of course, not even the earnings of the most successful managers ought to attain astronomical figures. This would be incompatible with the socialist social order and the Hungarian economic development level. Even their incomes must not exceed what can be spent under the given conditions on personal consumption and family investment directly serving it. But we are still far from this limit, and with development the width and contents of the limits change. It is only logical that those "awarded" a higher income must be allowed to spend it freely. The natural consequences of higher earnings must be taken into account in the pattern of consumption, and in ways of life. One cannot accept differences in earnings on the one hand and reject the corresponding differences in living styles, which do not violate what we call a socialist concept of life, on the other. And yet there are people in Hungary who find such styles of life objectionable.

Those who wish to slow down the rise in the earnings of managers argue that financial factors do not play a major role in the motivation of such executives as are socially committed. This is an over-simplification. There is no doubt that particularly with people occupying higher managerial positions stimulants other than financial rewards are important. A high degree of achievement motivation is often present. The majority of enterprise managers, chief engineers etc. even today work to the limit of their skills and energy and would not do more at doubled incomes. Their present level of official earnings does not, however, favour optimal selection in Hungary, and even results in counter-selection. Managers should really be chosen from among the most suitable, skilled and enterprising individuals. Ascetic habits are irrelevant and the claim to them even less so. The low earnings of managers bearing in mind their high status and the

importance of their duties often has a result a spurious moral base for tapping sorts of sources of income and other perks to which access is offered by higher positions in management. The proliferation at that level of such habits causes immeasurable political and social damage.

The earnings of managers have grown more slowly than average, their numbers, however, have grown more rapidly. In what is called the sectors of material production total employment increased by not quite one per cent between 1973 and 1977 but that of executives by 5 per cent. This exaggerated growth in the number of managers entails a growth in the number of control levels and, in consequence, an overcomplication of enterprise organizations impairing the efficiency of control. The growing number of executives is related to the fact that at present there is hardly any possibility in Hungary to increase earnings to any major extent in the same job. Thus we come back to the problem of wage differentation according to performance. It seems that *fewer but better paid executives (with a greater scope of authority) could work with greater success.*

*

To sum up: in my opinion, economic and social progress in Hungary requires a greater differentiation of incomes. Wage differentials according to performance should be increased, people should be allowed to earn more through more and better work, and the financial rewards of higher qualifications, knowledge and greater responsibility should grow. With this the inequality of incomes, the distance between the extreme limits, would not grow in Hungarian society. On the one hand, extremely high incomes do not come about in the state or cooperative sector of the economy, and not as part of official earnings. On the other hand, the main factor in the dispersion of per capita family incomes is not the amount of earnings of the members of family in paid employment but the ratio of employed to the total of family members. This disproportion has to be alleviated through social policy measures, not wages.

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COMMENTS AND CRITICISMS

L. DRECHSLER

A BIASSED PROFESSION OR A BIASSED CRITIQUE?

It rarely occurs that a whole profession should be attacked to an extent as was done by András *Bródy* in his article: "On measuring growth" [1]

Measurement of the rate of growth belongs to the most exciting problems of the theory of statistics. Debates on its methodological problems have been going on for long – almost without interruption – in Hungary and abroad as well as in international organizations.

Mistrust of statistics, a certain doubt about statistical data is no new phenomenon either. Some manifestation of it can be found in almost every country of the world. Its traces can be found even in the literature. Sometimes statistical offices themselves try to analyse this phenomenon, searching for its various reasons. A few years ago the Hungarian Central Statistical Office, too, made a study which discusses the problem how living standards are judged by the population. With this I do not want to say that there are no justified doubts and mistrusts about statistics. (But which profession can state that there are no such doubts about it?)

The article of András Bródy considers the measurement of the rate of development and declares in this context his mistrust of statistics. In itself, there is nothing reproachful in that. I confess to have doubts myself about this or that statistical data, sometimes precisely in the context of measuring the rate of growth. But Bródy is not mistrustful of some specific statistical data, of some publication or of some statistical office: he is mistrustful, in general, of every growth rate of every statistical office. Bródy's article does not say that the growth indexes are wrong because of some deficiency in professional knowledge but, implicitly and even explicitly, he charges the statistical offices with conscious, deliberate distortion. On p. 49 we read: " . . . 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." Bródy alleges that the statistical offices choose their methods *ab ovo* so as to touch up the achievements. This is a grave charge and I find it unjust.

Of course, it is everyone's sovereign right to believe in something and to doubt something, and I would not argue about that with A. Bródy. But, to justify his standpoint, he lists also seemingly scientific arguments whose majority does not hold water. In my contribution I am going to deal with the latter.

The Laspeyres – Paasche problem

Bródy is right in saying that the Laspeyres index (that is, the one weighted with the weights of the base period) yields generally a higher figure than the Paasche index (that is, the one weighted with the weights of the current period). He is also right in saying that in world statistical practice the Laspeyres volume index is dominating together with the Paasche price index (that is, the pair showing "better" achievements). In spite of this, the picture he gives in this context makes completely false impression. First of all, the difference between the two kinds of indexes is much smaller than alleged by Bródy. He simply transfers the experiences with international comparisons, that is, with spatial indexes to the temporal indexes. This is not justified at all. The differences in relative prices and in relative volumes between consecutive years within a country are generally much smaller than those between two different countries. Though it is true that the differences between the Laspeyres and Paasche indexes may be put at 25 per cent with spatial comparisons, the differences are much smaller with temporal comparisons. The author could have easily convinced himself of that, since such computations are amply available both in statistical literature and in statistical publications. (It is particularly disturbing that Bródy does not specify to what length of period he relates the 25 per cent deviation of the two kinds of growth rates, but he speaks in general terms.)

With all that I do not intend to allege as if the difference in the growth rates computed with the Laspeyres and the Paasche indexes were of a negligible order of magnitude (in a part of the cases, thus e. g. with several Hungarian industrial production index numbers it is indeed insignificant), but it is much smaller than it seems in Bródy's article.

Secondly, from Bródy's attitude the reader obtains a distorted picture of the attitude of the official Hungarian statistical service to the Laspeyres–Paasche problem. When advocating the use of the Fisher index (the geometrical mean of the Paasche and Laspeyres index numbers) he writes: "Yet Hungarian practice followed suit only in the late sixties . . . – with the gradual introduction of economic reforms . . . "

This is erroneous. In the fields where this is of importance, e. g. in analysing personal consumption, the Central Statistical Office has been employing since the mid-fifties the Fisher index and only the Fisher index. The same holds for the price and volume index numbers of foreign trade.

Thirdly, by not reviewing practice in its completeness, Bródy does injustice to the countries (and in respect of Hungary to the areas) where Laspeyres volume indexes and Paasche price indexes are computed. He does not mention, namely, the widespread practice (for which also a UN methodological recommendation exists), whereby after the lapse of some time the index numbers computed are revised, the old constant prices are exchanged for new ones, that is, the indexes are essentially recomputed. For instance in Hungary, when the 1976 constant prices were introduced in the computations of national accounting, also the index numbers for 1970–1976 were recomputed and the old indexes were replaced by them. Thus, in the long time series the period between 1970–1976 is of

Paasche and not of Laspeyres volume index nature. And if he labelled the phenomenon discussed as bias, the indexes computed for the period 1970–1976 have a downward bias, not an upward one.

Fourthly, Bródy is unjust towards the statistical offices also when he makes appear as if the choice of the Laspeyres volume index and the Paasche price index (instead of the Paasche volume index and the Laspeyres price index) were the exclusive consequence of efforts at touching up. Of course, I cannot prove that the chance of getting better results was no background idea with anybody in choosing the formulae. But I do state that in many areas we would have anyway selected the Laspeyres volume index and the Paasche price index even if there existed no intention at all at touching up. With national accounting it is unavoidable to have such time series at constant prices for 5–10-year periods which also allow cross-section analyses, that is where the whole is the sum of the parts. Such tables can be compiled only in the structure of the Laspeyres indices. The use of the Fisher index would pose the problem that the requirement of additive consistency is not satisfied, the sum of the parts deflated with the Fisher index does not yield the whole similarly deflated by the Fisher index. And Paasche-type volume indices cannot be applied since then the whole computation could be started only after the end of the last year.

Finally, it is expedient to mention that Bródy perplexes the reader also by attributing such consequences to the Laspeyres – Paasche problem which have nothing to do with it. On p. 49 he traces back to the deviations between the Laspeyres and Paasche indexes such "queer statements" that at the same date food prices are higher in Sweden than in the Netherlands, in the Netherlands higher than in Great Britain and in Great Britain higher than in Sweden. This problem has been known for long: if the so-called circular test is not satisfied, this a consequence of changing weights and it equally occurs whether the Laspeyres, or the Paasche, or even the Fisher formulae are used, quite independently of the fact whether the result of the Laspeyres formula is higher or lower than that of the Paasche formula. By the way, in the example quoted the Fisher formula has been used.

The problem of changing weights

Statistical literature has long been engaged in the problem how frequently it is expedient to change the weights of the index number. The dilemma is caused by the fact that the yardstick changes itself: not only the object of measurement changes with the passage of time, but also the instrument with which we measure (with the measurement of the growth rate also relative prices change). If we do not change the yardstick, e. g. if we calculate the 1980/1979 price index by using the same prices as were used in computing the index number for 1970/1969, we have to face the disadvantage of obsolescence of the relative weights. Pushing the problem to absurdity, it would make no sense at all to make a comparison with last year at relative prices of the year of the

Mohács battle, i. e. 1526. If, however, we change the yardstick every year, we can obtain longer time series only by chaining and this may impair the internal consistency of the computations, the indexes of the parts will not be in harmony with the index of the whole, we violate the so-called average test, as shown also by the numerical example on p. 51 of A. Bródy's article.

Thus, constructors of index numbers have to sail between the Scylla of obsolescence and the Charybdis of violating the average test. The solution can hardly be anything else but a compromise. In this context the recommendations of the UN Statistical Office propose to use the same weights within a period of 5–10 years, but to shift after that to new weights (new constant prices). Statistical practice indeed follows this recommendation in both the socialist and the capitalist countries – even if there are some exceptions here and there (e. g. in some countries weights are exchanged every year).

There can be no objection to Bródy's discussing the problem too, even if he does not transgress repetition of problems well know for long. But Bródy attempts to use also the example of violating the average test for supporting his statement that the statistical offices want to touch up the results.

There is not even a grain of truth in that. Bródy constructed a numerical example where both the Laspeyres, and the Paasche as well as the Fisher chained index are above the individual indexes. A numerical example with the deviation in the opposite direction could however be constructed with the same justification. Why is the example less justified or less likely if everything remains as in the example of Bródy but the q_1 and q_2 data of the second period are exchanged. This small modification will immediately change the whole picture: both the Laspeyres and the Paasche as well as the Fisher chained volume indices will violate the average test from below (they will be below the average of the individual indexes 1, 2).

In this context, I should like to call attention to an essential difference. In the earlier discussed Laspeyres–Paasche problem the deviations point to a definite direction: since generally there is a negative correlation between the price structure and the quantity structure, the base-weighted index is usually higher than the one weighted with the weights of the current period. Therefore, in this case Bródy called attention to a real danger of "touching up", he merely overstated its size and did not correctly state the approach of the statistical offices to the problem. But the "error" deriving from the changes in weights has no definite direction. This has nothing to do with the problem of "touching up or not touching up". Though – as far as I know – it has not yet been proven by anybody, it is likely that the dangers of downward and upward deviations are about equal. Otherwise, Bródy misleads the reader also in this respect, making the impression as if statistical offices applied in general chain indices, though – as I have mentioned – this is not so. It would be good to know, in what direction Bródy wants to proceed, if he is dissatisfied with the compromise established in practice (i. e. with changing the weights every 5 or 10 years). Does he want to come nearer to Scylla or to Charybdis, that is, would he propose more or less frequent changes of weights? But his article provides no answer to this questions.

What do we intend to measure at all?

Bródy rebukes the statistical offices not only for how they measure, but also for what they measure. On p. 47 it reads: "Yet already the object to be measured can be severely questioned: new research made it clear that per capita income does represent 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." Here again we are facing a great dilemma of statistical measurement, about which discussions and debates have been going on for a long time. Statistical offices have been and are frequently criticized for describing development comprehensively with gross domestic product or national income. These indicators, although expressing the development of products and services, do not reflect the changes in welfare, not even how welfare was affected by the development of production.

The substance of the problem is the following: there are activities the results of which are sifted by the value judgement of the market (commodity type products and services), these are included in the comprehensive indicators without further ado. With these, namely, the yardstick (price) is supplied by the market itself. There are, however, also activities which, although we know they contribute to welfare, are not sifted by the market, are not traded. Only a part of them are included into the indicators of product and income by the statistical offices. With some simplification one may say that that part is included with which there is sufficient basis for evaluating the value of output with adequate reliability. Products and services which are not traded have no price, therefore some assumption is necessary for accounting them in terms of value (imputation). (E. g. how much the producer would have obtained if he had sold the product.) There are fields where this imputation seems to be rather safe, and there are others where it is less reliable. Thus consumption from own production, the non-commodity type government services are included into the gross domestic product, but the results of activities carried on in households or the effect of environmental pollution (e. g. water pollution) are not.

Critics of the presently applied methods propose to expand the scope of computations; in their opinion this would be a way of coming nearer to measuring welfare. And in this they are right. Defenders of the present methods, however, argue that with the many imputations the role of subjective factors would be too large (e. g. how much should we deduct from national income because some river became more polluted?). They propose to retain a narrower notion but one which is more objectively measurable. Welfare as such is not measurable. They try to mitigate the disadvantage that comprehensive indicators do not render account of individual factors of welfare by publishing regularly various socio-economic indicators e. g. such ones that express the pollution of air and water etc. in physical units of measurement.

At the conferences of the International Association for Research in Income and Wealth (IARIW) every two years the problem is raised in some form or another almost on every ocassion. The front lines of the debate are rather characteristically drawn. The

representatives of statistical offices are against the expansion of imputations, while those of the research institutes are for it. As it turns out from the passage quoted, A. Bródy belongs to those criticizing the actual methods. There is nothing to object to that. It must, however, be objected that Bródy discusses also this problem as a manifestation of the statistical offices' efforts at touching up.

He is not right. Expansion of the imputations does not necessarily lead to a reduction of the rate of growth. True, one could find and quote authors who reached this conclusion. But there are also several counter-examples. Let me mention two examples from the literature of recent years. From their computations relating to Canada and covering 1961–1971 H. S. *Adler* and O. *Hawrylshyn* drew the conclusion that imputation of activities carried on in households does not essantially modify the rate of growth [2].

Another example even more contradicts Bródy. J. W. *Kendrick,* professor of George Washington University, performed computations about the growth of gross national product in the United States between 1929 and 1973. He arrived at the statement that the expansion of imputations does not reduce but even raises the index by about 20 per cent. (Kendrick's imputations increased the official GNP by 46.1 per cent for 1929 and by 74.1 per cent for 1973) [3]. When referring to Kendrick I am not convinced that expansion of the imputations raises the index number of growth. Other authors, similarly with computations covering on the whole the same period of the United States reached the opposite conclusion. All that makes it palpable that there are no strictly definable rules for the expansion of imputations and the role of subjective factors is here great. If Bródy were right in assuming that the statistical offices want to show better results at any price, why do they not undertake the expansion of imputations? As a matter of fact, in this way they would possess greater freedom for influencing the results. Why are they on the other side in this debate?

The subject raised by Bródy is indeed worth discussing. But the charge he raises in this context against the statistical offices is unjust.

Is the bias of the growth indexes measurable?

A. Bródy rebukes the statistical offices also for not publishing the error margins of the growth indexes: „. . . we still lack official publication of the tolerance 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 economics. We ought to endeavour the pioneering role." Thus on p. 49.

It is understandable that such demand should arise. Certainly, it would be good if, beside a, say, 104 per cent volume index number of the national income we could also put the error margin (say, ± 1 per cent). Yet the reproach is not justified. Namely, such error margins cannot be estimated in a well founded manner.

These problems, too, have been frequently discussed. It is no mere coincidence, however, that up to now no country has undertaken to quantify the exactness of its growth indexes numerically.

The problem is not that the size of errors in statistical measurement cannot be numerically expressed at all. Measurement of certain kinds of errors (e. g. the error of sampling) has old traditions and it is regularly applied in statistical practice. There are, however, some sources of error of the index number of national income or gross domestic product which cannot be measured, and where we cannot get a really good picture even of the nature of the error.

Without claiming completeness, a few such sources of errors are: errors in the measurement of the primarily observed data (quantities, values), error owing to incomplete coverage (e. g. the representative nature of the price index), error due to the imperfection of the formula, error deriving from the neglect of certain changes in quality, error attributable to distortion of the prices used, error attributable to the appearance of new products. Even if we take the last one and look at it closely, the impossibility of measuring this kind of error will become evident.

Let us assume that a new product appears satisfying some kind of new need introduced. To render the example topical, let us take the case of television sets coming into use. The statistician has no problem in accounting the purchases of TV sets at current prices, the necessary data are available. To compute, however, a quantity index he would also require data at constant prices and for this the problem of the price rise (or reduction) involved by the appearance of the TV set relative to the price level of the base period should be answered too. This question can, however, not be answered, whatever price the TV set appeared at since there is nothing to compare the price with. So the statistician cannot but neglect at what price the TV set entered; the price index will be the same whether the price was Ft 10,000 or 5000. It hardly needs proving that the statistical procedure is imperfect in this case: from the aspect of real income it is by far not indifferent, with *ceteris paribus* assumptions, at what price a new product has entered, and this should be reflected in the results, too. Yet, beyond feeling the uncertainty of our procedure, we cannot tell more about the size of the error made, we cannot answer even the question whether in the given case we have made a mistake distorting the result upwards or downwards.

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Measurement of the rate of growth has many real problems, among them also those which the article of A. Bródy discusses. It is at any rate good to debate these problems. In all certainty, there are many things to improve also in the statistical practice, thus, critical remarks must also be welcome. But in Bródy's article we find little useful advice. We find, however, several statements – partly owing to insufficient knowledge of practice – that do injustice to the statistical practice, to the statisticians.

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BRÓDY, A.: *On measuring growth.* Acta Oeconomica Vol. 24, Nos 1–2, pp. 47–56

P. KÖVES

DO WE MEASURE DEVELOPMENT CORRECTLY?

"All through my work impartiality has been the main objective: to picture my country as it is in reality, not as it should be"
(E. Fényes*)

The economy is not living now its quietest years.

Whenever a greater than usual attention is directed at some area of human society, also the specialists engaged in the field in question may come to the forefront of interest. If there are "troubles", narrower or broader collectives of experts may also become targets of the critique of public opinion.

In recent years in circles wider than the society of economists or even outside it recognitions like the following have been formulated: "Phenomena defying short and numerical description ... are in disregard", or: „... per capita national income does represent neither welfare nor wealth and clearly even less the level of utility, the quality of life ...". Both quotations have been taken from A. Bródy's article "On measuring growth", that is, from the declaration of an economist who adopted the views partially penetrating "from without".

So far so good. But Bródy wants to make accepted also such views by the trade of economists – referring partly to public opinion – which it would be rather his professional duty to refute. It seems as if he attempted to relieve a sense of remorse of economists by shifting responsibility for certain troubles onto a narrower circle of specialists, as if humanity had to be protected from a world-wide conspiracy of statisticians.**

According to A. Bródy "... the errors show a systematic bias ..." (p. 48) and they "... may surpass the usual magnitude of the yearly growth rate ..." (p. 48). As far as he knows, the statistical offices, in general, do not publish Paasche volume indexes (computed at prices of the period observed) and Laspeyres price indexes (computed at quantities of the base period). "Statistical offices try to certify the best results for their respective governments ..." – alleges the author (p. 49).

Bródy is of the opinion – at least he so suggests with his example – that also the "chaining" introduced for improving the computation of index numbers distorts the volume indexes upwards. Finally, he also states that in a homogeneous series of data – even without any problem related to the weighting of indexes – cyclicality also results in

*Elek *Fényes* (1807–1876), one of the founders of the Hungarian statistical service

**A Bródy referred to the very narrow circle of experts to which I belong (those teaching statistics at universities), and to my own statistical activity exclusively as being in agreement with. Thus I hope I will not be suspected of undertaking the unprincipled defence of "the honour of the uniform".

our measuring non-existent growth. "We may measure a yearly almost 2 per cent . . . after 35 years of measuring we will end up with a double living standard . . . though . . . living standards stagnated." (p. 55) This numerical result follows from a fictitious example, but according to the author " . . . there seems to be no warranty against it."

Before the exposition of my detailed counter-argument, in order to avoid misunderstandings, I briefly sum up also in what I agree with A. Bródy. I agree that in recent years we have been witnessing (or even promoting) fetishization of the rate of growth. (And this is *not* a problem of *measurement.*) I too, am of the opinion that it is absolutely necessary to explore the errors of measurement and to endeavour their elimination. There may occur also distortions that may be traced back to interests, and their sources must be found and eliminated as far as possible. Bródy lists a few well known sources of error: " . . . changes in representation (product mix), neglect of "unofficial and "black" markets, neglect of quality changes and the shortening of durability or life expectation of products, . . . pollution, crowdedness, etc." In this we agree, – and not only we two do agree.

There is some reality even in what A. Bródy transgresses the problems of economists and statisticians known and, for the time being, unsolved. It is possible that the scale comparing the developed and the developing countries or measuring the long-term development of a given country rather increases than decreases the differences. I think the fundamental cause of this must not be sought for in the theory of index numbers.* Economics encompasses more and more of the whole of human existence. "Natural" economy and the activity carried on in the households is not included with proper weight in the indicators relating to lower levels. The "economic universe is expanding". This expansion may slip to a certain extent also into the indicators. These are problems which the theoretical economists, statisticians and other experts should tackle *in common.*

But, for the time being, I am compelled to counter the statements of Bródy which are incorrect in my opinion.

On the index numbers

I am pleased that the author quotes me, though the sentence quoted on p. 48 is difficult to understand in itself. It also disturbs me that I read before the quotation that " . . . already a simple arithmetical mean may be biased." (The problem discussed is the unweighted averaging of individual volume indexes relating to individual products.) The reader may believe that here a gradation follows: the weighted average distorts even more. In general, the weighted average distorts less, but weights taken from the one or the other period generate bias of opposite direction and *equal* proportion.**

*I do not wish to discuss in my contribution to what extent the "Jánossy-method" can improve the results of index computations.

**In my paper [1] I expounded the problem in greater detail than I had done in my book published in 1956 and quoted by Bródy.

On the basis of the theory of index formulae, within that on the basis of the Bortkiewicz theorem quoted also by Bródy, only as much can be said that the application of weighting with the relative prices of the current period distorts the volume index *downwards* in the same ratio as does the application of relative prices of the base period *upwards.* We cannot thus declare that " . . . this bias is particularly strong if base year prices are used for weighting the growth rates of the productive sectors (as is done by the Laspeyres formula)." (p. 48) – unless we have reason to assume another *upward* bias independently of the index formula. Bródy does assume such causes, but "in the shade" of the quotation taken from me this cannot be taken for granted tacitly or even "supported" with the quotation. The same holds for the quotation from F. Jánossy.*

In a simile of his A. Bródy refers to the measuring rod. As a matter of fact, the theory of index numbers exists precisely because we do not possess such exactly scaled measuring rod for the purpose in question. Thus, however logical it may seem, we have to challange Bródy's statement that " . . . if a method of measurement is not realistic in the long run, it hardly follows that its results will be more exact in the short run" (p. 48). In contrast with the declarations made in order to dramatize the "Laspeyres case", at other places it turns out that Bródy is in agreement with Jánossy and others in that if e. g. we link annually chained Laspeyres indexes, less distortion will accumulate in the long run than if we applied directly the same formula for the longer period. With prices held constant for longer period (for measurement purposes) we measure more exactly in the first half of the long period than in the second – even between two consecutive years.

I gave expression myself to the suspicion that behind the use of the pair of index numbers consisting of the Laspeyres volume index and the Paasche price index we may find, beside practical view-points (constant prices), also the intention of touching up. But we cannot state, either for the past or for the present, that the statistical offices neglect the opposite solution. Similarly for practical reasons (an unchanged consumer basket for some longer time), at many places a price index of the Laspeyres type is computed. In Hungary the application of the Fisher formula coming about by crossing the Laspeyres and Paasche formulae has been long accepted in the computations of consumer price indices and foreign trade indices.

It is usual to put the question whether "the true indicator of change lies between the Laspeyres and the Paasche indexes". Following from his basic stance, Bródy's supplementary question is: "Could it be, ... than even the Paasche index overestimates growth and growth rates? " (p. 48)

Behind this question there may be at least three rather different starting points. In the first case the question may be formulated as: "can we find among the practically applicable formulae (already known or to be constructed) one which yields a result outside the limits of the Laspeyres and Paasche indexes and still charecterizes develop-

*At the place quoted Jánossy does not blame *more* the Laspeyres volume index (k_{II}) for the *upward* bias, than the Paasche one (k_I) for the *downward* bias. (Even if the illustrative example refers to the Laspeyres index [2]

ment better than these or their crossing; is crossing correct at all?" According to all indications we agree with my partner in the debate in that crossing is a good thing, thus Bródy's starting point cannot fall into this category.

Another possible background to the question asked may be the "economic" theory of index numbers worked out in the 1920s and 1930s, still discussed in theoretical works (but directly inapplicable in practice), whose bases were provided by the indifference curves of the neoclassical school. It is into this theory that the application of the Laspeyres and Paasche formulae was fitted in the 1930s under the name of the "method of limits". In this decade beside Ragnar *Frisch* [3] and others, also Leontief told his opinion about the "method of limits". Bródy's short reference is made to the 1936 study by *Leontief.*

Thirdly, the above question may be also asked by one who looks for other mistakes (not connected with index theory) in the indicators of development and wishes to state that the error denoted by him is greater than the difference between the Laspeyres and Paasche indexes. A. Bródy may think so too, but this question has to be delimited from the former ones.

Let us return to Leontief, since I thought to find behind Bródy's question the starting point listed by me as second.

After the reference to Leontief there follows a hypothetical numerical example (see the three tables) which, according to the anuthor, proves Leontief's standpoint against the "method of limits". Those teaching the computation of index numbers are accustomed to constructing similar examples with other purposes. We have here an example which proves partly that the Laspeyres, Paasche and Fisher indexes do not satisfy the circular test, partly that the chained indexes also infringe upon the proportionality test: it may happen that the "average" index does not fall between the individual indexes.

1. Basic data in three periods

Product	Quantities			Prices		
	q_1	q_2	q_3	p_1	p_2	p_3
1	10	15	12	1	1	1
2	10	5	12	1	2	4

2. Aggregates (Σqp)

q \ p	p_1	p_2	p_3
q_1	20	30	50
q_2	20	25	35
q_3	24	36	60

3. Volume indexes

Formula	2/1	3/2	Product	3/1
Laspeyres	100.0	144.0	144.0	120.0
Paasche	83.3	171.4	142.8	120.0
Fisher	91.3	157.1	143.4	120.0

Thus, beside the two periods we have here a third one. But the literature theorizing on the "method of limits" feels itself generally well even within the "limits" of two periods. Otherwise, the phantasy of those engaged in the "economic" theory of index numbers but not interested in the practice of index computations may freely soar. The index formulae derived mostly from the indifference curves created in a deductive manner cannot be closed into the cage of Laspeyres and Paasche.*

But let us consider again the lessons of the example. If we directly compare periods 1 and 3, then, in conformity with the viewpoints of the construction, every possible index yields an exact result, since the individual indexes are identical (120 per cent with both products). In Bródy's reasoning these *exact* (Laspeyres, Paasche, Fisher) indexes are not real indexes, only *check data* which "compromise" the Laspeyres, Paasche and Fisher *indexes* (as a matter of fact, the products of the chain indexes). As a matter of fact, of course, neither the chained nor the direct indexes are perfect, merely the chained ones are better. Literature can provide indications under what conditions it is more correct to resort to the one or the other procedure.

The example of A. Bródy also plays another function than those discussed up to now. In the example it is the chained *volume index* that shows a higher than real growth. But in the hypothetical example the q and p data may be exchanged for each other without any further ado and then the *price index* will have an upward bias and the volume index a downward one. Even though the author does not state here explicitly that he wishes to prove the *upward* bias of the volume, the reader may feel with great probability "convinced" in this sense. (Since we "know" that the "errors show a systematic bias".)

Who sees a mirage?

Following U. P. Reich, A. Bródy shows that if the q quantities and p prices of a cyclically changing but otherwise stationary economy are for some product

$$q = \bar{q} + \sin t \quad \text{and} \quad p = \bar{p} + \sin (t + \varphi)$$

*For my detailed opinion on all that see [5]

(that is, the cycle of prices is lagged by φ relative to the q cycle) further the absolute value of the growth of the real product is

$$dQ = p\,dq,$$

then in a full period of the length 2π the ΔQ increment is:

$$\Delta Q = \int_0^{2\pi} Q dt = \pi \sin \varphi$$

In a stationary process there should be no change at the end of the cycle in either quantity or price or value. Indeed there is no change in value, but the sum of "quantitative increments" is $\pi \sin \varphi$ and the sum of "price increments" $-\pi \sin \varphi$. "This is not a bias, this is a mirage" writes Bródy. Indeed it is, but the question is if it has anything to do with the real measurement of growth. *Real value* is never computed at *changing* prices in the case of a *single* product. Even if indexes with changing weights are computed, the real increments of several periods with individual products are not added up.

Let us have a look at the author's numerical example (adjusting the notation to the mathematical deduction!):

p	q	Δq	pΔq
	80		
1.0		+20	+20
	100		
1.2		+20	+24
	120		
1.0		−20	−20
	100		
0.8		−20	−16
	80		

The author declared still before the example that "our problem does not stem from "weighting" the index, because it arises already with a single product." (p. 54) Ulteriorly, however, he states he has used *changing weights,* which is better than constant weights.*

According to Bródy, at the end of the cycle the "volume index" is by $20 + 24 - 20 - 16$ points higher than at the beginning. But this is *no index,* it is an absolute increment; nor is it a *volume* since the quantitative increments have been valued at *different prices* in the individual periods. There is no changing weighting, since there is *no weighting,* as we have but a single product. And in the case of several products, the

*This is not the only contradiction in the text. On p. 54 the author justified the not simultaneous cyclical change of q and p with the fact that price changes are acknowledged in the indexes with a *lag.* In the example and in the mathematical deduction, if $\varphi > 0$, prices change first.

effect of weighting on the index does not depend on the changes in *price level,* but on those in *relative prices.*

Returning now from the numerical example to the more general exposition, the problem is, in my opinion, that from the aspect of index computation it is not the derivative of the absolute Q, but that of the relative Q/dp which has to be integrated. Thus, however, p drops out if we have a single product. With several products we arrive at the Divisia index.*

It would be wilfulness on my part to "extrapolate" in this respect the statements of Bródy and challenge an assumed standpoint.

I do not think it is necessary to discuss further problems, whether $\varphi > 0$ or $\varphi < 0$ is more likely. In the first case we should see a mirage, in the second a will-o'-the-wisp.

This was the example from which a doubling over 35 years followed. I think we need not be afraid of such mirage.

A. Bródy's concerns are more realistic when he questions the figures comparing the development levels of rich and small countries. I feel, however, that he was not sufficiently circumspect in his arguments here either. He e.g. challenges the 30–40-fold superiority of the United States over some developing countries, referring to the fact that the per capita animal protein or textile consumption is "only" 10-fold. But there are products, where this superiority is many hundredfold or even "infinite". Whether we like it or not, also the aircraft-carriers have to be and are included. (On the other hand, many high feasts under the coconut trees may have been left out.)

I think Bródy's least considerate statement was that the error of measurement of development over time may attain the usual value of the measured annual growth rates, that is, it is not sure whether we develop at all. If it is justified to say that "the basic irrealistic nature of the scale of measurement strikes the eye", it may be also said that even "the blind see" that the country and the world have much developed over several decades. With however approximative estimation the real growth rate over the long run more convincingly differs from zero than from the measured rate of growth.

On the statisticians

Practical and academic statisticians mutually complain of each other in many countries of the world. According to the complaints the university people do not know the problems of practice, while people of practice do not sufficiently rely on the results of science. I do not say that in our country everything has always been all right in this respect, but I could refer to several facts exemplifying good cooperation. Perhaps this cooperation is a component in the international respect for Hungarian statistics.

One of the charges in A. Bródy's article is that "professorial warnings seldom produce an echo outside the classrooms" and that "the common reader of newpapers (is)

*In both of my articles [1,5] I discuss also the Divisia index.

never being admonished about possible inconsistencies and discrepancies. . ." There is much echo outside the classrooms. Practical experts come mostly from these classrooms. Warnings against the accuracy of the data is no rare manifestation of practical statisticians. As a matter of fact, the acknowledged extent of accuracy is nearer to the professorial caution than to the "rightful doubts" of common readers in Bródy's article. But let us pass to those readers of statistical data who read them not only in newpapers.

"Consumers" of statistics are of course glad if the statistical offices publish "good news" for them – hoping that the *good* news are at the same time *true*. In principle it is possible that "stronger" consumers of statistics – as are e.g. state institutions, governing or strong opposition parties, public opinion formed by some social class or stratum, etc. – attempt to induce statistical offices not to err at the expense of the interests of the "strong consumer". If this possibility is realized, the statisticians may be exposed to major or minor uni-directional or opposed pressures. They may be rebuked *for ceding* to such pressure. But up to now statisticians have not yet been charged with insisting themselves on producing good certificates.

Statisticians – similarly to those in other vocations – observe certain ethical norms of the profession.

The quotation from Elek Fényes – head of the Hungarian Statistical Office in 1848 – which I put at the head of my article may be a contribution to the Hungarian version of the "Hippocratic oath" of the profession, in the conviction that our statisticians make efforts to perform their duties in its spirit also today.

Do we measure development correctly? We could certainly measure it better. But we should not condemn *without* foundation precisely those who do the most for measuring it in the best possible manner. On the other hand, I do not intend to dissuade anyone from exercising *well-founded* severe criticism.

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M. ZAFIR

THE GROWTH RATE AS REFLECTED IN "RECENT INVESTIGATIONS"

Surely, it would be more befitting to refer in the title to the article of András *Bródy* published in the present issue. I wish to express by the title of my contribution from the outset – with quotation marks – that there is no question of A. Bródy having said anything new, perchance anything progressive or useful in his article about measurement of the rate of growth.

Measurement of the rate of growth has its inaccuracies, deficiencies and tendentious errors, as is known by everybody who has ever come into contact with the world of price and volume indexes. A whole library of professional literature discusses them. The author does not remain tacit about it himself that also "the textbooks do caution the students." I can only add that even secondary school pupils are given such warning. "Yet the warnings of the professors seldom produce an echo outside the classroom" – writes Bródy and tries to prove that the practice of statistical measurement can be challenged in its entirety: ". . . 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? "

I wish to deal with four statements of the author with which he believed to prove his message.

Statement No. 1.: the differences between index numbers computable for the same period but different for reasons of weighting, for methodological causes, are very great. As he writes, "the discrepancy may surpass the usual magnitude of the yearly growth rate (p. 48).

To illustrate this statement, he indeed produces a host of startling examples. But there are many kinds of troubles with these examples.

First of all – although he criticizes the measurement of the growth rates – he operates with spatial, not temporal indexes: with the volume indexes of inter-country comparisons. He is not uneasy about that, as he writes: "But comparison in space is analogous to comparison in time: the more developed country representing the proportions the less developed one will achieve later." (p. 49)

Maybe they do not differ from A. Bródy's viewpoint, but I do question such exchangeability of spatial and temporal index numbers. This could be done if in the course of economic development countries indeed went along the same path, if identical production and consumption patterns belonged to a given level of development in every country. Obviously, this is not so, and we have not yet mentioned the problem of the variability of relative prices.

One cannot accept the way in which the author uses these indexes – more exactly, the deviations between the indexes, computed by the weights of the two countries, that is, between those computed at the two different sets of prices. As a matter of fact he

averages without any distinction all deviations between the indexes to be found in the source quoted, in the annex to L. *Drechsler*'s book.

If we only glance at the source, it turns out that comparing e.g. the consumption in the West-European countries with each other we find only 11–12 per cent deviations on average between the two kinds of indexes, while if comparison is made with the far-away USA with a way of life considerably differring from that in Western Europe we immediately find deviations of 30–40 per cent. The magnitude of the deviations is characteristic also depending on what economic indicators are compared (GDP, industry, agriculture, consumption).

The author puts all that into one basket and emphatically declares: ". . . the unweighted average deviation *exceeds 25 per cent"* (p. 49 italics in the original). After that the author speaks about this figure as an error characteristic of the growth rate. But he does not specify the length of the period (one year, ten years or thirty years during which the deviation is altogether 25 per cent). But without that it is not much worth.

The confusion of spatial and temporal measurements culminates in incomprehensible absurdity. The author speaks about the scale of growth and its exaggerated steep gradient, when an utterly different subject is discussed (i.e. that the development level of the USA relative to Italy is twice as high if measured at the rate of exchange than if measured at US prices).

Statement No. 2.: Statisticians deliberately choose the more favourable index, that is, the one showing higher growth rate and smaller increase in prices (p. 48).

Against this statement – formulated by the author in general terms – the facts in the computation of consumption and the consumer price index, of which I have detailed knowledge, are the following. The computation of consumption (and this implies that of the national income) is done in a manner that whenever the price base is exchanged the time series is recomputed backwards and officially modified accordingly. This happened in 1970 when the time series for 1960–1969, shown up to then at 1959 prices, were recomputed at 1968 prices. And this happened again in 1977 when the time series for 1970–1976, shown up to then at 1968 prices were recomputed at 1976 prices. This is explicitly described in the 1970 and 1977 volumes of the Statistical Yearbook. This means that we do not use the more favourable, but on the contrary, the more unfavourable volume index, i.e. the one showing smaller growth. And we assume the responsibility! And as regards the consumer price index, in the course of the current year and as preliminary data we have been publishing Laspeyres indexes, at the end of the year Paasche indexes and as annual final data Fisher indexes, (the average of the former two index numbers) – for more than two decades. As regards the merits of the matter, this practice is quite different from the one that may be inferred from the condemning reasoning of the author, formulated in general terms, and from his rough-and-ready, condescending remarks on the Hungarian practice.

Statement No. 3.: because of cyclically fluctuating growth, since ". . . prices can manifest themselves . . . only with lags", a systematical overstatement of growth is as-

serted. In the numerical example this is 2 per cent p.a. and the author underlines that "we indeed may be close to such a misrepresentation."

I do not wish to disentangle whether this overstatement of growth should be understood as a new error to be added to the great errors "presented" in the preceding, in connection with the weighting of indexes. Further, I do not discuss the debatable, perhaps not quite understandable starting points for the statement of the author, nor his conclusions. What I wish is only as much as to help the reader to clearer sight.

As said, the time series are at times recomputed on a new price basis. As regards personal consumption, this involves a complete item-by-item recomputation, covering all (about 190) groups of consumer goods and services. The results at old and new prices can be found in the series of the Statistical Yearbook, thus it can be simply established what deviation is caused in the figures by the shift to new prices (prices of the end point of some period). For consumption the 1969 Yearbook gives the index number 151 for the period 1969/1960 and the 1970 Yearbook, announcing the shift to new, 1968 prices, the index number of 145 per cent. For 1976/70 the index number at the old prices is 131.6 per cent against 128.7 per cent at the new (1976) prices.

These are then the differences between the two extreme values for methodological, i.e. weighting reasons. This is indeed an error of measurement, as discussed in every textbook, but it is not shoreless and not at all hidden as the author states – again not concretely about Hungary, but in general terms. Considering what has been said, in Hungary in our age it causes an average yearly reduction of 0.4–0.5 per cent in an index number covering a decade (or half a decade in the latter case) if we shift from prices of the beginning of the period, that is, from prices resulting generally in the highest growth rate, to prices at the end of the period, thus to the index number generally expressing the smallest growth. And if somebody swears by the averaged index then, halving this measure, he may consider 0.2–0.3 per cent annually as an error attributable to the methodology of index-weighting. (And, as against the reasoning of the author, with opposite sign!)

Of course, it might be raised that if we recomputed the whole time series beginning with 1950 at 1976 prices, we would again obtain a new series of index numbers, presumably again showing smaller growth. And that later we could again shift – with retroactive force – to a newer price basis and this could go on *ad infinitum.* Of course, we could, but this would not make sense. And, in this context, we have to scrutinize yet another statement of the author.

Statement No. 4.: ". . . 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." (p. 48)

In my opinion, the substance of the matter is that a time series has realistic contents exclusively as long as the period it covers is more-or-less homogeneous in its economic character, that is, in respect of the development level of the forces of production, the production relations and the goods turned out. E.g. when revising the time series of 1938–1960 the Central Statistical Office stated that the data relating to

dynamic development relative to the years before the liberation of the country are not of absolute validity. (On p. 8 of the publication: "A nemzeti jövedelem hosszúsoros indexének felülvizsgálata" (Revision of the long time index series of national income) the statement is found: "also the results of the present revision have shown that data of comparison with the very distant year 1938 are, following from the economic contents of the matter, of very conditional nature.")

If we look back from our days to, say, two decades we perceive similar great changes. At that time the spread of household machines, automobiles and many other consumer durables playing such great roles in the present pattern of consumption just started to spread. And where could we then find electric energy and fuel consumption similar to the present one? Thinking only about these – and there were quite a number of other qualitative changes in the pattern of consumption and relative prices – we may justly start and have to start formulating reservations about the use of the time series which compare our days to the end of the fifties. Thus, on second thoughts, it is indeed true that the method of measurement is "quasi-good" for the short run, good, if the period is relatively homogeneous in its economic contents. For the long run, however, – whether the homogeneous periods and the transitions between them are chained or the prices of either end of the long period are used for valuation – it can be interpreted with a growing number of reservations and finally an unusable final result will emerge. It is not the method but economic reality that should be blamed. These are not problems of comparison: we have to put up with the fact of incomparability.

On his head be it, if someone wishes to deduce meritory conclusions from volume indexes covering our whole century. (The Hungarian published time series start with 1950 and 1960; some comprehensive indicators are traced back – with emphasis on the reservations as quoted – to 1938.)

A. BRÓDY

ON THE DISCUSSION ABOUT MEASUREMENT – A REJOINDER

The combined and strong reply of my critics in a seemingly tedious methodological problem allows to conclude that the problem is delicate and timely.

I entertained doubts about the actual solution of the measurement of growth rates and living standards. This doubt arises in both laymen and specialists, even my critics share it. "Measurement of the rate of growth has its inaccuracies, deficiencies and tendentious errors, as is known by everybody. . ." – writes *Zafir.* Thus we do agree on the phenomena, what we are debating is the extent and cause of the errors.

What they particularly take ill is that I pointed out: statistical offices can nowhere be completely independent of governments. Therefore, if the measurement itself is burdened with uncertainty (which my critics only know well and affirm themselves), it

would be naive to expect that the errors will be free from distortion. Publications will always and everywhere overestimate achievements within the limits of the given possibilities. The "given possibilities" are, of course, only partly methodological limitations. It depends much on whether the basic data themselves are public and accessible, whether competitive statistical investigation exists or can exist – as *Köves* indicated – or whether every step of data collection, processing and publication is a monopoly, as prescribed by the Hungarian Act on statistics.

I willingly admit that from among the offices having such a monopoly it is the data service of the Hungarian statistics which is the most reliable, because it is the most public one. But monopoly remains monopoly and the deriving difficulties are independent of the good intentions or the ill-will of the persons representing them.

The basic problem

I have presented the debated errors as tendencies asserting themselves all over the world. My critics have not accepted the diagnosis (without which there is no recovery) and regard the phenomena as natural. I would call this standpoint statistical agnosticism: reality almost vanishes and only a few equally unsatisfactory notions and faulty indexes remain on the scene.

Köves e.g. allows three interpretations for my statement that even the Paasche index may overestimate:

a) another possible index falls outside the domain,

b) this limit does not satisfy the neoclassical theory,

c) the error is greater than the difference between the Laspeyres and Paasche indexes.

As a matter of fact, my statement is simple: it is real growth that may fall outside (usually below) the values given by the pair of indexes. But the other two critics do not consider this highly important surmise even worth mentioning (I could not call it a theorem yet, since I have not proven only demonstrated it). Or rather, where this problem leads to the general slope of the scale of measurement, Zafir simply declares that the question is absurd.

What can I do? How can I justify again what is so clear and important to me while it is secondary and incomprehensible to my critics? It will be certainly of little use if I refer to Jánossy's book already quoted.* Measurement of the development level is performed with the aid of the traditional indexes because – as Köves aptly notes – we have no exactly calibrated measuring rod for the purpose. The different indexes bring about scales of measurement with different slopes. Experience shows that all these scales are so steep that they indicate uninterpretably great differences in both time and space. I

*See [1] p. 113 ff. As I have already stated, I do not agree with his choice of the scale. But he treats excellently the problem of slope.

find we agree here with Köves – although he is looking for the reasons elsewhere. Involuntarily though, also Zafir acknowledges it, when he says that it makes no sense to compare far distant points. I for one continue to believe that a) measurement must and can be arranged so that we compare with the same methodolgy both in space and time, b) distant points are connected by relative error of the same magnitude.

Comparison in space and time

Drechsler writes about this in his book [2]. But in the discussion he takes a different standpoint, similar to that of Zafir: the two kinds of measurement have nothing to do with each other. But in the book he acknowledged the justification of my standpoint, even partly accepted it. "There are some people who entirely separate these two spheres of problems from each other" – he wrote, reprovingly, not considering that a few years later he would do the same. Of course, he did not find the two problems "quite identical" even in this book; the reason being in his opinion, that in time there is a natural sequence, while in space there is none, and, on the other hand, that one finds greater differences in space.

But I cannot accept his arguments. Of course, ordering in space, which has more dimensions than time, is more complex. It is more complex but not different in nature. He argued for his second statement as follows: "Structural differences between individual countries are usually much greater than those within the same country between two periods near to each other." Of course, this statement stands or falls with the word "near", while, as a matter of fact, there are countries far away in space but near in structure, and there are also deep structural changes occuring suddenly in a country. The difference – if any – is at most quantitative but by no means qualitative, thus I do not find it justified to distinguish theoretically between the two methodologies.

But let us quote the crown of his reasoning: "It follows that with international comparisons one can use much less certain simplified methods which cause but relatively slight distortion in dynamic indexes and which, precisely on this account, were permissible and rather widespread." That's it. In my opinion the "simple methods" are not permissible – in spite of their being widespread – and the distortion is relatively no smaller even in the case of dynamic indexes.

The size of the error

Both Drechsler and Zafir demonstrate that I did not specify to what "length of period" the about 25 per cent deviation between the Laspeyres–Paasche pair of indexes relates. I am somewhat puzzled: a relative deviation is a relative deviation. Or do they believe that one per cent relative deviation in a year may grow into a 25 per cent one in 25 years? This is not so: if I err every year one billion when measuring 100 billions, then,

measuring altogether 100 billions in ten years I may have erred 10 billions and the error is still only 1 per cent.

I think my critics would like to maintain the view at any price that though we measure sufficiently accurately from one year to the next, it follows from the nature of things that the many small errors "accumulate" after many years and then the error is no longer attributable to measurement but to God himself. No, the matter is far from being so idyllic. If someone acknowledges that "on his head be it" if someone wishes to draw conclusions from long time series, he also acknowledged that "on his head be it" even in the short run, for measurement is no more accurate there either.

Now, wherefrom did I pick to characterize – not the error, but the uncertainty between the Laspeyres and Paasche indexes – the ominous order of magnitude of 25 per cent? From several places. The formula of *Bortkiewicz,* if we standardize the dispersion of changes and assume a slight negative correlation, according to our existing knowledge, between the quantities produced and price, leads to this order of magnitude. So do the empirical data of *Gilbert* and *Kravis.* And so does Jánossy's graph constructed with the aid of much computation (op. cit. p. 112). And the same is suggested by the appendix to Drechsler's book.

Maybe, the rigorous measure of the relative deviation is only 20 per cent, maybe it is even 30 – only the order of magnitude of the deviation is important: it is certainly not one or two per cent, nor 60 or 70 per cent. Otherwise, also the data quoted by Zafir from the Hungarian statistics (growth of 45 or 51 per cent and of 28.7 or 31.6 per cent) indicate deviations of about 10 per cent. Why they do not indicate more will soon turn out.

Can it be done otherwise?

The question, of course, remains, whether the margin of error can be methodologically reduced. Research points toward two directions and not without success; in both instances they reach back to the same circle of ideas: the Marxian labour theory of value. This can be hardly stated about the theory of index-numbers underlying the present statistical practice.

The first is the method related to the name of *Jánossy,* and later to that of *Ehrlich,* which brought considerable results in respect of both spatial and temporal comparisons, essentially with the same methodology which was later extended by *Bekker* to the developing countries. My impression is that the relative errors of the method are, even in the initial stages of research, in the neighbourhood of the error margins of better Western statistics.

The other attempt at measurement is based on the use of equilibrium price systems computable with the aid of the input-output table. In Hungary such computations were performed by *Ganczer* and *Glattfelder,* later by *Dániel* and *Augustinovics;* international comparisons were made by *Haraszti.* These, too, produced highly realistic results. For the

years 1954–1967 in the Federal Republic of Germany U. P. *Reich* presented such computations, to which I have to revert later.* I think the question may be justly asked: why has the Hungarian Statistical Office made no attempt as yet to apply these methods? Why does it insist on the exclusivity of the old methods known to imply large margins of error – when even such an authentic person as Zafir denies their applicability in the long run?

I would not like to seem malicious but is it not possible that the Office is averse to these methods because in the case of modest growth achievements they lead to only modest numerical results.

About the front lines

I think the key to understanding the situation is provided by Drechsler, when he characterizes the two front lines emerging all the world over in statistics as a conflict between statistical offices and researchers. To this, in my own interpretation, I only add: this is the attack of science on the conservatism of the statistical offices. It is very much needed, since otherwise statistics would develop even more slowly. I am of the opinion that this is the subject matter of the present debate.

I deplore, therefore, that in some questions (maybe only because of misunderstandings) I find myself also opposing *Köves,* though until now I have believed to advance in the same direction.

Already very early Köves advocated theoretically the index "with an infinite number of links" (essentially the Divisia-index), and if I have read his latest study well, he still insists on it.

But, as we all know, the direct application of such an index seemed impossible for two reasons: it required "continuous" computation, which is infeasible, and theoretically its numerical value was not independent of the road covered.

This is why I believed he would read the report on *Reich*'s research with increased attention (he interpreted it correctly: Reich discusses indeed the Divisia-index, only I attempted – unfortunately at my undoing – to simplify the mathematics). Exploration of the systematic error of the index may lead and has indeed led to improving the error.

In my opinion, namely, Reich succeeded in making the procedure independent of the road covered by transforming it into "complete integral". But in this case the need for "continuous measurement" falls away and there is a hope to make a large step forward in the direction marked out earlier by Köves.

Of course my accepting the findings does not imply that they are surely good. Certainly there remain many problems of detail that require clarification, but, considering the not too rosy situation of statistics, must new ideas be obstructed or aided?

*See [3]. The index numbers computed were in 9 cases out of 13 *outside* the domain enclosed by the Laspeyres and Paasche indexes.

At this place I would point out something that makes our debate extremely topical. In the future, (say, in the next twenty years) growth rates will be everywhere essentially lower than the present ones are. At the same time, structural shifts (changes in relative prices and relative levels of production) will be much more stormy. Thus the difficulty and relative inaccuracy of statistical measurement will be extremely growing. If it does not make very definite steps on the way to methodological renewal, economic statistics will loose even what has remained of its creditworthiness.

A few Hungarian arguments

I have not said that the error of measurement attains the rate of the growth measured, but merely that it may attain it. Köves feigns as if I challenged the whole of development; as a matter of fact I only objected to the exaggeration of the growth indicators.

I know of cases when the error of measurement essentially exceeded the rate measured. E.g. we were compelled to modify the rise in living standards in 1951 – six years later – to a more than 11 per cent fall in real wages. But, my critics may say, this was long ago.

But what happened to the national income of 1974? At *current* prices it showed an increase of 4.7 per cent, while at *comparable* prices the growth became already 7 per cent [4]. Instead of "deflation", "inflation" of the index occurred. What was the real growth? In my opinion it was at most 1–2 per cent in 1974. And this would have been good to know at that time.

Let us only scrutinize the balance of foreign trade that comprises in some years an uncertainty that is at least as great as the total growth of national income itself.

The problem is not only the methodological mistake of imputing a non-existent profit to foreign trade and adding it to the national income (the index number of growth is computed in this way*). Then, deducting the similarly imputed but more realistic loss, this appears as a mere difference between the "created" and the "disposable" national income. The index of the latter is not published, though, as a matter of fact this is the national income that has actually come about.

But the problem lies even deeper. Namely, from the balance of foreign trade *no kind* of certain conclusion can be drawn for the development of national income. If we exported 25 billion more than what we imported, (and this 25 billion is 5 per cent of the 500 billion of national income), this may hide two things: may be we gained 25 billion through foreign trade, since we acquired for a lesser amount of exports all what we imported. And it may also be that we lost 25 billion or even more because we could not export as much as the countervalue of our imports. The balance of trade says nothing, we should turn to the balance of payments.

*I mention this only to characterize the fact that – as against the statement by Drechsler – the Statistical Office does not refrain from imputation, even when market judgement exists.

But we look in vain for this balance among statistical data. And, as with everything unpublished, the suspicion arises that not its unfavourable development is concealed but that it is even more inexact than the published data, since it lacks the check of publicity. In consequence, as many offices, banks, ministries and other organs discuss it, as many data and opinions we find, and in the end nobody knows even the order of magnitude of the real figure.

But let us take an example from another field: the official price index of building investment showed in 1971 only a 21.6 per cent rise against 1960, and the price index of buildings and fittings in the state construction sector not even as much: 18.7 per cent [5]. As a matter of fact, the average costs of building a flat doubled during the same time span – and the price of flats rose even more. At the same time consumer statistics relating to housing services recorded the following [6]: the "consumption" of housing services rose *at current prices* to 1.76-fold, *at unchanged prices* to 1.57-fold. The price index implied is thus only 12 per cent!

What these price indexes forgot to include, their lag behind the actually rising prices, was taken into account as a rise in production and consumption.

Zafir acknowledges that an annual 5 per cent growth is measured with an uncertainty of about half a per cent because of the deviation between the two kinds of index numbers. This is in itself an uncertainty of 10 per cent. But if we examine more closely why the "scissors" between the two indexes are so small in Hungary, a deeper distortion comes to the surface. The scissors are smaller because the negative correlation between the changes in production and changes in prices is much smaller in our country than in market economies: the prices of both the base period and the period observed are "official" prices. And it has been stated several times that in Hungary the prices of fast growing industries are high and those of the lagging industries are low.* Thus, stressing the development of the growing industries and hiding that of those lagging behind, we may indicate a growth rate faster by almost 1 per cent annually than if we measured this growth, say, at world market prices.

If we add to this the almost 50 per cent relative uncertainty reckoned – because of the weak representation of the price indices – as growth in production (and consumption), though this is not growth, merely undisclosed inflation, we have to state with sorrow that Hungarian statistics are more unreliable than those of the advanced capitalist countries: the uncertainty is almost greater than the actual measure of growth.

Thus we cannot wonder if the public frowns upon the statistical publications about the standard of living, nor that economic policy decisions relying on uncertain bases take us sometimes in wrong directions.

As a matter of fact the statistics of planned economy have to be more exact and not more inaccurate than statistics in market economies – since planning can rely only on statistics.

*In the West one can buy a TV set for the price of 100 kg of bread or 100 shaves – in Hungary not even a transistor radio.

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BOOK REVIEWS

ZELKÓ, L.: *International value – international prices.* Alpher aan den Rijn – Budapest, 1980. Sijthoff & Nordhoff – Akadémiai Kiadó. 154 p.

In the first chapter of the book, consisting of four major parts, the author discusses the definition of international value. Two of the factors, determining international terms of trade, are closely dealt with: the level of development and comparative advantages. Later he surveys the theories of Ricardo and Marx, concerning the distribution of gains from comparative advantages, and discusses the differences between national and international markets. The achieved stage of development influences the international terms of trade of a country through its level of productivity. Problems of the term of international productivity level, defined as average productivity of goods exchanged in the international markets, and difficulties related to the comparison of productivity levels of the various countries are recognized by the author. In his opinion however, this does not cause greater problems than comparing national incomes, and they are mostly of a technical character.

The principal category of the book: the term of *unified value* is based on the following assumption. If international trade does not involve comparative advantages (but the exchange of goods is serving economies of scale), then – supposing an equal productivity level in countries "A" and "B" –, the exchanged amount of labour has to be equal as well. Under the conditions of the international exchange of equal values a special characteristic of international trade accomplished on the basis of comparative advantages, is that *the amounts of national labour exchanged (calculated at unified values) are equal.*

The term of comparative advantages in relation to a number of countries is defined by the author as follows: "Each country disposes over realizable comparative advantages in relation to other countries with those products the productivity of which *more positively deviates* from the average international productivity of these goods than the national productivity level of the discussed country does from the average world productivity level." When defining the average international input not only internationally traded goods are taken into considerations.

Surveying the Hungarian Marxist literature on the functioning of the law of value on international scale, Zelkó criticizes the – almost conventional – approach according to which the "gravity point" of the prices of goods internationally traded can be defined as the weighted arithmetic average of national values. He proves that the exchange of goods under the requirement of the exchange of equal amounts of national labour would cause losses of labour for developed countries involved in international trade; consequently this cannot be required, since it leads to absurd results. When considering the weighted arithmetic average of the national values of goods traded internationally (involving certain commodity groups with varying weights) as a price centrum, the most developed country might suffer a loss of labour in the international exchange of goods. Further theoretical problems arise as well in this approach when considering those commodity groups which are not entering international trade, since their average labour input apparently influences the amount of the national value.

Realizing the gap between the starting model and reality the author draws attention to the fact that since international value cannot be directly

linked with national values (not even in simple commodity production model), and the same applies to the international production price; and so the price centrum of the rational international exchange of goods, the unified value is only indirectly linked with national labour input; for prices influenced by this price centrum Zelkó uses the term of *theoretical price.*

"International money" is the title of the second major part starting with a survey of the theories of Marx and Ricardo and following with an analysis of the functions of international money.

Concerning the purchasing power function Zelkó emphasizes that gold fails to meet its medium of circulation function in international trade at present as well, and at the same time the money without own value becomes more and more a medium of circulation. Since international trade developed into a multilateral and ever changing process, the store of value function will be fulfilled by the reserve currency. Chapter "Contemporary Capitalist International Finances" discusses the Bretton–Woods system collapsed in the early seventies.

A separate chapter is dealing with the international finances of socialist countries. Little attention is, however, paid to the theoretical and practical peculiarities rooted in the lack of the money functions of the common currency, and further to the problem that producer prices of the CMEA countries are not directly comparable either to each other or to contractual prices because they are formed in a structually different way, both in relation of certain countries and relations. Zelkó is right in his assessment in claiming that because of the nominal rate of interests paid within CMEA and of problems related to the repayment of the credits, debtor countries, are in a position more advantageous and all this hinders the expansion of mutual trade. Because of a dominant role played by the US-dollar the author is against joining the IMF by the socialist countries.

The third major part deals with international prices. In the author's view the main reason for the differences prevailing between official parities and purchasing power parities of each currency is that the exchange of goods at theoretical prices can only be realized if in the underdeveloped countries the official exchange rates are devalued compared to the effective purchasing power parity of the currency that – especially in the case of a unified exchange rate system – results in an increase of the imports of developing countries and an *unavoidable* deterioration of their terms of trade. From this point Zelkó deducts the necessity of tariffs, however, he refers to the need for support for ailing branches.

In the fourth, final passage the author discusses the problems of international and national prices. He claims that world market prices fail to reflect international input proportions, but they reflect the internal value relations of the most developed countries, consequently – in his opinion – they are not able to express a price centrum adequate for comparisons with a "world efficiency". That's why he is against the idea to form the domestic prices in Hungary on the basis of world market prices. Despite this, necessary orientation at a desirable degree of the participation in the international division of labour is provided by a comparison of domestic costs and world market prices. Zelkó is quite right in pointing out that in the labour theory of value foreign trade is promoting the efficiency of national labour but is not contributing to the growth of national income.

A number of theoretical statements of interest are to be found in the book. Their verification is, however, not very convincing as a consequence of the outdated statistical figures applied, a very limited reference to the related international literature and due to a rather superficial approach to problems of economic policy; especially as far as the explanation of the links between CMEA prices and the Hungarian price system or the differentiation process in the developing world are concerned.

L. CSABA

KOVÁCS, G.: *Jövőkutatás és társadalmi tervezés* (Future research and social planning.) Budapest, 1979. Közgazdasági és Jogi Könyvkiadó. 365. p.

A major recent development in the socialist countries is the emergence of problems of social planning reaching far beyond strict economic planning. This phenomenon is a joint product of

various factors, like the growing importance of long-term planning; evolution of living standard planning into planning in much broader terms: the way or mode of living; emergence of problems of the socialist consumption pattern and the model of the socialist human ideal; comparison of the prevailing social system with the idea of a developed socialist society, a number of sociographic, sociological, philosophical and politological researches done; technological assessment, cognition of the negative phenomena of the so-called post-industrial or welfare societies of the advanced capitalist countries, etc.

As a result of the above mentioned and various other factors not only the subject of planning has become broader but as a qualitative development, demand for comprehensive social planning has emerged as well. This demand has been substantially fuelled by the proliferation and qualitative development of futures research, and a tighter link evolving between long-term planning and futures research. Under these circumstances it is no surprise that a new contribution to the Hungarian scientific literature should be a book with the title "Future research and social planning" by a well-known university professor G. *Kovács,* engaged in futures research.

The book consists of four parts. The first is a general introduction to the various problems to be discussed and deals with *the link between futures research and social planning.* The first chapter is concerned with the *present dilemmas of futures research and the trends of its further development.* In the socialist countries it was forecasting that has developed most smoothly and one of the problems is related to the relationship between this branch of futures research and futurology, which – mostly because of ideological considerations – was only accepted with some suspicion. Another dilemma arose concerning the relationship between futures research and planning, and the independence and tasks of the first. It is a very important recognition that just as the time horizon of futures research reaches more and more into the distant future, its scope becomes broader as well, going beyond the scope of long-term planning. The third dilemma: the question how futures research should be saved from the ups and downs often experienced in the socialist countries.

The principal statement of the second chapter concerned with *the possibilities of planning and with social planning* is that, beyond the economic environment, the development of other fields may be planned, too, and in this respect it is not at all sufficient to plan only their economic preconditions. (At the same time it is not necessary to plan everything in the economic sphere which in fact is subject of planning.) The problems of planning are closely related to those of measurability, probability, uncertainty, risk taking, problems of the information base, and in these respects there are differences both between futures research and planning, and the various fields of social activities. It would be a mistake to interpret social planning in a narrow way, as it were a correction of economic planning. The development of social life as a whole and its various fields cannot rely merely on economic planning. In the course of social planning both the objectives and the ways of their realization have to be planned together with the required preconditions. To the further development of social planning a more rapid development of futures research and a coordination of forecasting and planning systems (structures) seem to be unavoidable as a starting point. A second starting point would be a description of social activities according to the requirements of planning. A third one is the broadening of today's practical planning towards social planning.

The third chapter deals with the *methods.* According to the author demand for specialization has not been marked in the field of futures research, and as a consequence, the applied methods have been taken from other disciplines. The author is definitely against the belief in connection with the so-called "hard" (mathematical-statistical) methods that the results obtained with them cannot be refined with the help of the so-called "soft" methods. He disapproves the fact that futures research still lacks the approach of looking at possible paths of development by tracing them back from future objectives. He draws attention to the possibilities of constructing theory, to the importance of thinking in alternatives, of rejected alternatives as well as of updating forecasts; and to the methodological problems attached to them. Approaching these questions from the side of social planning he stresses the

requirement of coordination between the plans in various fields and elaborated for various periods.

According to the fourth chapter bearing the title of *The planning activity of society*, a more definite distinction is required between conclusions concerning the future drawn in various disciplines, as well as between futures research and planning. In order to achieve the expected results futures research and planning should develop into a real profession demanding appropriate training and on-the-job-training of experts in futures research and planning. Besides, improvement of the institutional network of futures research and planning is necessary.

The essence of the author's idea is expressed in Part II, under the title *Elaborating the long distance complex future image.* Its first chapter – as a foundation for the subject – discusses the *time and space-related problems* of this scenario. When defining the goals of a long-term plan such a future image may serve for the consideration of the requirements of even more distant time horizons and for the evaluation of the plan itself.

The elaboration of such a future scenario as far as space-related problems are concerned, requires an even more many sided and sophisticated approach than time-related problems. This future scenario has to be embodied under all circumstances into a regional system of conditions bringing the spatial interrelations to the surface; taking regional problems and crises into consideration as well. The demographic explosion may turn out as the most severe, most delicate regional disaster. In order to be able to cope with this and other global problems the author suggests the continued promotion of biological research and the implementation of its findings.

Among the *elements of the future image* discussed in the second chapter, the first and most important one is the *natural environment.* In this connection the problems of substantial changes in climate, ways of influencing these changes, and how far this influence may be planned in advance, emerge. Another important aspect to be examined concerns the development opportunities of the Hungarian natural environment and their utilization. The third aspect – a well-known problem of world models in general – is environment pollution and protection. The second important element (sub-system) is the *technical-economic basis of society,* and in this context the future of the large-scale engineering industry evolved in the framework of capitalism but taken over by the socialist economy. In the author's view around the turn of the millenum "a second socialist industrialization" is due to occur: therein the implementation of self-programmed, perfectly automated production equipment, with the computer industry and computer techniques in its background. An increased implementation of computer techniques and computers may bring about a rather different division of labour, social stratification and the evolution of a new consciousness; it will play a distinguished role in the development of communication techniques, becoming an important factor in the specific structure of the productive forces of the future. Another progressive specific productive force will be the "biology industry", whose significance derives not only from an increased role of the food economy, but from the protection and development of the social human-stock as well. – The third important "element" is the *structure of society.* It seems probable that class stratification will be of decreasing significance, whilst social mobility and problems attached to it will be gaining more and more attention. Mobility is closely related to the future of incongruency. (Incongruency is defined as the situation where the requirements of the jobs are not in harmony with the qualification, knowledge and ability structure of the employees concerned.) A horizontal incongruency manifesting itself in the ability of meeting higher requirements might be acceptable and even wanted as representing the reserves hidden in the future. From the point of view of the future scenario the generation structure of society is of importance as well, therein not only the problems of the youth and the old, but those of the middle-aged generation deserve attention, too. This means that the future scenario must be drawn up for all generations and their interrelations as well. A perfect realization of the emancipation of women is to be expected in the following development phase. The family pattern will be compatible with the social structure of the future, though losing its significance and fulfilling its function together with other smaller communities. – The fourth element is the most important and most sophisticated one: *the*

mode of life and the system of values. The principal item is work, but on a much higher intellectual level. As regards organization, work done by smaller communities, or involvement in two similar trades might be of growing importance. Coping with the joint requirement of collectivism and diversification will necessitate social consciousness regarding the maintenance of real and justified differences. The first precondition of correctly defined equality is to secure the conditions of nourishment according to physiological norms for everybody; the second: everyone has the right to a dwelling of his own, which could be the scene of his secondary activity as well; another precondition of equality is the reasonable spending of leisure time; securing equal conditions for gaining basic knowledge and ability, for health service. Though inequalities will remain, their characteristics and appearance, their size and distribution between the various social strata will change. In the course of future development first the differences between various social classes will be eliminated, as regards inter-strata differences an easing is to be experienced, and finally material inequalities will be replaced more and more by other kinds of inequalities. The gap between the chances of meeting demand and its actual meeting will be narrowing. The mechanism of meeting somebody's demand depends always on the development of human consciousness, and the satisfaction of demand according to needs under the circumstances of communism will certainly not be done exclusively by means of fringe benefits. As a final idea the author draws attention to the fairly important role of social experiments in the formation of the future mode of living.

The third part of the book deals with *complex planning. (N-sectoral and N-dimensional planning)* embracing several branches and problems. The first chapter – bearing the title of *Prognostics requirements to be deduced from the development of planning* – points out that in the framework of planning priority development programs based on forecasting are gaining importance. These highly comprehensive programs require a multidisciplinary approach and are long-term or prospective programs. Whilst a forecast or a conception aims decisively at gaining information, a program or a plan concentrates on decision making.

According to the second chapter – *The joint enforcement of comprehensiveness and specifications* – comprehensive planning covers more and more problems instead of sectors. The need for a many-sided handling of problems – both in futures research and planning – is analyzed with the examples of the energy problem and water management. In the author's view "man-centred" planning has not yet been achieved to a satisfactory extent. Interventions from many sides are affecting the reproduction process of man, however, their synthetized impact has not yet been estimated. Reinterpretations are taking place as regards the interrelations of the various planning areas. In the course of planning the development of the economy, education, science, culture, health service, it has to be decided to what extent these areas are to contribute to the solution of certain socio-economic problems, and what has to be done to further the development of the area concerned, considering its internal laws. Transition to multi-dimensional planning may contribute to the solution of a number of problems like efficiency, effectivity, profitability and their interrelations, approached so far in a limited scope, to a better understanding of the phases of social development, or to the correct judgement of the role of economic growth.

The third chapter bearing the title *The spreading of systems-approach* emphasizes the importance of the relationship between biology and social sciences, and analyses the opportunities of systems-approach in dealing with problems in futures research. An increased inclusion into the systems approach of the time factor is one manifestation of this phenomenon.

In the fourth part – *Future-consciousness and institutional system* – the author emphasizes the importance of 'future-consciousness' (responsibility for the future) beyond that of the insight into the future. In the first chapter about *future-consciousness* the reader is faced with a limited rehabilitation of utopia. From the point of view of a scientific control of society the artistic and scientific future-consciousness, analysis of the relationship between the latter and everyday future-consciousness, and the elaboration of sce-

narios based on it are all bearing special significance. In the activity of the supervisory authorities the elements of scientific and everyday future-consciousness are paralelly present. In the last chapter concerned with the *planned development of the institutional system* problems of parlamentarism, further improvement of the Hungarian system of medium-level management (ministries, local councils), and the system of decision-making are discussed. In this respect the author emphasizes the significance of alternatives in handling problems, risk taking, the importance of a performance related system, further the necessity of a large-scale sharing in decision making and responsibilities and the improvement of information supply.

In the Appendix a 300-item biography and contents in English, Russian and German are enclosed.

To sum up, it may be stated that the author, starting from the well-known areas of futures research, gives insight into the new dimensions of the subject of social planning and, drawing attention to a more detailed analysis of these problems, he contributes to an approach to their solution with his own ideas.

Á. SCHMIDT

A. GIMES BURGER (ed.): *A zöldség- és gyümölcsfélék fogyasztása és kereslete* (Consumption of and demand for vegetables and fruits.) Budapest, 1979. Mezőgazdasági Könyvkiadó. 180 p.

In developed Western countries one can find an extensive literature on consumption economics going back for more decades. This discipline has only little tradition in Hungary. This was quite understandable on a lower level of production, under the conditions of supply shortages when quantitative growth was the main concern. The Hungarian food economy has arrived at a phase of development where the importance of consumption economics is equal to that of production economics.

The book by A. Gimes, Mrs. Burger and her collaborators (J. *Kapronczai,* M. *Régins,* K. *Szép,* P. *Vig*) deals certain problems of food consumption in Hungary in the field of consumption economics. The authors analyse the changes in the structure of food consumption, the developments, as well as the changes in consumption and prices. The analysis concentrates on the period between 1960–1974, but in certain instances they pay attention to post-1974 events as well. The authors are especially concerned with the production and consumption of vegetables and fruits within total food production and consumption.

In the first part of the book factors influencing the consumption of the various sorts of vegetables and fruits are discussed. The authors start with a brief survey of the problems of production. In 1975, the percentage share of gardening area within the total agricultural area was 9,3 per cent in Hungary, whilst its contribution to the gross agricultural output was 13 per cent. The common feature of vegetable and fruit growing is that both require labour intensive technologies. Though in the Hungarian agriculture – during the observed one and a half decades – the substitution of labour by capital investments made a great advance, and the complex mechanization of a number of branches was accomplished, however, the same cannot be said about gardening. In this field not only the machines and machine lines are still in an experimentary stage of development but the improving of vegetable and fruit sorts and the production methods as well.

Beside cooperatives and large state farms small-scale farming, too, plays an important role in Hungarian agriculture. (Some 1/3 of the agricultural output is the contribution of small-scale farming.) Within vegetable and fruit growing the output of small farming amounts to about 50 per cent of the total.

The consumption of fresh and processed gardening products totalled some 14 per cent in the per capita food consumption in 1975. Within this – due to the high proportion of small-scale farming – the selfconsumption of the producers is quite substantial. In marketing of the produce foreign trade plays a significant role. Within food exports the share of fresh and processed gardening products came to 36 per cent in 1975. The same figure within food exports to socialist countries was 45,2 per cent, against their 19,7 per cent share in food exports to the West. Future prospects of exports to CMEA countries are

bright, especially to those countries which are more to the north of Hungary. However, this requires a greater profitability of the marketing of gardening products and other foodstuffs via foreign trade. Namely the export prices of most products still reflect outdated cost proportions.

A detailed analysis shows the price development of garden products. As regards producer prices, between 1970 and 1976 agricultural prices in Hungary rose by 28.2 per cent, therein the prices of vegetables by 56.9 per cent, and that of fruits by 31.2 per cent. But even price rises higher than the average failed to encourage large farms for starting the production of ever more labour and capital intensive garden products. The reason for this is the rising of costs (material costs, costs of capital goods, and wages increased). (The authors only refer to this but fail to quote figures demonstrating the increase in the production costs of some important products.) In their opinion as regards gardening the direct profitability conditions have to be improved, or at least they have to reach the level of the other branches.

A very precise analysis follows about consumer price development, and the relations between producer and consumer prices. These links are direct and tight in the case of gardening products, in contrary to other food products. Whilst the average consumer price index of food products showed an increase of 18.6 per cent between 1970 and 1976, vegetable prices grew by 71.3 per cent during the same period, and those of domestically grown fruits by 63.7 per cent. That means that consumer price relations considerably changed during the period observed to the advantage of gardening products. The authors supply an international comparison as well. According to this the price of tomato and apple in Hungary is higher in relation to milk and bread prices as compared to those in most of the capitals of the countries drawn into the survey. Consumers consider the rise of vegetables and fruits rather substantial since other food prices show no or hardly any changes. In Hungary the majority of the prices of principal food products is fixed and subsidized, whilst the prices of others are moving freely, showing a pronounced upward trend. The authors emphasize that the Hungarian consumer price system as a whole has to be adjusted in a way that the prices should reflect real costs and the changes of actual production costs. This would promote the formation of a healthier consumption pattern being adequate to the living standards.

The price analysis is followed by a detailed discussion of the Hungarian vegetable and fruit consumption. During the one and a half decades after 1960 the per capita vegetable consumption stagnated in Hungary. This was partly due to the slow expansion of the output, the rise of consumer prices, the shifting of the supply structure towards more expensive vegetables, and further to supply fluctuations in the course of each year. Within per capita vegetable consumption that of fresh vegetables decreased against a five to six-fold increase in the consumption of deep-frozen vegetables. Per capita fruit consumption showed a pronounced growth, too. Whereas – reckoned in terms of volume – the consumption grew by 33.8 per cent, it rose by 80 per cent calculated at constant prices. This shows a shift in consumption towards more expensive fruits (e.g. imported citrus fruits) as well as a more balanced fruit consumption thoughout the year. The most pronounced growth in fruit consumption was shown in citrus fruits, tinned and other processed fruitery.

A separate part is devoted to the analysis and comparison of the consumption patterns of the various strata of the population classified according to their income level. A lot of information is furnished on consumer behaviour as regards vegetable and fruit consumption in Hungary.

The second part of the book deals with demand analysis. Various income and price elasticity calculations have been made and conclusions drawn. They point out that the demand for vegetables and fruits – as it is the case mostly in food consumption – is inelastic to income changes, however, the demand for certain vegetables and fruits shows more elasticity than that for the other food products. The same applies to price elasticity as well; a 1 per cent change in the price level will fuel a less than 1 per cent change in the demand. Based on international comparisons the authors refer to the fact that the level of elasticity coefficients depends greatly on the saturation of the market. That is why coefficients are generally lower in Western Europe than in the socialist

countries. The authors point out that the consumption of canned fruits is less inelastic than that of canned vegetables.

Finally, the authors analyse the seasonal fluctuations of consumption. In their opinion in the case of a number of vegetable sorts the elimination of this seasonality would result in greater possibilities for the expansion of their annual consumption.

A methodological Enclosure and a rich bibliography completes the study.

The work by Mrs. Burger, A. Gimes and her collaborators is filling a gap in many respects and is a great contribution to the foundation of consumption economics. Though the authors paid attention in the first line to the problems of vegetable and fruit consumption, their methods can be usefully applied in observations in other fields of food consumption as well. This work will be of great help for university education as well as for scientific research, and it may well arouse international interest as well, especially in the socialist countries.

I. BENET

LAVIGNE, M.: *Les relations économiques Est-Ouest* (East–West economic relations.) Paris, 1979. Press Universitaires de France. 304 p.

Marie *Lavigne's* book begins with a simple paradox-like question: "Why this interest in East–West commerce? . . . We shall see that this is a very small proportion of international trade which it is extremely difficult to calculate precisely. How is it then that these relations provoke such an amount of interest, worry and hope in the public opinion, in political and business circles? "

It is a right question for since the middle of the sixties East–West economic relations have been practiced by businessmen (and by bankers in recent years), discussed by economists, and enhanced or hindered by politicians – depending on their country's constant foreign policy and/or the fluctuations of international politics, – while East–West trade represents only 3 percent of world trade.

In Marie Lavigne's opinion the explanation for this paradox lies in the political factors hidden behind or relying on the mechanisms of commerce and cooperation.

But politics is the field of interests and passions. And if East–West economic relations are interwoven with politics, the question of reliability of the tools used for their analysis and of the results obtained arises.

Marie Lavigne's book bears a double seal of credit-worthiness. One is of subjective character: it comes from the author's personality. She is an acknowledged expert of socialist countries and their integration, the CMEA, not only within the French economic science but at international scientific meetings too, who has already proved in her previously published books that she thoroughly knows the socialist countries' economic functioning (and its relation to the underlying Marxist ideology); her critical but always objective remarks assured her the interest of economists in socialist countries, their scientific acknowledgement and willingness of cooperation also manifest in intensive working relationships.

The other source of the reliability of her analysis lies in the just published book itself. Not only does she safely find her way in what one of her critics aptly calls "statistical jungle" but right at the beginning of her book she introduces the readers into the statistical sources and the problems of their interpretation. Her knowledge and objectivity are both proven by the witty table (*Table 1,* p. 18), which shows well the great differences in the data concerning the value of East–West trade and its balance published by different international organizations.

The credit-worthiness of the book's assertions are supported by an aboundance of sources, and factual material analyzed, among them the numerous publications and news appeared in the socialist countries. The author often participates in international consultations concerned with East–West trade; but not only these provide opportunities for meetings with the socialist countries' economists, so do her personal visits in CMEA countries, her on-the-spot researches and consultations.

The first part of her book, divided into three chapters, deals with statistical analysis ("Numerical analysis of East–West trade"). It shows in detail and analyzes from different points of view first the development of East–West trade, and then seeks the meaning of and comments upon the importance of balances in East–West trade, which have come increasingly into the economists' and financial experts' focus of interest since the middle of the seventies because of the then commencing international credit operations of the socialist countries.

In the second half of her book she discusses specific features of East–West economic relations, commenting upon political factors, institutions of East–West relations, then generally on international trade between countries with different economic systems. Her analyses based on rich sources are profound here too, but beside the details she manages to show the totality of relationships, commenting both upon political factors and institutional frameworks.

Although in the preface the author qualified her book as theoretical, economic experts will surely read with great interest what she writes in this part about the possibilities of access to Eastern markets as seen from the West, – pointing out, that from this aspect the socialist countries' foreign trade mechanism is not so rigid as often is supposed in Western business circles. In a different context this question arises again in Chapter VII of Part Three (Financial mechanisms), where the author examines one by one the mechanisms of financing and credit insurance, and later the phenomenon of compensation deals. The latter, as a specific form of exchange of commodities, has been especially often criticized lately in Western business circles and at economic meetings, – perhaps more ardently than justified by its effective volume (Hungarian foreign economic policy, for instance, has considered it for some longer time as disadvantageous and expressly avoids barters as forms of the exchange of goods). Marie Lavigne fully covers the variations and cases of compensation deals and thus the picture becomes more detailed and complete for the Western reader.

Dealing with commercial-technical and credit questions in such detail is all the more necessary and useful, since the Western business circles' knowledge of these questions is still rather vague and one-sided. France's export to the United States – in the average of the last ten years – represented somewhat more than 5 per cent of her total exports, her exports to CMEA countries represented somewhat more than 4 per cent of her total exports. As export market for the French economy the CMEA ranks almost as high as the United States. At the same time, the author of these lines is always surprised that in French economic dailies and professional publications about seven times as many articles and information appear about the United States' economic life than about that of the CMEA countries. Taking into consideration the not too big difference between French exports directed to the two regions, this disproportion in the quantities of information concerning the two regions seems exagerated even if it is taken into account that the prevailing economic situation of the United States influences French economic life not only directly, through export possibilities, but also through several other transmissions.

Those, who in different governmental bodies or international organizations deal with questions of international economy, will surely read with special interest what the author writes about the relations between CMEA and the Common Market, and later about general problems of trade policy in East–West relations. Her analysis of this point may provide both Eastern and Western negotiators with useful data for a more precise knowledge of facts and views, – which is one of the preconditions for the slow process of getting closer to make progress.

The institutional analysis stretches into the book's last, third part too, in which Marie Lavigne provides answers, through the example of industrial cooperations and through showing financial mechanisms, to the question asked as title of this part "Mutual advantages or unilateral gains? ". According to the objective method pursued throughout her book she does not wish to be a judge of this question. In accordance with the author's target "this book envisages to ask questions, to provide starting points and footings for thinking". Nevertheless, the listed facts suggest to the reader familiar with the topic that East–West relations are mutually advantageous not only for both halves of Europe but also for

Eastern and Western partners in a wider sense. They may become so especially if the proposals at the end of this part concerning the multilateral solution of financing problems come true. One of these, namely the establishment of a joint East-West European bank financing bi-, or trilateral industrial cooperations has come true right after the book was published, even if in certain sense only partially. In November, 1979 the Central European International Bank Ltd. was founded in Budapest with a capital of 20 million dollars; 34 per cent of the shares belongs to the National Bank of Hungary, 66 per cent is in the possession of Italian, German, Austrian, Japanese and French banks. (The chairman of the Bank's board is Mr. Leopold *Jeorger*, general manager of the French Société Generale.) By the way, since the book was published, the network of Western banks' representative offices operating in socialist countries has further widened in Hungary, for at the beginning of 1980 also the Banque Nationale de Paris opened a representative office in Budapest.

The book's last part holds the title "Conclusion", – but in reality the author widens the horizon of her analysis here and places its general lessons from the point of view of time into a historical and from the point of view of space into a global framework. This wide horizon comprises the socialist economy's history as well as the new world economic order. Thus, experts in theoretical and applied economics in both Eastern and Western countries will read this concluding part of the book with perhaps even greater interest than the previous ones.

Marie Lavigne, just as in many others of her articles and books, proves her thorough knowledge of communist ideology and its historical development. Writing about the socialist countries' outward opening, she surveys the socialist theory on international trade and, on the other hand, the history of foreign economic relations in the Soviet Union and other socialist countries. It is sure, what she writes about these questions will induce further reflections also in the works of the socialist countries' economists. All the more so, since many economists in the socialist countries share the author's opinion, when she says: "The task of formulating a specifically socialist theory on international trade has still to be solved."

Of course, in the bourgeois economic sciences there was the long way of empirical learning to go from Ricardo's comparative advantages to the Heckscher–Ohlin theorem. And in CMEA countries this process of empirical learning has been going on – historically speaking – for a short time. It was hardly one and a half decade ago that the socialist countries started to take an active part in a wider sense (reaching beyond CMEA) in the international division of labour; their international financial relations are hardly a few years old. (The practice of international trade which has been going on for a longer time within the CMEA is hardly suited because of historical conditions related to its formation, its political determination to derive from it the universal socialist theory on international trade.) The working out of the socialist theory on international trade may even be delayed by the fact that interdependencies between national economies are becoming ever stronger and more complicated in the world economy and are changing even in quality; – the whole international trade is being revaluated all over the world. Economists, who up to now have calculated only with the hypothesis of relative scarcity, are forced now to accept the hypothesis of absolute scarcity manifest in global dimensions. The customary rythm of cyclical changes was broken with brutal ardour by sudden eruptions of secular changes working only in depths for a long time and gaining strength slowly. In this situation future requirements are more important than past experiences. So, most probably, the socialist theory on international trade will come to life not by way of deduction from former lessons and experiences, but as a reaction to the problems arisen from the already global world economic environment encircling the socialist economies and their integration. This will rather be a system of requirements seeking for the rationality of division of labour in a new world economic order, – guided by social interest (and the societies' interests) instead of private capital's interests, but based on the criterion of economic rationality.

Economists of socialist countries can share most of the author's critical remarks concerning the functioning of socialist foreign trade. All the more so, because with these remarks she does not want to demonstrate the difficulties (or even

impossibility) of trade between East and West, but triggers in the reader a reasoning leading towards the solution. Hungarian economists also are interested in the ideas Marie Lavigne mentions in connection with the obstacles of optimal participation in international trade, – and they do not discuss these problems only among themselves, but often with Western colleagues too. As an example, I wish to cite only the Franco–Hungarian meeting which took place in February, 1978 in Paris under the joint organization of Université de Paris X-Nanterre and Université de Paris I – Panthéon-Sorbonne and the material of which was published also in the form of a book.

Beside the obstacles outlined by Marie Lavigne it can be mentioned, that nowadays in a socialist economy (not so much deriving from the system's principles, merely because of its present stage of development) relative time has no economic value for the enterprise, – thus, generally it is not interested in introducing an innovation more rapidly than an other enterprise, or in getting a foothold in a (foreign or domestic) market before an other one. The reason for this and thus one of the obstacles of self-adaptation is that every swift and successful adaptation to changes supposes an inherent interest. But if this interest is really remunerated the necessarily uneven successes in adaptation will cause differences in the firms' profits and in individual earnings, – which it is difficult to make accepted in a socio-economic system whose ideology was motivated basically by the objections against the extreme income differenciation in the capitalist system.

Madame Lavigne has correctly recognized that every socialist country gave up its "aversion" against commerce. At the same time she believes that the outward opening has made the socialist countries more vulnerable to perturbations coming from abroad. This is true, of course, but it has to be taken into account, that precisely this situation will induce new approaches and new directions of development within the functioning of the socialist economy itself.

It is not sure that the direct result will be a greater homogenity of the internal functional mechanisms. Those changes which came to life in the control system determining the functioning of Hungarian enterprises on 1st January, 1980, rather suggest that socialist countries, and among them also Hungary, will continue to utilize various methods to enhance the adaptation of their economies to the new world economic situation.

The above mentioned changes in the Hungarian control system are based on the recognition that the changes having occurred in world economy need not necessarily only damage national economies but can open up for them new possibilities, too. Hungarian economic policy wants to stimulate and force also Hungarian enterprises to take advantage of these possibilities by giving a greater role to competition.

This is in itself a change of great significance in the general functioning of socialist economy, which up to now has not accepted competition among enterprises as rightful. If from time to time some forms imitating competition did arise, the result achieved in competition was not remunerated. The main rule of these competitions was that every participant had to cross the finish line at the same time.

The new Hungarian control system (which may be considered a new wave of the economic reform of 1968) wishes to solve the contradiction between the lack of domestic competition and the coercive external competition first of all by changing the pricing principle, and by a Copernican turn of mind that, since domestic prices are not competitive prices, enterprises are obliged to form even their domestic prices on the basis of prices achieved in foreign markets, thus in real competition.

Perhaps it is not an overstatement to say, that this way of reasoning which deliberately accepts competition and wishes to introduce it into the inner functioning of a socialist economy, may start a new process of development, in consequence of which today's socialism will gradually become competitive socialism, accepting the competition's advantages and its consequences.

Marie Lavigne's new book helps to understand the conditions of not only an all-European economy, but of a new world economic system. And this is a significant contribution to the target beyond ideologies of which her book's last sentence speaks: peace.

E. KEMENES

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P. ERDŐS

NON-CLASSICAL CRISES IN THE POST-WAR US ECONOMY*

The author first reviews the theoretical model of classical periodic crises, presenting the assumptions in the presence of which the model reflects reality fairly well. Then he points out the main changes in whose consequence the model is no longer valid. Next he lists the most characteristic features of the two depressions (crises) of the seventies which sharply differed from those we were accustomed to in the classical crises. Then he reviews the theoretical weaknesses of the anti-inflationary and anti-cyclical armory of the US administration. He shows that both depressions were released precisely because of the application of these instruments and gives a broad description of the history of the depression and crisis as well as of the emergence from them.

On the occasion of the 1979 annual meeting of the Hungarian Academy of Sciences I lectured on the theory of crises of the classical type. I established that the economic crises and recessions after World War II were no longer of that type. Their general theory has not yet been born, and it is questionable whether it can be constructed at all.

For some years I have been investigating with my colleague F. *Molnár* a decade of the United States economy, the years 1969–1979. Though what I am going to say now derives from our common work, I still believe that when taking the academic chair I have to report on the subject I am engaged in. As a matter of fact, what I am going to relate is, beyond certain contributions of theoretical interest, hardly more than two case studies, because it is more than doubtful that what holds true for the US economy in the seventies, is equally true for some other decade or e.g. for the Federal Republic of Germany as well.

Let us first list the changes in circumstances in consequence of which the present-day crises are no longer of the classical type.

I have called those periodical crises to be of classical type, for which the material basis of periodicity is to be found – according to a sentence of Marx – in the periodical massive renewal of fixed capital. In this sentence Marx referred merely to the material basis, instead of the cause of the periodical crises, and even less about their immediate cause. My own theory regarding the crises of classical type establishes more than that: in the eruption of the crises of classical type and in the recovery after them I attribute the role of immediate cause to the properties of fixed capital production.

Of course, economic theory can be based only on some highly simplified model of the infinitely complicated reality. A theory is acceptable if the model it is based upon

*The study is written on the basis of the author's inaugural lecture read at the Hungarian Academy of Sciences.

includes the most important factors, together with their mutual interrelations that release the phenomenon to be interpreted. Individual, or random causes – however important they may be in a given situation – cannot find place in the general model. In fact even those elements of reality have to be neglected by the model builder which have no major weight as yet in the given period, although they do appear regularly. These have to be left out of account even if certain elements, existing for the moment only in a rudimentary form, might obtain determining importance a few decades hence.

I tried to prove the key role played by the production of fixed capital in the crises of classical type by relying on the following double theorem. I set out from the thesis that the essential interrelations in the reproduction of social capital can be described with satisfactory accuracy in a two-sector scheme of Marxian type, where the first sector represents the production of investment goods, the second that of consumer goods. About the economy thus modelled I stated that – *ceteris paribus* – changes in the first sector produce a positive feedback, while those in the second a negative one on the whole course of the economy. And, from the second statement of the double theorem it follows that if at the peak of the business cycle merely the production of consumer goods ran away relative to investment activity, this would impair business. It does not lead either to lasting decline or to lasting emergence from the crisis if the production merely of consumer goods starts to decline or increase: the decisive push for both has to come from the first sector, that is, the one producing investment goods (fixed capital), which has a positive feedback effect.

This line of reasoning – apart from many other things – is based on two kinds of simplification no longer permissible in the investigation of present-day capitalism. *First of all*: this model left out of consideration the economic role of the state, thus particularly the existence of government revenues – derived mainly from taxes – and of government outlays frequently covered only partly by revenues. Today the government claims 25–30 per cent or even a greater part of the GNP. At the time of the classical crises, however, budgetary revenues only amounted to a few percentages of the GNP and outlays were restricted whenever revenues were dwindling due to recessions. Thus, neglect of the role of the government did not make the theory unrealistic. *Secondly*: the theorem that an upswing in the production of consumer articles had a negative feedback effect on the economy relied on the simplifying assumption that workers in their totality always spend their wages and only their wages. In the last century and even in the early years of this one overspending financed by consumer credit and the related debts were mostly still negligible. Also mortgages on account of home purchases by workers could be neglected without making a major error. In the average of a not too long period – five or ten years – workers spend even now their earnings and only their earnings on consumption and consumers' investment, but in shorter periods the situation is different. At least in the last ten years workers have substantially overspent in the United States at times of good and saved considerable sums at times of sluggish business. It follows from this, that changes in the production of consumer goods have no immediate negative feedback effect on the economy.

Finally, *a third change.* To wit: it is true that a decline or upswing in the production of investment goods has, *ceteris paribus,* a positive feedback effect on the whole economy, that is, its decline has a deteriorating and its upswing an invigorating effect, but the strength of this feedback has considerably lessened in the meantime. At the time of classical crises the sector producing investment goods employed a sufficiently great part of workers to produce secondary avalanche-like cumulating effects if a great part of those working there became unemployed. But today more than 60 per cent of those living on wages and salaries in the United States of America are employed in the service sectors. The sector producing investment goods constitutes only a minor part of the branches making up the other not quite 40 per cent. A one-sided increase or decrease in the number of people employed in this sector involves much smaller changes in the wages spent than earlier. Thus, the impact of this change on the whole of the economy will be also much milder.

The characteristic course of a cycle of the classical type may be briefly outlined as follows: after the depression a massive renewal of elements of fixed capital starts, followed by a massive expansion of capacities. Employment is growing, profit is increasing, and so is the production of consumer goods: prices are rising. Then unutilized capacities start emerging, hence demand for investment diminishes. A part of the workers producing elements of fixed capital are dismissed. Then the avalanche starts: all kinds of products become unsaleable at the earlier prices, thus prices start falling, together with them wages are reduced; profits dwindle or even turn into loss. Finally, the avalanche stops and the economy is stagnating at the trough. I emphasize once more that both recovery and decline have to be introduced by changes in the corresponding direction, that is, recovery respectively decline, in investment activity.

But the recent recessions or crises in the United States have not been preceded by major under-utilization of productive capacities. In fact, it may be considered typical precisely that investment activity remains brisk even months after the start of the recession and begins to decline only later. And conversely: investment remains languid even if production is already rising again. That is, the difficulties in sales are met first in the sphere of consumption, particularly in that of consumer investments – i.e. on the housing market and on the market of consumer durables – and that not only at the beginning of a decline, but even at the peak of an upswing. At the end of recessions it is similarly a revival in consumers' purchases that starts the general recovery. From the perspective of the crises of classical type these are paradoxical phenomena. But a student of crises that occurred at the beginning of this century and prior to it is struck even more by the phenomenon that for more than twenty years prices had not been declining when real demand weakened; on the contrary, they had been rising. Inflation reached an in peacetimes unprecedented record rate in the United States in 1974, when the gravest post-war crisis began to unfold. Under such conditions, nominal wages did not fall either: they, too, increased.

Well, it is these new developments students of political economy have to explain. This is what I am attempting now myself.

In the period indicated in the second paragraph of this paper, economic recessions or crises occurred on two occasions, in 1969–1970 and in 1974–1975. But recessions and "mini"-recessions followed each other already after World War II at much shorter intervals than 10 years. At the same time, the time-path of investment activity became smoother than earlier, thus there was no time left for developing considerable excess capacities, while, on the other hand, at the end of recessions the bulk of machinery and equipment could not be in such used up or obsolete state that their scrapping and massive replacement would have become timely.

The degree of utilization of capacities was not low either in 1969 or in early 1974, thus employment and, consequently, the sum of wages disbursed were rather high. It is thus sufficiently obvious that the cause for the fall in realized demand must not be sought on the side of production. Let us establish: the spontaneous forces of the economy did not produce such sharp contradictions in the real sphere either in 1969 or in 1973 which should have led then to recession or even crisis. As regards the classical causal mechanism, the economy was not in a state mature for crisis when the decline actually occurred. Both recessions were precipitated essentially by the government's economic policy.

The economic policy in the US disposes of two major groups of instruments. Their application is called fiscal and monetary policy, respectively. Both try to save the course of the economy from fluctuations by their effect on *demand.* The US government has, namely, no or hardly any direct tools for channelling private investment and it can influence also production merely through its own orders for goods and services in a direct manner.

Fiscal policy is based on the facts that, on the one hand, the state levies taxes and, on the other hand it spends its revenues or their major part, and, in a typical case it overspends, causing thus a deficit. Government revenues, if they derive from so-called direct taxes, immediately reduce the disposable money income of those subject to the tax – that is, of firms, holders of stocks and bonds, of the self-employed and of those living on wages and salaries. The indirect taxes raise prices and their immediate effect is that they thus reduce the real value of money incomes. On the other hand, however, through its outlays the federal budget increases the disposable incomes. To wit: it buys goods and services; it pays its civilian and military employees, makes transfer payments e.g. in the form of pensions, unemployment and welfare benefits, health and educational expenses. As a rule, government outlays become revenues for other people. The latter spend the bulk or the whole of the incomes thus received on the purchase of goods and services – thus increasing the revenues of those selling goods and services, that is, mainly of the enterprises. That is, in the final analysis, the bulk of government outlays serves to increase demand directed towards enterprises. The higher the amount by which the outlays of government exceed its revenues the greater will be – *ceteris paribus* – the additional demand created by it.

But the system of levying taxes and of government outlays is in a sense rigid in the United States. Thus, from the aspect of revenues: the tax rates are approved by Congress and thus their change – paradoxically even their reduction – results in quarelling

between Congress and the executive lasting not infrequently for years. And as regards outlays, the hands of those responsible for the implementation of the budget are bound by a great many earlier commitments – so-called government programs. In another sense, this system is still flexible. Namely, at times of a business upswing, when national income and employment are growing, so are tax revenues, since the rigid tax rates define the taxes payable in percentage of incomes or turnover. At the same time, the amount of unemployment benefits and reliefs diminishes. Therefore, this budgetary system relatively reduces disposable incomes and together with them demand when business is improving, while in the declining phase the opposite happens. In this context literature uses the term "built-in stabilizers": they prevent demand from all too much running away and also restrain its decline.

Let us now have a look at monetary policy. For this the Federal Reserve System, for short the FED is responsible. Its main instruments are: regulation of the quantity of money in circulation by changing the so-called bank reserves and sometimes the reserve rate; open market operations, that is, sales and purchases of government bonds (sales namely reduce and purchases increase the amount of money in circulation). The instruments further include the changing of interest rates and, also by means of these, the tightening or easing of credit conditions.

While fiscal policy is rigid in the above sense, because it is made rigid by congressional debates and election tactics, monetary policy is highly flexible. For all practical purposes, the FED is sovereign, it freely chooses its own means and changes them frequently. And it hardly needs mentioning that a reduction of the quantity of money in circulation as well as the tightening of credit conditions reduces demand.

But both fiscal and monetary policies only affect *nominal* demand, the spendable and spent amounts of dollars directly. Only government purchases are exceptions to this rule, even these only if the government orders definite quantities of commodities. But even if, in a given case, we know the circulation of what amount of money the FED "tolerates", the raising of how many dollars of credit it allows, or by how many dollars the government modifies the net revenues of firms and other tax payers as well as of those enjoying transfer payments, we still do not know what amounts of commodities are lured to the market by these revenues, or by the given quantity of money in circulation and by that of credit and how much of it reaches the final buyers. This depends, namely, not only on the quantity of the money spent, but also on the price level. And fiscal policy does affect the price level. Suffice it to say now only as much as is common knowledge: a shift towards a deficit in the government balance has an inflationary effect.

It is more difficult to assess the possible consequences of monetary policy. As has been mentioned, the monetary instruments serving to boost the economy are: permissive credit policy, reduction of rates of interest, increasing the amount of money in circulation. But the FED can merely increase the *supply* of money directly in the hope that with this also the circulation will grow. It does not depend on the FED whether the surplus money offered will meet a corresponding demand. And if it did not – as is the case frequently at times of crisis – this stimulating effect becomes illusory. (If, however, the

additional money does come into circulation, it also supports and mostly increases inflation.) But as for a reduction in the volume of circulating money the FED's resources are effective enough. In accordance with the argumentation of the quantity theory of money we could believe that a forced reduction of the quantity of money in circulation elicits a reduction of prices. But with today's oligopolistic price setting methods the majority of prices is rigid downwards. Prices are indeed prone to rise, but hardly willing to fall. And if the increase in the money in circulation is held back while prices are rising, then, – if the velocity of money circulation does not sufficiently increase, the volume of sales must decline.

This is what precisely happens in the typical case. Monetary policy is an excellent instrument for slowing down economic growth and even to force it to decline, as if strangling the economy.

This is how the 1969–1970 recession occurred. In January 1969, after eight years of Democratic rule the Republican Nixon won the presidency chair. And in November that year the longest expansion of American economic history, lasting full nine years (less two months) and only interspersed with mild slow-downs came to an end. This economic growth had been much supported by the Viet Nam war, but also by some economic measures of the Kennedy–Johnson administration. While unemployment fell by 1969 to 3.5 per cent, the budget deficit kept increasing, and inflation accelerated. In hindsight it was a mild inflation: in the four yearls between 1965–1969 it amounted to 16.2 per cent, that is, the annual average rise in prices was but 3.8 per cent.

But Nixon beat alarm. There were also balance-of-payments difficulties. But his first concern was to break the wage fights of workers and for this according to the then popular theory, the raising of unemployment seemed best suited. Nixon only confessed so much that what he planned was to slow down growth but in reality he reckoned with a decline. He hoped to realize his plans first of all with the aid of restrictive monetary policy, although he modified also fiscal policy in a restrictive sense.

Accordingly, in April 1969 the FED raised the rates of discount and increased the obligatory reserve rates of its member banks. These instruments served to reduce the quantity of money in circulation. And indeed: while in 1968 the quantity of money in circulation increased by 7.2 per cent, in the first half of 1969 it rose by only 2.2 per cent and in the second by a mere 0.35 per cent. As a consequence all rates of interest started to soar. Only the rates of interest of saving and mortgage institutes were exceptions: namely, the maximum level of interest payable by them was regulated by order. Therefore, the creditors of such non-bank financial institutions withdrew their deposits *en masse,* and invested their money into negotiable papers bearing higher interest. This had grave consequences for residential construction and also for the purchase of consumer durables, since the credits serving this purpose were also financed mostly by such non-bank institutions. Credits for such purposes were available only with difficulty and at high rates of interest. This is why real demand for consumers' investment declined even before the spontaneous occurrence of the crisis.

However, initially corporate investment did not react. The corporations' liquid assets usable for internal financing amounted to $61.7 bn in 1969, while the sum of their investment was 85 bn. Somehow they had to cover this difference. At the same time, the budget deficit of the preceding year turned into a surplus of 16.7 bn, and this, too, reduced the financial assets of firms. The large corporations still succeeded in getting the credits necessary for their investment projects, and that mostly from the banks which, as an emergency measure, raised additional credits on the Euro-dollar markets, at rates of interest of 10–11 per cent, while in 1964 the rate of interest paid by the most credit-worthy debtors on short-term credit was still around 4 per cent. The level of investment thus remained high and started to decline only half a year after the introduction of monetary restrictions. In this phase-shift a role was also played by the fact that enterprises made efforts to balance the increased wage costs by labour-saving investment. The vivid investment activity also had particular sectoral reasons. Frequent disturbances in operation prompted, namely, the electrical, gas and telephone companies (privately owned in the USA) to bring about additional capacities. These could easily shift the increased costs onto consumers.

Thus, restrictive monetary policy caused substantial disturbances first of all in the credit sphere. Under the impact of this policy the volume of GNP fell in the fourth quarter of 1969 by 2.2 per cent. That is, not only did economic growth slow down, but even a mild recession occurred. Inflation, however, continued undisturbed. Nevertheless, in the first quarter of 1970 the FED had to retreat. The big corporations, namely, created a panic. They set the rumours afloat that they suffered of a liquidity crisis, and were threatened by bankruptcy. The actual failure of the Pennsylvania Railroad Co. gave emphasis to their complaint. The FED could not withstand the pressure and loosened the monetary brakes. And, since the recession had not been triggered by the state of the economy but by the actions of the FED, the obstacles to further growth were cleared from the way. After the easing of credit conditions the upswing started on the markets of housing and consumers' durables, while a revival of business investment had still to be waited for.

The history of the deepest post-war crisis, that of 1974–1975 provides much more lessons than this interlude did. The causes of its eruption I will only briefly mention.

In 1971 the annual growth of the price index of consumer goods did not exceed 4.6 per cent and in 1972 it even lessened. But in 1973 it amounted already to 6 per cent. In this also the oil price explosion at the end of the year had a role. At any rate, the fight against inflation obtained anew the first place among government preferences. The real sum of profit after the previous decline kept incessantly rising and its growth was greatest precisely in 1973. But there existed a government surplus already in 1972, this increased in 1973, and even 1974 closed with a surplus. This unequivocally points to a restrictive economic policy. The restrictive effect of the economic policy aimed at a surplus was even enhanced by the fact that – mainly in consequence of the "de-escalation" of the Viet Nam war – the volume of government purchases of goods and services fell considerably, despite the fact that it is precisely these outlays that increase real

demand, not merely through the sums spent but directly. Monetary policy remained restrictive also through 1973: while in the second half of 1972 the quantity of money increased by 9.5 per cent (at annual rate), in the second half of 1973 this increase was only 4.5 per cent. Credits serving residential construction were squeezed to a smaller extent than in 1969 but construction still slowed down in the first quarter of 1973. The decline lasted for two years and reached the trough with a fall of 43.6 per cent. This was already caused by the crisis: the population refrained from incurring further debts. It is likely that the eruption of the crisis was precipitated by the official report analysing the economic outlook for 1974: it considered a large-scale price increase inevitable and declared that the fight against inflation was again the prime task. It projected the slowdown of production increase which started in the fourth quarter of 1973 to continue and acknowledged that even a decline was likely. Businessmen, however, know that the American-type fight against inflation does lead to recession. If economic policy-makers speak about a possible absolute decline, business executives take absolute decline for sure and act accordingly. This is called a self-fulfilling prophecy.

It came, thus, to the deepest crisis of the post-war period, accompanied by a record rate of inflation. Fight against inflation, did not reduce the rate of inflation this time either: it reduced production. This should be hardly surprising after what has been said. But in order to understand the causes for the recovery after the crisis, we have to dig deeper.

I am going to present three diagrams. They illustrate a version of the formula p_c serving to determine the price level of consumer goods. According to this formula $p_c = \frac{W}{C - C_c}$ where W is money wages, C is the volume of consumer goods, C_c is the consumption of non wage earners, $C - C_c$ is the real consumption of wage earners, while p_c is the price level of consumer goods. Also the changes in the index of price level can be similarly written as a quotient of the index numbers of the increase or decrease of wages and the consumption of workers. But – with an error amounting to at most two or three percentage points – this change in price level can be also obtained, instead of the quotient of the numerator and the denominator of the formula, as the difference between the latter two. We constructed the diagrams by resorting to this method, illustrating how the three factors: the nominal demand of workers for consumer goods, the volume of consumer goods bought by them and the price level of consumer goods adjusted to each other.

Two columns start from the zero axis. The one, departing from the left-hand side shows the increments of wages, transfers, savings by workers and of the direct taxes paid by them in percentage of the money sums spent by workers on consumption in the preceding year. The column beginning on the right-hand side shows the increment or decrement in total consumption and in that of capitalists in percentage of the real consumption of workers in the preceding year. The length of the arrow shows the percentual change in price level, so that the change in price level is obtained as the distance

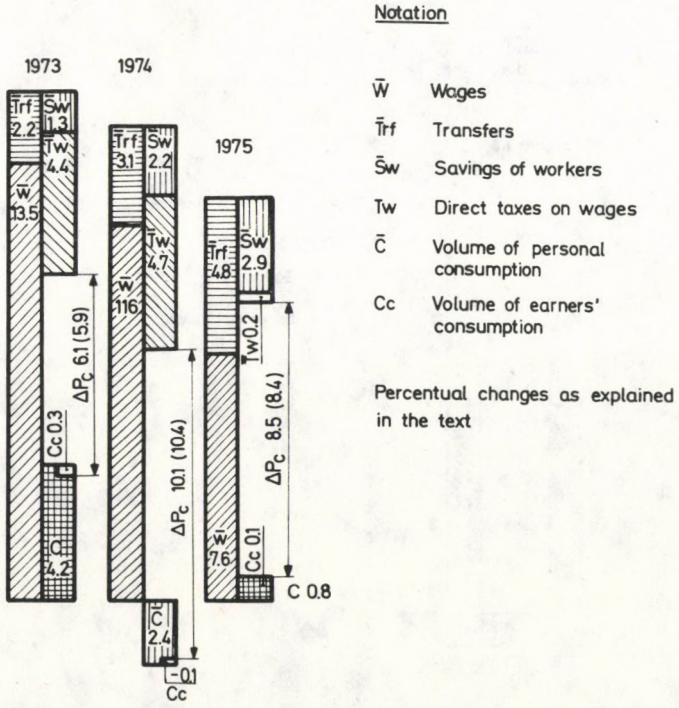

Fig. 1. Yearly changes in the volume and price of personal consumption in 1973–1975

between the two end points of the columns, while the figure in parentheses is the more exact value obtained as quotient. Thus e.g. in 1974 the increment of wages increased the disposable income of workers by 11.6 per cent and that of transfers by 3.1 per cent, while the increment of savings reduced it by 2.2 per cent and that of direct taxes by 4.7 per cent relative to the sum spent by workers in 1973. Thus, if workers could have purchased in 1974 the same volume of consumer goods as in 1973, the rate of inflation would have been $11.6 + 3.1 - 2.2 - 4.7 = 7.8$ per cent. But in 1974 the volume of consumer goods available to workers was 2.3 per cent less. The difference between the two percentual figures is $7.8 - (-2.3) = 10.1$ per cent. Thus, the rate of inflation was with good approximation 10.1 per cent, and more exactly computed (by division) 10.4 per cent in 1974.

In quite similar manner we get for 1975 8.4 per cent by division and 8.5 per cent by measuring along the arrow in the diagram.

It turns out from the diagram relating to 1974 that, although wages increased by much smaller percentage than in 1973 and transfer payments by hardly more, and although both the savings of workers and the sum of direct taxes paid by them increased, yet entrepreneurs raised their prices by more than ten per cent relative to the level a year

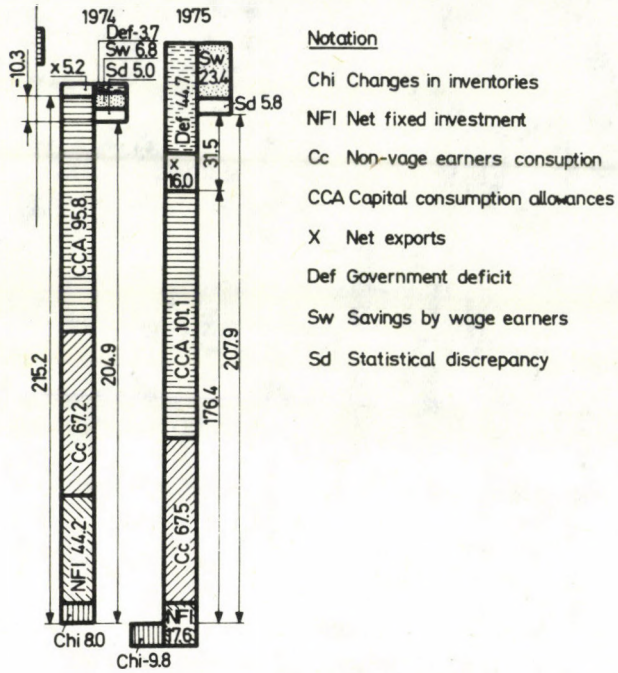

Fig. 2. Gross profit after taxes and its components 1974–1975. (millions of 1972 dollars)

ago and, in consequence, they had to reduce the volume of sales by 2.4 per cent. It is still worth mentioning that although workers' wages increased by less than a year ago, their taxes rose faster. Taxes as a built-in stabilizer behaved in a paradoxical manner: money wages increased and – because of the progressive tax on money wages – workers had to pay more tax in spite of their diminishing real wages. 1975, again, was characterized by milder inflation than the preceding year. The sum of wages increased at a slower rate – since employment also fell – on this account also the sum of transfers increased, while the price reducing effect of taxes falling on workers was slight. But the most conspicuous thing was that entrepreneurs raised the price level only to an extent which allowed the sale of a bigger volume of consumer goods than in the preceding year. We have to find an answer precisely to the question what has led to this favourable turn. But, since we have to do with a profit-motivated society, we have to focus attention to profits. The gross profit after taxes (including depreciation) is made up of the following items: 1. gross investment that is 1 a) net fixed capital investment, 1 b) replacement of fixed capital taken to be equal to depreciation and 1 c) investment in inventories; further: 2. consumption by capitalists, 3. export surplus, 4. government deficit and 5. the overspending (negative saving) by workers. To the sums listed under 1. and 2., that is, to gross investment and consumption by capitalists there correspond goods (and services) purchased by

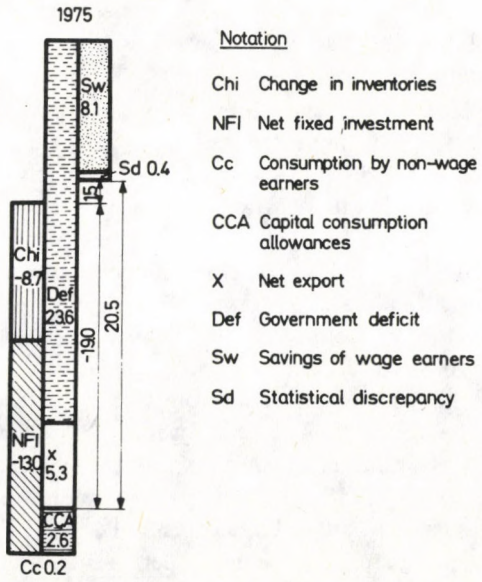

Fig. 3. Percentage contributions of individual profit components to the total percentage change of gross profit after taxes, 1975. (at 1972 dollars)

capitalists, while the items 3–5 accrue to capitalists in the form of money income unspent in the given year. In our studies written with F. Molnár we called the first two items material profit and the last three ones paper profit.

In the following diagrams I shall present the changes in after-tax profit in 1974 and 1975 at 1972 prices, by components.

Profit in 1974 – $204.3 bn – was about 10 per cent lower than in 1973. In 1975 profit amounted to $207.9 bn in 1972 dollars, thus it somewhat exceeded the one in the preceding year. But the third diagram is more instructive. It shows, similarly at 1972 prices, by what percentage the individual profit items contributed to the slight – 1.5 per cent – increment of gross profit relative to 1974. Thus: profit was diminished by 8.7 per cent through decreased inventories, by 13.0 per cent because of falling fixed capital investment, while the increment of consumption by capitalists increased it by 0.02 per cent, and the increment of fixed capital replacement by 2.6 per cent. These items are the constituting parts of material profit and the figures show that material profit fell relative to the preceding year by 19.0 per cent. As against that the changes in the components of paper profit, i.e. the increment of net export raised the profit by 5.3 per cent, the increment of the deficit by a full 23.6 per cent and the higher savings of workers reduced it by 8.1 per cent. We had to take into account also an insignificant item, statistical discrepancy indicating the inexactness of official statistics in the sense of reducing the

total by 0.4 per cent. In the final analysis, the increment of paper profit increased total profit by 20.5 per cent: the 1.5 per cent increase is the difference of that and the 19.0 per cent decline in material profit.

The increase or decrease of material profit depends on the behaviour of capitalists. It depends on them how much they invest and how much they consume, and these two items combine into gross material profit. If it depended merely on capitalists, their gross profit would have diminished from 1974 to 1975 by 19 per cent, and their net profit by even more. From among the three components of paper profit the government deficit does not depend on capitalists' behaviour; also the savings of workers are independent of it, while net export usually increases at times of deteriorating business, mainly because then the import demand of the country is smaller than usual. The diagram clearly shows that the lion's share of the increment in paper profit derived from a "jump" in the deficit, while the increase of this part of profit was only partly reduced by higher savings of workers. Indeed, in the form of increased government deficit capitalists obtained a national grant and it was essentially thanks to this that instead of a further fall their profits even increased somewhat. Surely, this grant was not given fully voluntarily. The jump in the deficit was caused partly by the crisis itself, by the high unemployment. The government had to spend much on unemployment benefits on this account. But the other, the main cause of the increase in deficit was the discretionary fiscal policy of the administration. Namely, at the trough of the crisis a general reduction of taxes was enacted. Not only on this account, but mainly on this account government revenues fell along with an increase in budget outlays.

The question now is how it came, that on this occasion the effect of the additional demand due to the large government deficit was not, at least partially, exhausted by a further increase of inflation. We get an approximative answer to this question from the following series of figures.

Net profit as percentage of GNP

Year	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Pre-tax net	26.1	24.3	22.9	21.9	22.5	22.4	19.2	19.3	20.2	20.8	20.7
After-tax net	16.8	15.4	14.2	14.4	14.8	14.9	12.0	12.4	12.8	13.3	13.2

As can be seen, the ratio of net profit to the GNP – a notion related to the profit margin – increased from 1971 to 1973; it fell to the trough in 1974 but started to rise again in 1975.

What does this mean? We can obtain an answer from the price diagrams already seen. In 1975 capitalists raised prices by only 8.5 per cent instead of the 10.4 per cent in 1974. Thanks to the national grant given in the form of paper profit, even this more

modest rise was enough to increase instead of further diminishing the profit margin in the sales prices. Under the pressure of the crisis enterprises rested satisfied with that much, all the more so, because – as it turns out from the profit diagram – they wanted to reduce their excessive inventories. Since the price rise was relatively moderate, the volume of consumer goods they succeeded in selling was already higher – as against the drop in the preceding year. And with this – starting once again from the market of consumer goods – the crisis came to an end and a new upswing started. Also a more detailed analysis than the one presented here would show that it was mainly the tax reduction that helped the economy to emerge from the crisis. But we have to add: this was not to be achieved by any kind of tax reduction. What was needed was one implemented at the most propitious moment and of adequate extent. Such a tax reduction cleared the way for an upswing.

In conclusion I attempt to draw some, not too revealing, lessons.

In recent decades the US economy has been an unstable one, inflicted by inflation. Inflationary trends evoke inflationary expectations and the latter become causes and promoters of further inflation. Inflation is an immanent and permanent element of the American economy. Government economic policy is usually more definitely aimed at fighting inflation than at unemployment and underemployment. It can be such, since the system of unemployment benefits has warded off up to now the danger that the elementary outcry of the unemployed masses should break out in politically unbearable mass movement.

The manoeuvres aimed at boosting business menace with an acceleration of inflation, while the anti-inflationary measures generally cause unemployment. The latter lead to frequent provoked declines: to such as would not be brought about by the spontaneous forces of the economy if they were allowed to evolve. Also on this account, sometimes, similarly to what happened in 1970, to start an upswing it suffices to ease the monetary policy. At other times, however, as e.g. in 1973–1974, supported also by the exogenous event of the oil crisis, the decline exceeded the degree still believed to be tolerable by the government. Recessions involve, namely, not only that they hold back workers in wage matters with the scourge of unemployment, but they also reduce profit. Experience has proven and the 1974 – then record – inflation roared into the ears of economic politicians that the usual anti-inflationary measures become partially effective at most only with a lag of a few years. If the recession is running away in a non-intended manner, the government *is* forced to take also particular anti-recession measures. Such was the tax cut of 1975, which occurred at an extremely propitious moment – and led to a recovery with abating inflation. But there is no guarantee that the administration will have similar luck in a similar case. The economy of the United States is invariably an unstable economy plagued by inflation.

КРИЗИСЫ (НЕКЛАССИЧЕСКОГО ТИПА) ПОСЛЕВОЕННОЙ АМЕРИКАНСКОЙ ЭКОНОМИКИ

П. ЭРДЭШ

В начале статьи автор представляет теоретическую модель периодических кризисов классического типа, указывая на предположения, при которых модель в достаточной мере отражает действительность. Затем он останавливается на тех важнейших изменениях, вследствие которых эта модель перестает быть действительной. В дальнейшем автор перечисляет наиболее характерные четры наблюдавшихся в 70-ых годах двух спадов (кризисов), которые в корне отличали их от классических кризисов. Он также указывает на принципиальные недостатки антиинфляционного, антицикличного арсенала американской администрации. Доказывая, что оба спада были вызваны как раз его применением, автор в общих чертах анализирует историю спада и кризиса, а также выхода из них. Некоторые моменты этого анализа представляют собой теоретические новшества.

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J. KORNAI

"HARD" AND "SOFT" BUDGET CONSTRAINT

Hungarian economic literature in recent years has much discussed the behaviour of enterprises and, in this context, the impacts of economic coercion on the enterprise. This study wishes to contribute to the subject. Its main task is to clarify some notions: what should be meant by "budget constraint", by the "hardness" and "softness" of this constraint.*

Introductory example

The concept of "budget constraint" had been introduced by the theory of household consumption** and then it was taken over by the general equilibrium theory. In this context, "budget" is of general nature and serves to denote the plan for revenues and expenditure of any economic unit: household, enterprise, non-profit institution. It is thus not restricted exclusively to the (fiscal) plan of the central government. For those less familiar with the literature on microeconomics it will be useful to explain this notion with the aid of a highly simplified example and a related figure.

A factory plans a technological reconstruction, for which a definite sum, say 50 million Forints, are available. It may choose at discretion from various degrees of mechanization and automation. In the figure two *isoquant curves* can be seen. Let us consider the lower curve T_1. Each point of the curve represents identical amounts of output: 1000 tonnes annually. This amount can be produced with many combinations of "machine" and "labour": with more labour and fewer machines, and conversely: with less labour and more machines. The parallel T_2 curve above it represents higher annual amounts, 1250 tonnes, T_3 1500 tonnes, etc.

The two straight lines in the figure express two possibilities for spending the budget with two constellations of the price of "labour" and the price of "machines". The straight line with the smaller slope expresses that the firm may buy 7 units of labour for 50 million forints, if it spends nothing on machines, and 3 and a half machines, if it

*A new book by the author [6] has been recently published under the title of "Economics of shortage". The present article takes over *Chapter 13* of the book – with some modifications, sometimes shortening, sometimes complementing the original text. The book itself consists of 22 chapters; the present article thus excerpts a part of the book, the "centre" of a longer line of reasoning. It is unavoidable that the article should leave many questions unanswered, to which the book tries to give an answer.

**As far as I know, it was introduced by the Russian theoretical economist *Slutsky* in his classical study [8] on the household.

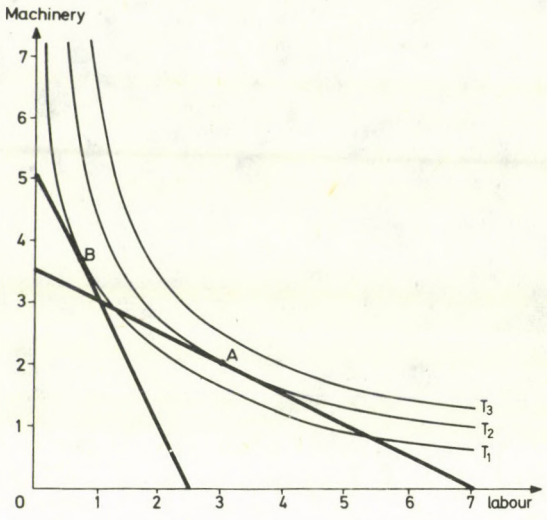

Fig. 1. Choice of the input combination and the budget constraint

spends nothing on labour. And, of course, every linear combination of the two kinds of input can be realized from the same amount. The steeper line presents the state when labour has become expensive relative to machinery. Now, for the same 50 million forints only 2 and a half units of labour can be had, but 5 units of machinery.

However strong the simplifications may be, the figure expresses important relationships. In this model the decision-maker can take into account exclusively those alternatives which do not fall above the actually valid budget line. *Precisely on this account,* he is forced to react on prices directly. If the budget line shifts, he too *must* shift the point representing the decision.

Anyone acquainted in another context with mathematical programming (e.g. applied a programming model to drawing up an investment or production plan of a firm), obviously recognizes that our figure presents a simple two-variable decision problem. The budget constraint delimits the set of feasible decisions. The question we want to examine is: under what circumstances is the constraint *effective,* that is, when does it really influence the enterprise's behaviour, and under what conditions does it become ineffective.

Relationship between the financial balance and the budget constraint

Let us come nearer from the schematic example to economic reality. It will help clarification of the notions if, for the moment, we leave it open whether we have to deal with a capitalist or a socialist enterprise. In a later part of the article

the historical realization of the categories to be clarified now will be reviewed in socio-economic systems of different periods.

Everyone knows *the financial balance of the firm.* In its most comprehensive and general form it gives the following relationship as a summary reflection of financial processes in a period:

Terminal stock of money − terminal stock of debts ≡
≡ initial stock of money − initial stock of debts +
\+ credits raised during the period +
\+ other receipts during the period −
− credits repaid during the period −
− other outlays emerging during the period.

The left-hand and the right-hand sides of the balance are linked by the sign of identity. This identity of the two sides always holds tautologically. *This* balance cannot be "infringed upon". Even if the enterprise simply does not pay for the commodity delivered, the balance-identity remains: an item of the credits raised during the year will be the credit forced upon the supplier, forcibly extorted by our firm. This is why we say that the financial balance sheet, the *ex post* accounting of monetary sources and their uses is an *"accounting" identity.*

The financial balance may be also written in the form of inequality. All uses may be taken to the left-hand side and all sources to the right-hand side and it may be stated that uses must not exceed sources. This is again an upper constraint of tautological nature, which is necessarily observed.

In the budget constraint the same items appear as in the financial balance, and in the constraint derived from it: uses must not exceed sources. But the budget constraint is not an *ex post,* but an *ex ante* category. It is not an "accounting" identity, but a *behavioural regularity.* More exactly: it is a summary expression of a whole series of partial rules which jointly restrict the behaviour of the firm. For understanding it, we must break it down into its components.

Hard budget constraint: the pure case

First we examine the *pure* case of a hard budget constraint. We shall indicate five conditions the fulfilment of which guarantees hardness of the constraint. A theoretical construction is presented; one or another of the five conditions is never perfectly satisfied in reality. This will be explained later.

The five conditions together are *sufficient* to guarantee *perfect* hardness of the constraint. We do not claim that only this set of conditions guarantees it. However, these five conditions provide a good starting-point for further steps in our reasoning. To facilitate subsequent comparisons we shall add the letter H (hard) to the serial numbers of the conditions.

Condition 1-H. Exogenous prices. Purchase prices for inputs and selling prices for outputs are given for the firm. The firm is a *price-taker* and not a price-maker. From this point of view it does not matter who determines the price: an atomized market process that cannot be influenced by a single buyer or seller; a seller more powerful than our firm in fixing the purchase price, or a buyer more powerful in fixing the selling price; or a state authority. It may be anybody; the main point remains that our firm is unable to influence the price.

Condition 2-H. The tax system is hard. This does not mean that taxes are high, but that the following principles are strictly observed:

a) The formulation of tax rules (laws, regulations) cannot be influenced by our firm; they are given exogenously for it.

b) The tax system links taxes to various objectively observable and measurable criteria.

c) The firm cannot receive any individual exceptional exemption.

d) The tax imposed is collected unconditionally on the prescribed terms.

Condition 3-H. No free state grants. The state does not give any grants to cover current expenses, nor make any free contributions to investment.

Condition 4-H. No credit. All inputs purchased must be paid for exclusively in cash. Interfirm credit cannot be taken up either by agreement with the seller, or by breaking the contract, failing to make payments and thus forcing the creditor's role upon him. Nor can credit be obtained from any other source.

Condition 5-H. No external financial investment. Our argument does not cover the foundation of the firm, that is, the question of how the initial financial investment in the firm was made. We consider only existing firms. Condition 5 says: the owners can draw profit from the firm. Yet if they do so, they cannot re-invest it in the firm.*

Conditions 1-H, . . . ,5-H set *ex ante* behavioural constraints on the items in the financial balance of the firm. If these constraints are strictly observed, then the budget constraint summing up their effects indeed restricts the freedom of choice of the firm, that is, it becomes a true constraint on *behaviour.*

Let us now examine the implications of these five conditions in detail.

How does hardness of the budget constraint manifest itself? (We shall again add the letter H to the serial numbers.)

Consequence (i-H): Survival. The firm's survival depends exclusively on the proceeds from sales and on the costs of inputs. If, for a short time the latter is greater than the former, the owners can avail themselves of the money stock to cover the loss, and can renounce the withdrawal of profit. But, if they have fully renounced the withdrawal of profit and used up the money stock and the loss is still not eliminated, they are compelled to reduce expenditures. Fewer inputs lead to less output, proceeds will decrease, and

*Conditions 4-H and 5-H give ***abstract conditions*** which can be interpreted only for a stationary economy, that is for simple reproduction. It is necessary to state them in order to define the ***pure*** case of hard budget constraint. We shall return later to the problem.

finally the firm becomes insolvent and goes bankrupt. *The hard budget constraint is a form of economic coercion: proceeds from sales and cost of input are a question of life and death for the firm.*

Consequence (ii-H): Growth. Technical progress and growth of the firm, which require investment, depend on the same factors. *Financial resources to purchase additional inputs necessary for expansion of the firm are created exclusively by internal accumulation within the firm.*

Consequence (iii-H): Adjustment to prices. Prices being given exogenously, *the firm must adjust to prices.* Adjustment must be performed basically by *real* actions, first of all by increasing or reducing the level of production, or by modification of the input-output combination. These changes are internal to the producing plant and are, therefore, not directly linked to prices. Indirectly, however, they are all the more closely connected to them, by purchases of input which permit modifications in production, as well as by sales of output which are made possible by modifications in production.

The firm may be helped in its adjustment by two *internal* financial variables: it may use its money stock and it may reduce or suspend the withdrawal of profit. The money stock, however, may be exhausted, and withdrawals of profit can only be reduced to zero. The firm cannot maneuver by using *external* financial resources. Finally, therefore, no other means is left than to adjust through *real* actions.

Under such circumstances price is not merely a "signal" which the firm observes in controlling real actions if it feels like it, but need not observe if it does not feel like it. It *has to* observe it because otherwise it will be incapable of development or expansion, and might even go bankrupt.

At this point we can entirely ignore the properties of prices. "Optimal" prices or "nonoptimal" ones, "equilibrium" prices or "nonequilibrium" ones—it is all the same from the point of view of *hardness* of the budget constraint. It matters only that prices do not depend on the firm and that in the case of a hard constraint the firm has to adjust to them. This was expressed in the figure by the shift of the decision from point A to point B under the impact of changes in price.

Consequence (iv-H): Uncertainty. The firm does not share its risks. It bears the consequences of external circumstances as well as of its own actions.

Since prices are exogenous, they may bring disaster or good luck for the firm. In either case it will be the firm's own bad or good luck. If it is bad luck, nobody will help it to get out of it; if it is good luck, nobody will skim off the result.

Consequence (v-H): Demand of the firm. The consequences enumerated above together imply that the firm's *demand for inputs is finite.* It depends closely on the purchase price of inputs and on the current and expected income of the firm, on its sales receipts. (In the figure the finite nature of demand was expressed by the fact that only points on or below the budget line were attainable. The firm can buy only as much "machinery" and "labour" as is allowed by its budget constraint.)

Almost-hard budget constraints

In every actual economic system there are several phenomena at work which shift the budget constraint away from the pure case of perfect hardness as described above. We shall examine below under what conditions the budget constraint should be at least *almost-hard.* The expression "almost-hard" indicates that although the constraint is not so hard as in the theoretically pure case, it is approximately hard. This will be indicated by the *consequences.* A budget constraint is almost hard if it causes the consequences (i-H/–/v-H) of the preceding section. Again we shall be content to give a set of *sufficient* conditions; there may be other sets of conditions able to cause consequences (i-H/–/v-H). (The letters AH following the serial numbers of the conditions indicate the qualification "almost hard".)

Condition I-AH: Price-making within narrow limits. Some of the firms are price-makers for some inputs and outputs. However, in deciding on prices they are constrained by the resistance of their trading partners and, finally, by the level of total demand.

Conditions 2-AH and 3-AH: No state redistribution among firms. Here conditions (2-H) and (3-H) of the pure case must fully stand. The state cannot redistribute the financial receipts of fims either by differentiating taxes and other methods of skimming off profits, or by subsidies and other grants.*

Condition 4-AH: Credit on hard conditions. This does not mean that the creditor demands high interest, but that certain *principles*–which are "orthodox" and "conservative" – are employed in granting credit:

The creditor (bank, etc.) grants credit to a firm only if it is creditworthy, i.e. it is fully guaranteed that the firm is able to repay it from the proceeds of its sales of output. That is, credit is an "advance payment".

If the firm has taken a loan, it must always fulfill every obligation in the credit agreement: instalments must be paid on time, and interest must be added according to the agreement. The adherence to credit agreements is enforced with the full rigour of the law.

The buyer cannot force the seller to grant credit by failing to pay immediately – without preliminary agreement – for the goods delivered.

Condition 5-AH: External financial investment on hard conditions. The internal financial resources of the firm can be supplemented by monetary investment by the owners. This may finance only technical progress and expansion of the firm and must be reimbursed from increased proceeds. No external financial resource can be used to surmount short-run financial difficulties.

We wish to avoid repetition. Reconsideration of what we said in the preceding section can convince the reader that consequences (i-H/–/v-H) listed there will occur in

*This condition only excludes redistribution of money incomes *among firms.* This is compatible with state redistribution of incomes among various groups of the population: with high taxes levied on some groups and with monetary supports given to other groups.

this case too. It must be added, however, that they cannot be guaranteed as strictly as in the theoretically pure case. It is true that conditions 2–3 have not changed: the possibility of state redistribution is still excluded. Yet even so difficulties may arise with conditions 1, 4, and 5. They deal with phenomena about which a simple "yes or no" statement cannot be made. We cannot say, for example that credit is given either on hard or on soft conditions. There are many intermediate degrees possible. The situation is the same with price-making or price-taking, as well as with the hardness or softness of external financing conditions.

Soft budget constraint: the pure case

Intermediate cases will be discussed later. At this point, however, we shall omit them and discuss the other extreme.

When can we say that the budget constraint has become totally soft, that is it does not bind *ex ante* the freedom of choice of the firm? We shall go over the five conditions discussed above. (This time we shall put a letter S after the serial number.) In fact, a single condition – or perhaps even a single part of a condition – is sufficient to render the constraint soft, though usually several conditions apply simultaneously.

Condition 1-S: Price-making. The majority of firms are not price-takers but price-makers. Price is not exogenous for most firms.

Theoretically this could be the case on both sides of the market: in input prices as well as in output prices. In practice, however, it is usually the latter which soften the budget constraint. The firm is able to impose its own cost increases on the buyer. This may be because, in the case of free contract price, it is the seller who is stronger than the buyer. (For example, it is a large monopolistic seller faced with many scattered buyers. Or, there may be chronic shortage, and he can dictate the price for this reason.) Or it can influence the price because, although it is formally determined by an administrative price authority, the firm has a large influence on the authority's decision.

Continuous imposition of all costs on the buyer is made possible ultimately by the fact that total demand in money terms is not strictly limited but adjusts more or less passively to the rising level of costs.

Condition 2-S: The tax system is soft. A few of its characteristic manifestations are these:

a) the formulation of tax rules is influenced by the firm;

b) the firm may be granted exemption or postponement as an individual favour; and

c) taxes are not collected strictly.

Condition 3-S: Free state grants. The firm can get these in various forms:

a) contributions to investment expenditures, without repayment obligations;

b) permanent subsidies paid continuously in compensation for a lasting loss or to encourage some activity over a long period; and

c) *ad hoc* nonrecurrent subsidies to counterbalance an occasional loss or to encourage a special activity.

Condition 4-S: The credit system is soft. It does not follow "orthodox" and "conservative" principles.

The firm is granted credit even if there is no full guarantee of its ability to repay it on schedule from its proceeds from sales. Credit is not strictly an "advance payment"; its granting is not closely related to expected production and sales.

The firm is permitted to fail to fulfill its repayment obligations undertaken in the credit agreement. Moreover, the firm, in the role of buyer of inputs, is allowed arbitrarily to postpone payment without previous agreement with the seller.

Condition 5-S: External financial investment on soft conditions. In the case of a firm in state ownership this cannot be distinguished from condition 3-S, free state grants. Phenomena of this kind may also be observed with private enterprise: owners invest money from their own resources in the firm – not in order to develop and enlarge it but to help it out of its financial difficulties.*

We can now contrast the signs accompanying phenomena and direct consequences of a soft budget constraint with those of a hard one.

Consequence (i-S): Survival. Survival of the firm does not depend only on whether it is able permanently to cover the costs of its purchases of inputs from the proceeds of its sales. Even if the former permanently exceed the latter, that may be counterbalanced by tax exemptions, state subsidies, soft credit, etc. The difference between the proceeds from production and the costs of production is *not a question of life and death.*

Consequence (ii-S): Growth. Technical progress and growth of the firm do not depend solely on whether it is able to raise the financial resources for investment from *internal* financial accumulation (whether from its money stock, i.e. from savings from previous profit, or from hard investment loans which have to be repaid later from its own receipts.) The financial resources needed to buy additional inputs for development and expansion may be provided by the state in the form of free subsidies or soft investment credits.

Consequence (iii-S): Adjustment to prices. The firm is not compelled to adjust to prices under all circumstances, for two reasons.

Either the budget constraint has softened as a consequence of above-mentioned condition 1-S. The firm is not a price-taker but a price-maker. For example, let us take the case when it is able to influence the selling price of its own product. It need not take much notice of the relative prices of inputs. However much they change, it will be able to adjust the selling price of its own products to cover cost increases.

Even if this method does not operate and the firm is a price-taker, it still does not have to adjust to prices by altering its input-output combination. Even if it disregards prices and suffers losses as a consequence, these may be compensated for by remission of tax, state subsidy, postponement of credit repayment, extra credit granted under soft conditions, and so on.

*For example, a family enterprise in difficulties which the owners try to refloat at the cost of their personal wealth. This is, of course, limited by the size of that wealth.

Survival and growth of the firm do not depend on prices. The firm takes note of prices if it feels like it and does not take note of them if it does not feel like it. In the latter case it can still survive and even expand.

The firm may react to changes in prices in its *real actions,* namely, by a suitable change of its input-output combination. This changes the real quantity of inputs purchased as well as the real quantity of sales, and thereby affects the firm's financial situation. Yet the firm may also react in another way. It may try to influence purchase and sales prices, as well as the *financial variables* (tax, state subsidies, credit terms, etc.).

In the first case the firm reacts in the real sphere, in the second case in the control sphere. In the first case it acts in the *factory,* in the second case in the *offices* of the ministry, the tax authority, or the bank. In the first case the main element in the reaction is *production*; the adjustment of the input and output combination to the new situation. In the second case the main elements are: requests, complaints, and bargaining–in other words, attempts to *manipulate* all those on whom tax remissions, subsidies, soft credit, and so on, depend.

Softening of the budget constraint does not exclude the first reaction, but it does not enforce it either. At the same time it offers large scope for – and even temptations to – the second kind of reaction.

Consequence (iv-S): Uncertainty. The firm does not bear risk alone, but shares it with the state. If circumstances develop favourably, it cannot be sure that it can keep the additional profit: probably it will be skimmed off. However, if it has bad luck, or cannot adjust itself adequately to conditions, it will probably be able to shift the consequences onto somebody else: onto the buyer by a price increase; onto the creditors; and primarily onto the state.

The financial situation of the firm and its budget-constraint suffer from a double uncertainty. One is the kind of uncertainty that is present for every firm (also that with a hard budget constraint): prices and markets are uncertain. In addition, uncertainty is also caused by the continuous redistribution of the financial receipts of firms. The firm cannot foresee exactly how much the state will take away from it, or how much it will give.

Consequence (v-S): Demand of the firm. As a result of the consequences enumerated above the *demand of the firm for inputs is almost-insatiable.* It does not depend either on the purchasing price of inputs, or on current and expected income of the firm. Sooner or later it can expect to be able to cover its costs on inputs; and, if its proceeds from sales of outputs are not enough, it will be able to cover costs from an external financial source.

After all, a soft budget constraint does not bind the firm in its action in the real sphere, namely production and trade. *The soft budget constraint – as opposed to the hard one – is unable to act as an effective behavioural constraint, but exists only as an accounting relationship.*

Let us have a glance again at the figure. In the case of a hard constraint, the budget line is impenetrable, as if it were of stone, while in the case of soft constraint, it can be

easily expanded, as if it were of rubber. Therefore, it does not determine the place of points A or B. The decision-maker forms the input-output combination *not* by adjusting to prices.

Elementary events and general behaviour

In previous sections we have considered the factors that harden or soften the firm's budget constraint. These factors influence the life of the firm at the submicro-level, through millions of elementary events. Objective events take place which are subjectively *perceived* by decision-makers in the firm. The latter are affected not only by their own experience, but also by their observation of other firms. Finally, all these experiences form *expectations*. The hardness or softness of the budget constraint reflects what the manager of the firm expects for the future. The more he expects that the existence and growth of the firm will depend *solely* on production costs and on proceeds from sales, the more he will respect the budget constraint, and therefore the harder that constraint will be. And the less he expects this to be so, the less seriously he takes the constraint, the softer it will become.

It follows – as we noted earlier – that the constraint need not assume one of only two different values: *either* hard *or* soft. There are also intermediate stages, for two reasons. First, one or other decision-maker may himself expect an intermediate value. Secondly, within the same system the expectations of different decision-makers may vary; some expect a harder budget constraint, others a softer one.

There are, however, tendencies that lead toward uniform and extreme expectations. If an event occurs frequently enough which gives the impression of a soft budget constraint, and if its frequency goes beyond some critical value, a "public opinion" will develop that regards the constraint as soft.

The degree of hardness of the budget constraint is *observable and measurable*. Since it is a very complex group of phenomena, it cannot be described by a single cardinal indicator. It can only be measured ordinally, by several indicators together.

By making observations over a longer perod the *normal degree* of hardness of the firm's budget constraint within the system can be established for given social conditions.

Observations about capitalist and socialist economies

Up to this point in the present study we have discussed the budget constraint on an abstract level. We wished to elaborate the *analytical tools* (concepts, relations of cause and effect, principles of observation and measurement, etc.), for the examination of historically materialized specific systems. Now, in possession of the analytical tools, we shall begin to tackle this task.

First of all we shall make a few remarks about the hardness of the firm's budget constraint in a *capitalist economy*. Differences between countries are considerable. Nevertheless, looking back over a long period a common trend is evident.

The normal degree of hardness of the constraint seems to have shifted: *the trend is in the direction of softening*. Perfect hardness in its absolute purity may never have existed, even though the capitalist system came close to this abstract extreme point in the then leading countries in the nineteenth century. Bankruptcy was real bankruptcy; the firm that failed was not helped out by anyone but crushed ruthlessly by more successful competitors. The receiver selling up the bankrupt businessman's personal belongings and the debtor's prison were symbols of the hard system of taxation and credit. With a few exceptions (the railways, shipping, insurance, a few big companies engaged in colonial trade) firms were not big; prices were in fact formed mainly by anonymous market processes and were thus given exogenously for the firm.

Significant changes have taken place since the initial period of classical capitalism, and these move the budget constraint away from the point of "perfect hardness". Although they are well-known, we shall briefly review them.

The economy is becoming highly concentrated; huge corporations are being founded. They are no longer price-takers, but price-makers. This is one of the basic factors from the point of view of softening the budget constraint. A large capitalist corporation is able to react to input price changes not by adopting its input-output combination, but by adjusting output price to actual costs plus the expected mark-up. By its price-making power it can almost "automatically" guarantee its survival, its self-perpetuation.

Historical experience draws the attention of society towards employment, and not only the attention of workers directly suffering from unemployment but also the attention of capitalists and other strata of society. Bankruptcy is not solely a problem for the capitalist owner, since it always affects employment. Workers in the shut-down factory are dismissed. What is more, modern economics has shown that there are multiplier and accelerator effects; every bankruptcy reduces aggregate demand, thereby endangering employment at other places as well. It is not only the owners who are involved, but trade unions as well, and almost the whole society presses the state to save the threatened firm: it should be given a tax allowance, subsidy, and credit with governmental guarantees. Rescue action sometimes takes the form of nationalization.

Protectionist state intervention is growing in numerous fields. The state protects domestic companies left behind in international competition, if their performance either in exporting or in import substitution is weak. For various socio-political reasons it subsidizes unprofitable products and services.

The growth of a firm depends not only on its success in atomistic markets but also on its power: the pressure it can put on its business partners, the connections it has with banks and, last but not least, the extent to which it can influence state decisions, taxes, subsidies, and government orders.

Principles of credit are softened: in the Keynesian spirit they deviate from "conservative" and "orthodox" principles. A budgetary deficit is deemed to be permissible and even desirable in certain conditions.

We repeat that all the above-mentioned phenomena are well known from Marxist literature* as well as from works of non-Marxist economists.** Here we have collected them according to a single criterion: we wished to point out that these processes all contribute to the softening of the capitalist firm's budget constraint. Today's capitalist firm does not react to circumstances merely through *real* actions. The bigger and more powerful the firm, the better our observation applies. The firm can influence its life in numerous other ways: from price-making to "lobbying" the authorities.

As regards the degree of hardness of the budget constraint of the capitalist firm, no general proposition can be made. The normal degree of hardness is different in each country, depending on the level of concentration, on the economic activity of the state, and on other social factors. It also varies within one country; it is different for the powerful and the weak firm. There is a sphere in which it could be said that the budget constraint is still "almost-hard", and other spheres where it is „not very hard" or "rather soft" – although nowhere under capitalist conditions has the budget constraint reached full softness, with an automatic guarantee of the firm's survival.

It is not the task of the present article to analyse in more detail the position of the capitalist economy. We have gone into the question this far mainly to avoid distorted comparison. We may compare theoretical cases: the "pure hard" and the "pure soft" budget, as defined at an abstract level. Or we may compare one *real* system with another *real* system. And in this case we must compare the empirically observable behaviour of the modern capitalist firm with what we can also observe empirically about the socialist firm. In respect of the latter our main hypotheses are as follows:

1. *In the traditional socialist economy* (prior to the reform of economic control and management) *the budget constraint of the firm is soft.*

2. *A partially decentralizing reform like the 1968 Hungarian reform shifted the normal degree of hardness of the firm's budget constraint – but only a little. The constraint remained basically rather soft.****

*The historical importance of the concentration of capital was first stressed by *Marx,* and later it played an important role in the thought of *Hilferding, Lenin,* and *Luxemburg.*

**The price-making role played by the big firm was first stressed in the literature of imperfect competition; starting-points were works by *Robinson* and *Chamberlin.* The work of *Galbraith* on the relation between the contemporary capitalist corporation and the state raised great interest.

The theoretical starting point for active government economic policy pursued in the interest of full employment is Keynes' activity; related pro- and anti-Keynesian literature is plentiful. The neo-liberal school must be mentioned especially: *Hayek, Friedmann* and their followers who, while feeling nostalgic about the classical free market period, point out sharply several aspects of the softening budget constraint.

***This hypothesis is indirectly supported by the following comparison. First I quote from an article on Japan in an American weekly ". . . the combination of slow economic growth, competition from abroad and the rapid appreciation of the yen has proved fatal to many companies . . . Last year, a record 18,000 companies went bankrupt . . . the transformation may be painful . . ." (*Nagorski* [7]). On the contrary, in Hungary, following the price explosion perhaps one or two firms were subjected to a procedure of financial rehabilitation.

3. *The budget constraint is not uniformly soft for every firm. It is relatively softer in the preferred industries and for the biggest companies.*

It is not mere chance that I have called the above ideas "hypotheses" and not "statements". True, they are verified by hundred kinds of experience; also many articles were published in the Hungarian economic literature which support them by facts.* Nevertheless, further comprehensive empirical investigations are needed in order that the hypotheses might be considered fully proven.**

The validity of hypothesis (2) was confined to the end of 1979, leaving open the question of the hardness of the budget constraint beginning with 1980. It is known that one of the basic ideas justifying the introduction of the control system of 1980 was to "harden" the financial and credit system, to strengthen the economic pressure on the firm. It would be too early to make any statement on the extent to which this has been realized. The normal degree of hardness or softness of the budget constraint cannot change from one month to the next. As we have emphasized, this is a rule of behaviour and human behaviour is shaped by much experience, long observation and "ingrained habit". Economic executives will have to experience repeatedly themselves or observe what is happening to their colleagues in order to understand that loss is a serious matter, that transgression of the budget constraint is impossible and that the life and death of the firm, its growth, depend on the financial position – until the recognition becomes deeply ingrained in their consciousness and governs their decisions almost unconsciously, as a "conditional reflex". Therefore, an opinion about the impact of the 1980 control system can be formulated in this respect after 2–3 or 5 years.

Budget constraint and profit-motive

Having reached the end of my article, it may be stated that much more questions have remained open than I have succeeded to answer. We have torn out merely a single link from the chain of causes and consequences. At this place we could not discuss at length what factors do really explain the normal degree of hardness or softness of the budget constraint, and the direction of a possible change: whether it tends towards hardening or softening. And, on the other side, we have not shown all possible consequences of the soft (or rather soft) budget constraint: how it affects the adaptability of the firm, its demand and supply, the equilibrium of the national economy, the emergence of shortage, etc.

*We should like to stress from among them the following ones: *Csanádi Demeter, M.* [1], *Deák, A. ed.* [2] *Deák, A.* [3], *Faluvégi, L.* [4] *Fenyővári, I.* [5], *Szabó, B.* [9] *Tallós, Gy.* [10] and *Vincze, I.* [15].

**The author – together with some colleagues from the State Development Bank: A. *Deák,* A. *Ferge,* K. *Sztahó* and M. *Simek* – is now processing the financial balances of state enterprises in recent years in order to draw some conclusions regarding the phenomena discussed in the present article. An attempt will be made to measure the hardness and softness of the budget constraint.

Instead of digressing to all these problems at this place, I shall confine myself to a single remark. Those well versed in the literature on reforms of economic control systems will have noticed that we touched on several problems amply discussed in that literature. Yet the focus of the reform dispute in this connection was "profit-incentive", whereas in this article the focus is on "softness of the budget constraint". This would not be worth mentioning if it were just a terminological difference. In that case this article might be blamed for changing terminology unnecessarily.

Yet the issue here is not merely a change of words, but differences in the logic of the argument and in the order of importance of the explanatory factors. The fact that the owners, managers, and workers of a firm are interested in increasing profits does not in itself determine their behavior. When profit incentives are combined with a hard budget constraint, efforts are directed towards the line of real actions. Combining profit incentives with a soft budget constraint gives at least an equal role to the manipulation of financial variables, price increases, running after state donations, etc.

The crucial question affecting the situation of the socialist firm is not whether the managing director's personal share in the profit amounts to zero, 10, or 50 per cent of his basic salary. Nor is it crucial by what formula profit shares are distributed among workers, or how welfare funds or tax paid on profit are linked to profit. All this is important, but *not primarily* important. In the case of a hard budget constraint the managing director would not be indifferent to profit even if his personal share were zero in the short run – since he has identified himself with the survival and expansion of the firm. We do not seek to change the terminology, but to draw attention to the fact that the main question – both theoretically, and in practical economic policy – is not the actual form of incentive, but the rules for the survival and growth of the firm and, linked to these phenomena, the relation between firm and state.

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«ЖЕСТКИЕ» И «МЯГКИЕ» БЮДЖЕТНЫЕ ОГРАНИЧЕНИЯ

Я. КОРНАИ

Выражение «бюджетное ограничение» вошло в обиход в микроэкономике. Под этим понимается обусловленность поведения, отражающая то, что хозяйственная единица (домашнее хозяйство, предприятие, учреждение) при планировании своих расходов не может превысить имеющихся в ее распоряжении финансовых ресурсов. Статья посвящена поведению предприятий. Сначала в теоретическом плане уясняется, когда ограничение является «жестким» и когда «мягким», то есть когда оно эффективно ограничивает свободу действий предприятия и когда практически не оказывает воздействия. Для последнего достаточно, чтобы имело место хотя бы одно из следующих условий: предприятие решающим образом определяет цены сбыта своей продукции; получает даровые государственные субсидии; система налогообложения и кредитования «мягка» и т. д. Наиболее характерные последствия «мягких» бюджетных ограничений: выживание предприятия гарантируется автоматически, его рост весьма мало зависит от его финансового положения, оно не реагирует чутко на цену затрат, его текущие расходы и спрос на капитальные ресурсы могут оторваться от его собственной выручки от реализации.

Затем в статье дается анализ степени жесткости — мягкости бюджетных ограничений в условиях различных исторически сложившихся экономических систем. В заключение рассматривается связь заинтересованности в прибылях и бюджетных ограничений.

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I. SCHWEITZER

ON THE ECONOMIC NATURE OF A SHORTAGE PHENOMENON

The spare parts problem in Hungary

The spare parts situation in Hungary is clearly one of shortage. Moreover, shortages are palpably more serious and frequent than in many other fields of the economy. The shortages originate to some extent from excess demand owing to the obsolescence of machines and equipment, their fragmentation by country of origin and machine type, and the malfunctioning of the (commercial) organization of machine distribution. The main reason of shortages, however, is on the supply side. In domestic production and in a big part of imports shortages in regard of quantity and assortment are triggered by such causes affecting production which hold both for domestic manufacturers and for those in socialist countries shipping to Hungary. Engineering firms are reluctant to produce spare parts because the orders for such parts are fragmented and their statisfaction involves higher costs and trouble, whereas these enterprises can fully exploit their capacities by turning out finished machines, without satisfying demands for spare parts.*

Shortages, temporary, cyclical or lasting, present themselves in every field of the Hungarian economy. We face it day by day whether we are consumers or producers. Shortage is accountable for about every negative symptom of the economic life. But what accounts for the shortage, or, more precisely, for its massive and apparently ineradicable prevalence?

In general, and starting from the relation between demand and supply, the quest for the causes of shortage may be started in at least two directions. Both explanations are logical and, therefore, we can state that there are at least two types of shortage possible. (In our opinion both types exist in Hungary at present.)

1. Lasting shortage can be caused by *absolute* excess demand relative to supply (the outflow of money exceeds the money requirement of circulation) when the raising and the balancing functions of prices are impeded by rules of control (fixed or limited prices or other statutory interferences). This could be defined as absolute shortage but the term would delusively suggest that in such cases every commodity is in short supply. Of course, in such cases, too, only goods in greater demand disappear from the market (or, more precisely, from the legal market only to necessarily reappear on the black market.)

*This article is based mainly on the study "Some questions of the spare parts supply of engineering industrial products" completed for the National Board of Technical Development in 1979. The commission making the report was headed by the author and its elaboration was coordinated by András *Róth.* Members were: Jenő *Barátossy,* Imre *Bóc,* Lajos *Bódis,* Imre *Bóna,* Ferenc *Czerny,* László *Halpern,* Gábor *Kürti,* Ervin *Miklós,* Jenő *Simon,* Béla *Tóth,* Jakab *Verbovszki,* János *Völgyi.*

2. Even if the whole of demand and supply is balanced, lasting shortage can be caused by a management system where supply (production, import) is not under the direct and powerful influence of demand and hence the *structure* of supply fails to properly adapt to demand. This is the case when the impact of commodity (market) and monetary conditions – primarily the supply regulating role of prices – cannot assert itself sufficiently in the economy. In such cases production and stockpiling of unsaleable products are necessarily regularly too high, while a considerable part of demand is left unsatisfied or is satisfied through big détours, at extra costs and with delays. This kind of shortage may be called *structural* shortage.* Although the economic reform of 1968 aimed at enhancing the role of the regulated market in Hungary and at establishing a direct and flexible adjustment of supply to demand, a lot of this is yet to be attained. It can be said that structural shortage greatly contributes to the frequency of shortage phenomena.

This paper's subject is the spare parts shortage. That is, it does not treat shortage and not even the shortage of parts in general. For the sake of unambiguity let us give a few definitions: the subject is the spare part supply of products of the *engineering industry*; the range of engineering industrial products covers both means of production (investment goods) and consumer goods of the machine type (cars, household appliances, electro-acoustical equipment). The term *part* is used for any machine part, unit, standard unit that is suitable for being built into any machine, equipment or vehicle as a separate subassembly mounting unit. In this category distinction is made between productive parts and spare parts. Productive part means a part built into the machine in the process of manufacturing. – *Spare* part means any part suitable for replacing a defective or worn-out productive part.

This classification is in accordance with the viewpoints of use. It must be noted beforehand that from the point of view of the production process the matter is not that easy to distinguish. Productive parts and spare parts are materially totally identical, nor is there any difference in the technical process of manufacturing them. Moreover, the manufacturer's costs will be obviously the lowest when he need not distinguish between productive parts and spare parts but can manufacture them at the same time in large series. But the manufacturer inclines to deny the difference. For him the shortage of spare parts means that the amount of parts he has manufactured is not enough and clearly because the production capacity is not sufficient.

Spare part shortage is not a unique deficiency symptom of the socialist economy but is undoubtedly one of the most "spectacular" ones. There are some specific causes making the strains caused by shortage of spare parts more apparent than shortages in general. One is their strongly limited substitutability. When there is shortage of any other commodity, the user has relatively ample opportunity to modify his requirements

*Transitory structural shortage, encountered in the period until supply closes up to demand, naturally exists in every economic system. Above a case is described where, owing to the said reasons, this closing up takes place with difficulty or not at all and, therefore, shortage is a regular and mass phenomenon. The two cases are obviously different in quality.

towards a substitutive product. The same is in most cases not possible when a spare part is needed. Another specific cause of the bigger strain is that spare part shortage causes clearly visible and direct damage to the user since the machines he has bought must idle. While he is deprived of income because of being unable to manufacture and to make deliveries or while he is forced to make extra efforts, his costs are continually and sometimes increasingly burdened by wear and tear and depreciation. The impact of the spare part shortage is therefore striking and it evokes particularly strong public reprehension. The recurring press campaign in Hungary about the idle agricultural machines in harvest time is a good illustration, and it has become a slogan that, whatever the costs, agricultural machines must not stand idle in harvest time because of missing spare parts. Last but not least let us mention that the picture drawn about the magnitude of the spare parts shortage is even gloomier because the organization distributing the spare parts necessarily ranks the users in distributing the shortage items and here smaller institutions and enterprises are generally discriminated as against bigger users – although the former ones are more numerous.

All of these suggest the question whether the special nature of the spare parts has the only result of making the strains more palpable here, or is it worse than that: are the shortages themselves greater here than – sorry to say – in the average of the national economy? But shortages cannot be measured and they cannot be measured for the same reason why the size of needs cannot be stated directly. Analysis of the demand for and supply of spare parts nevertheless revealed a number of features that support the experiences: the extent of spare parts shortage is in Hungary in fact greater than that of commodity shortage in general.

Let us now review the factors determining the demand for and supply of spare parts.

Factors of demand

According to every indication the demand for spare parts is extremely high in Hungary: too many spare parts are used until a machine wears out. The causes are numerous. Surely some of them could be eliminated or at least mitigated. The too broad and scattered range of types of the machine stock is often quoted as an obvious reason for the difficulties of spare parts supply. Diversification of the machine stock certainly seems to be abnormal as shown by the example in Table 1.

This fragmentation can be evaluated from several points of view. It is widely attributed to inconsiderate and uncoordinated purchase policy: every user buys different types. However, this requires some comment.

1. It is very likely that this judgement comes from the overcentralized commercial organization that, necessarily, prefers purchases of big batches. Naturally, also the interest of the national economy is on the big batches side but only up to the point where use does not demand special machines. The overcentralized organization is not very

Table 1

Number of machine types in the machine stock of the building industry and average number of machines of each type by machine categories

Machine category	No. of machines	No. of machine types	Machine/ type
Excavators	5.370	310	17.3
Material preparing and auxiliary machines	24.912	665	37.5
Material moving and special transport machines of the building industry	20.336	1083	18.8
Hoists, cranes, loading machines	9.875	560	17.6
Machines for foundation, public utilities, civil engineering, road, railway, tunnel, bridge building and maintenance	3.686	497	7.4
Special and fitting machines and equipment	10.705	580	18.5
Prime movers and energy transformers	20.195	655	30.8
Vehicles, machines for wood and metal processing and sundry	33.777		
of this: vehicles	10.431	291	35.8
All machine categories, total	128.856	4641	27.8

capable of taking care of this user's – and national economic – interest and considers it, when fulfilled, a sacrifice.

2. It is also claimed that occasionally fragmentation is created because the commercial organization (foreign trade) alternates the import sources in accordance with its particular considerations (*inter alia*: balances of payments by countries). This can affect the composition of machines imported mainly from western countries. The types of machines produced within the country or imported from socialist countries is really not so diverse but is still diverse enough as a result mostly of frequent modification of types and stopping of production. Distribution by countries is illustrated in Table 2.

The above data show the strongly limited oportunities of the users' machine buying policy. The enterprise intentions with respect to development must be adjusted to the objective market possibilities. And the market, also that of finished machines, is a shortage market. Instead of purchase policy an adjustment to the given limited opportunities of the moment is actually required. No doubt the machine stock will consequently be of a random and eventually hyperdiversified type-composition and thus also the demand for spare parts will be diversified and somewhat increased.

A still more important factor than the ones listed above is the age composition of the machine stock, or, to put it more accurately, the high rate of badly worn-out and obsolete machines. Delayed scrapping and repeated renewal of long written-off machines are evergreen subjects in Hungary. Many attempts have been made to remedy this state of

Table 2
Distribution of the machine stock of a chemical enterprise by countries of origin
(in percentage of data)

Countries of origin	Pumps	Com-pressors	Other	Machines total
Hungary	39.4	47.2	63.8	45.0
USSR	48.4	1.8	17.2	39.8
GDR	1.6	16.4	0.3	1.9
CSR	2.4	–	–	1.8
Poland	1.4	–	–	1.0
Socialist countries, total	93.2	65.4	81.3	89.5
Germany (Fed. Rep.)	1.2	29.2	–	2.5
U.K.	1.6	–	17.3	5.0
Sweden	1.0	–	1.0	1.0
Austria	1.4	–	–	1.0
Italy	0.2	1.8	–	0.2
Switzerland	0.8	–	0.3	0.6
France	–	1.8	–	0.1
Netherlands	6.8	1.8	–	0.1
Western, total	6.8	34.6	28.6	10.5

affairs but the results are not satisfactory. The replacement of outdated machines is carried out extremely unevenly, from two points of view. 1. There are enterprises where a great many obsolete machines are run. The main cause is the financial situation of these enterprises, their chronically limited investment opportunities. This is often a consequence not of shortcomings of enterprise activity but of decisions taken on higher levels and having cumulative consequences. 2. There are activities practically without any domestic machine supply. These activities are often of a kind that simple old type machines are perfectly suitable, whereas the prices of the appropriate and relatively valuable small machines, available mainly only from Western countries, are unreasonably hight. The two factors often add up at one enterprise or the other and especially when the enterprise is not "highlighted", when it is not given investments funds and when it pursues special activity in small series. The only alternative left in such cases is to keep the old machines running. It is obvious that by the perpetual renewal of machines the demand for spare parts is enormously swollen and cannot be reasonably satisfied.

Among the factors causing unreasonable growth of demand "practical experts" often quote the organizational system of stockpiling and distributing spare parts. In Hungary the spare parts come to users through a multi-channel organization. Its members are producing and import enterprises, wholesale and repair-maintenance companies. This multi-channel organization was brought forth by a mercantile concept, the presumption that it must be more advantageous for the buyer to have alternatives to choose from. But

the system is continuosly deformed by shortage and its twin the "supply attitude": sellers have the upper hand and they rank buyers and make them queue up. The multi-channel system is distorted also by a process where some "paramount" organization emerges from among the members and controls the others since it has the nearest access to the real source of the inflow (the manufacturer or importer) and the others cannot get the spare part to be sold without his agency. Thereby the numerous channels, the trade organization turn into an illusion: the buyer – especially the smaller one – must run errands. This is a target for justified attack.

This organization is criticized also for causing losses to the national economy mainly because of multiplied storage and stockpiling. This way, so they claim, the national economy must hold larger stocks than if a single supply enterprise kept a central store or could at least keep centralized records of the stocks and regroup their odd distribution. It is argued that this could put an end to the situation where something can be frozen stocks at one place and a shortage item at another. (In this connection one can hear nonsensical opinions too, e.g. that if all stocks were at the proper place there would be no shortage at all. If this were true then the spare parts auctions held occasionally should bring the balance to zero point. But it isn't. Experience unmistakably shows that in any given period there indeed are a larger number of spare parts which are needed at many places but cannot be found anywhere in the country.)

In fact the cause for the shortage situation is not the multi-channel system but precisely the blaming of the multi-channel system and the resounding advocation from time to of the alleged advantages of centralization are the very consequences of the shortage situation. The critics, however, neglect the fact no giant organization can be expected to pay the same attention to and handle with thorough care and accuracy smaller – sometimes very small – volumes of demands as orders that determine the activity, future and assessment of the whole organization. There of course are quite small consumers among the users of spare parts, and there are spare parts that are needed in very little quantities or whose unit values are small. These, too, must be dealt with in the proper way. Hence the organization needs parallelly quite little and quite big units. The neglect of smaller buyers and smaller orders can be clearly seen also in the import of spare parts. It would be wrong to blame for this the foreign trading enterprises with enormous ranges of commodities and customers; the current state of affairs is a necessary outcome of the current organization. There should be smaller separate organizations in whose activities the solving of these smaller problems should be just as important as the big ones for the big organizations.

There are also other arguments against the assumption that the centralized mammoth organizations would be suitable for improving supply. These organizations could clearly not be as suitable for estimating the market of a broad range of demands as trading companies aiming at a special and particular sphere and scale of users who can directly feel what their customers might need. Characteristically, the idea of "aggregating" demands and the physical approach to planning is associated with the mammoth organizations exactly in the same way as it used to be typical of the system of plan directives in

Hungary – it is at most completed with the dream of using up-to-date enormous computers. But this must not be hoped to be a salvation. The consequence would quite obviously match the consequences of the plan directive system: with standardized and by necessity wrongly planned demands there would emerge still bigger frozen stocks, the structural shortage would grow and, besides, the system would also have to bear the costs of an enormous red-type apparatus. For which, by the way, examples are already found.

In the present system the biggest volume of stockpiling must be carried out by the user – unlike in a market economy: he tries to store whatever is available because this is still cheaper than a machine idle because of a future shortage. This attitude – a very reasonable one from the point of view of user in emergency – is made possible, encouraged and backed by the relatively low price of spare parts. The prices of spare parts are usually compared to the prices of finished machines. There is a handy indicator which expresses how many times more a machine fitted from spare parts costs than a new machine. Experts state that this indicator is many times higher in market economies than in Hungary even if varying by countries.

Demand for spare parts is increased also by the lack of incentive to *renew the defective parts.* If up-to-date renewing technologies are used, the lifetime of the renewed parts is near to or occasionally longer than that of the brand new parts. It is especially reasonable to renew parts that are of high value and hard to find.

The national-level usefulness of renewing old part is apparently manifest especially if we think of the alternative which translates into shortage. Still, renewing on industrial scale does not yet reach in Hungary the extent that would be expedient in a situation like this. Considerable values are lost through the scrapping of defective parts that could be renewed.

The current price calculation system works against the renewal and repair of spare parts. The repair industry is interested in the least possible work and in the highest possible value of material used because this way it can increase its gross output. On that account it is becoming more and more usual to replace complete units. This is a symptom known too well. Heaps of units dismounted from cars that are still renewable (e.g. clutch plates, brake shoes and brake cylinders) are wasted. Similar symptoms are found in the activities of servicing electrical consumer goods. The approach trying to keep maintenance charges at a low level through setting a minimum profit margin in percentage of labour cost results, along with numerous other harmful implications, in the wasting of renewable parts and in unreasonable replacement of parts.

Last but not least, the demand for spare parts strongly depends on the *quality and breakdown rate of the running finished machines (and of spare parts).* For many a reason (lack of specialized production of part units, poor material quality, shortcomings of technological discipline, poor anti-corrosion measures) a lot of machines manufactured in the socialist countries (including Hungary) certainly require more spare parts than the machines turned out in advanced western countries.

Supply factors

In the above symptoms and processes affecting the demand for spare parts have been reviewed. There is evidence for the existence of several factors in the Hungarian economy accountable for the exaggerated and unreasonable demand for spare parts. Still, spare parts shortage is not caused by excessive demand. The real and essential cause must not be sought in the demand factors but in the failure of supply – production and import – to satisfy adequately the demand. It satisfies neither the reasonable nor the unreasonable demand, and neither in quantity nor in assortment.

For sake of simplicity, import and production will be treated hereinafter together. This can be done because, like in the domestic case, in the overwhelming majority of spare part imports – namely in the spare part imports originating from socialist countries – the ultimate cause of insufficient supply and reluctant supply is the insufficiency of production. The lasting and apparently unremovable deficiency of spare parts production is a problem in Hungary and in the other socialist countries alike and thus it is logical to assume that the cause – or at least some of the causes – are the same. This assumption is supported by experience.

Analyses designate the *end product approach* as the most frequent general cause of neglecting spare parts production. The end product approach looks back to a long history in the socialist economy. In the strongly centralized system of directive planning production is distributed ("profiled") by the central bodies between enterprises by bearing the end products in mind: the major and centrally monitored products of the enterprises are almost exclusively end products. The investment plans specify capacities, production plans specify technology and financial plans specify the receipts and profit accordingly. Under plan directives the decisive items of production forecasts, the quantitative plan figures, determine the number of pieces of the products to be manufactured. Every effort of the enterprises is directed towards this end.

It is another concomitant of centralized physical planning that any production escaping the attention of central designers falls short of the demand. This is true for the production of spare parts in particular: first of all for the sphere of productive parts the manufacturing of which is the duty of the manufacturers of the end product, and, secondly, for the spare parts whose "supply" is also the "responsibility" of the manufacturers of the end product. To the consequences of the end product approach there paradoxically belongs the shortage of "less important" products and " trifle" items of which manufacturers or the population need small amounts but a wide assortment of types.

In Hungary the system of directive planning was brought to an end in 1968. Is it still reasonable to blame the end product approach for the lagging production of parts – and therein of spare parts? We think it partly is. The end product approach survives quite vigorously even if not in compulsory plan specifications. The main products of enterprises are, with few exceptions, still end products, investments are aimed at expanding the production of these, and the growing numbers of pieces (metres) in which they are turned

out are very important success indicators of the enterprise earning appreciation and remuneration. Clearly, enterprises are encouraged to pursue mainly the higher production of end products even at the detriment of other production, e.g. of spare parts.

Another explanation is also heard: it is often quoted as the cause of deficient supply that manufacturers are not financially interested in the production of spare parts. This statement is true to some extent but is too general to be meaningful. In Hungary incentive is frequently quoted as a sort of a clue: if something does not work, it does not because the one supposed to do it isn't motivated enough financially. This argument is in fact only meant to gain extra allowances or to increase them.

What is really wrong with incentive? Is the reason for the deficiency of spare part supply that the price of spare parts contains too little profit, that is, is the production of spare parts not lucrative enough for the enterprises? The arguments of manufacturers show that even though spare part prices are really rather low, the substance of the matter is not that. In most cases enterprises do not even utilize their margin offered by the free price form to set higher prices. The lack of concern is because spare parts sales make only a fraction of price receipts – and of the profit – of the engineering manufacturers. One can hardly figure a profit margin that could motivate enterprises through the impact of spare parts production upon enterprise profit.

Manufacturers are reluctant to produce spare parts because – as is unequivocally testified – orders for spare parts rarely ensure an economical batch size. Compared to the big series of finished machine production (and the production of productive parts it requires) the spare part orders are minute and scattered in time. Costs are greatly increased or even multiplied by scheduling their production. It may be still worse that it takes away capacities from current production. It is namely a most rare case if capacities required for spare parts production are reckoned with in the investment planning of plants, while the simultaneous pursuing of current and spare part production would require reserve capacities. Moreover, it is only feasible by painstaking and careful organization of production. There is nothing to motivate the Hungarian enterprises to undertake that.

The economy of Hungary – like of the countries in general – normally does not possess reserve capacities. Stockpiling by manufacturers could be an alternative. But this apparently runs against barriers – namely, financial ones. Actually the point is that, in the terms of János *Kornai,* in the "suction" state of the economy every enterprise would – understandably – spend its limited circulating assets on current production rather than to invest it into stocks for the sake of providing better service to partners.

To provide adequate spare part supply to his customers the manufacturer needs to incur extra costs and make extra efforts, either because production has to be repeatedly scheduled and reserve capacities have to be secured or because the manufactured spare parts have to be kept in store. Although in theory there is no cost or effort an enterprise would not undertake if it were paid a corresponding high price for it, in practice it would be hard to have the economy accept a spare part price making the production of spare

parts so highly profitable and earning so much profit that the manufacturer should rather give up the less difficult fulfilment of finished machine orders.*

It will be probably not far from the truth to assume that Western companies, too, provide good supply not mainly because of the lucrativity of spare parts sales. The true reason is the desire to appeal to the customers and to safeguard the good reputation of the "brand name". By means of adequate spare part supply they want to gain acknowledgement and growing market for their finished machines. Why is this endeavour of the socialist companies not strong enough? Is it a deficiency prevailing on a mass scale because of human, personal, or perhaps sociological reasons? Not at all, the difference has obvious economic grounds. Economic reasons, the preponderance of supply and the consequential competition inspires the enterprises to give better service to buyers in the West.

In the Hungarian economy – and in the economies of the other socialist countries – demand is preponderant and this manifests itself in shortages. Spare parts shortage as a specific symptom develops on the soil of a general proliferation of deficiency symptoms and is associated therewith. Since the market of finished machines is itself a shortage market, orders are placed with manifacturers continually and almost unlimitedly. Instead of having to make efforts to win the customers they are in a position of being able to increase their finished goods production almost unlimitedly even if they do not provide satisfactory spare part supply. On the market of finished machines the customer is not given any alternatives, he has got to buy in such conditions.

We have come to the end of our train of thoughts. We yet have to revert to an assumption not mentioned above. In connection with the supply factors it was assumed that the manufacturer of the finished machines and the manufacturer of the parts (spare parts) are the same enterprise. This is often the case, moreover, in Hungary where the production of specialized parts has declined rather than developed because of difficulties of cooperation, it is a more frequent occurrence than elsewhere. But there necessarily are many cases when the part is manufactured by another "outworking" sub-contractor and so it would stand to reason that this latter should manufacture the spare part too. International cooperation also exists.

Unfortunately, for the time being the spare part supply is steadily deteriorating along with the rate of cooperation: it is namely the rarest of cases when the sub-contractor is prepared to supply also spare parts.

In the given industrial organization – concluded as a result of a lengthy economic historical process on the basis of ideologies hardly studied till now – the subcontracting enterprises themselves are not specialists, the product turned out under cooperation is not their main product but their main line is in most cases the manufacturing of end products for which, as stated, demand is in excess over supply and so they prefer to engage themselves rather in that than in cooperation which might involve many a difficulty because of the mentioned specific causes.

*Otherwise, the profit incentive is probably not so strong at all as to prompt the Hungarian enterprises to undertake heavy efforts for higher profitability.

Consequences of the shortage conditions

Deficient supply of spare parts results in various *emergency solutions.* This practically means an irrational organization in turning out the missing spare parts, at *extra costs* for the national economy. Theory and practice agree that from the cost aspect it is the most advantageous if spare parts and productive parts are manufactured in the same works. This allows for big batches and a high degree of specialization. Organization of production in this manner is the most advantageous not only from the point of view of production costs but also from that of technical paramaters, reliability and quality – points that are not without importance for users and for the national economy as a whole.

However, in case of emergency the part is manufactured not by the manufacturer of the finished product (or, more precisely, not by the workshop where the part was manufactured for the end product) but by some other workshop more or less capable technically to do it (substitutive production). Big volumes and relatively big batches are manufactured by other plants assigned to supply the repair industry and occasionally the users (car service shops, agricultural plants), and also users are forced to manufacture individual or small-series spare parts (such as maintenance shops of factories).

The extra cost for the national economy is obviously considerable in both cases relative to the costs of specialized production in big series, including the supplying of parts for finished machine production. The most disadvantageous case is the small series or individual production carried out at the user. Here the disadvantage appears not only because of production costs but also because of the often insufficient knowhow, the materials used are not the right ones, nor is the accuracy attainable and it follows that the reliability, performance and lifetime of the repaired machines are unsatisfactory. That is, the deterioration in national economic efficiency and the damage caused comprise not only the extra cost of production but, owing to poorer quality, also a lower performance at the user of the machines.

Despite the manifest extra cost for the national economy investigations show a paradoxical state of affairs: the user enterprises which manufacture the missing spare parts in their own works are, according to *their cost accounts,* able to produce the spare part cheaper than they could buy it if it were available. Even if the rather uncertain quality of this "production" is not taken into account, though that, too, can eventually cause big losses, it can be positively stated that the enterprise cost accounts notwithstanding this solution is certainly more expensive for the national economy. The difference is due directly to the *different methods of calculation* of the two manufacturers – the regular manufacturer and the occasional one. This derives in part from the fact that usually only the general costs of production are charged as the costs of such do-it-yourself. On the other hand, even if the total overhead costs were considered, for engineering enterprises these might be as much as 1000 per cent while for the users the rate is much less. (In this context there arises the question – beyond the subject-matter of this study – what could be the reason for such a difference in overhead costs between specialized machine building enterprises and various user enterprises.)

Despite the apparently lower costs of own production the user enterprises only manufacture the spare parts themselves almost exclusively in case of emergency. Beyond capacity limits this is because they are aware of the uncertain quality of the spare parts manufactured in this way and of the undependability of cost accounts.

The hardships of supplying spare parts to imported machines often lead to the introduction of import substitutive spare parts production. Such an attempt was made in Hungary in the late sixties and early seventies to improve the spare parts supply of agricultural machines imported from socialist countries through organizing domestic production. Steps were taken in a similar direction, among others, in the field of vehicles and building machines. The success of such ventures was thwarted by high costs, lack of documentation, and limited capacities. Besides, the production organized in emergency to substitute for import also invokes the danger that the manufacturer of the finished machine feels relieved from the burden of shipping spare parts and leaves the production of big series of ever increasing amounts and assortments of spare parts to the Hungarian user who has but limited capacities for such purposes and only because he is cornered. Such import substitutive production is nevertheless often indispensable and it has been successfully fitted into the system of spare parts supply.

The manufacturing of spare parts substituting for western import takes place in principle for reasons of saving foreign exchange. Beyond the high cost effects this has the grave implication of doing more harm through jeopardizing the running of the imported machine by parts manufactured in quality often beyond comparison with the original ones than what the import of spare parts would cost. This kind of import substitution has therefore not spread in Hungary.

ОБ ЭКОНОМИЧЕСКОЙ ПРИРОДЕ ОДНОГО ИЗ ЯВЛЕНИЙ ДЕФИЦИТНОСТИ

(Проблема запасных частей в Венгрии)

И. ШВЕЙЦЕР

Положение со снабжением запасными частями в Венгрии характеризуется явными признаками дефицита, причем явления дефицитности здесь гораздо более тяжелые и частые, чем во многих других областях хозяйства. В определенной степени дефицит вызывается чрезмерным спросом который является следствием устаревания машинного оборудования и большого разнобоя в поставщиках и типах машин, а также дисфункциями организации снабжения торговли станками и оборудованием. Однако главная причина дефицитности лежит на стороне предложения. В отечественном производстве и в большей части импорта количественный и ассортиментный дефицит вызван влияющими на производство причинами, общими как для отечественных поставщиков, так и для поставщиков других социалистических стран. Машиностроительные предприятия чуждаются производства запасных частей, так как заказы поступают обычно на малые партии, и их выполнение требует значительных дополнительных расходов и связано с рядом трудностей. В то же самое время эти предприятия и без выполнения заказов на запчасти могут полностью загрузить свои производственные мощности.

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HETEROGENEOUS LABOUR AND THE DETERMINATION OF VALUE

Heterogeneity of labour and its implications for the Marxian theory of value has been one of the most controversial issues in the literature of the Marxist political economy. The adoption of Marx's conjecture about a uniform rate of surplus value leads to a simultaneous determination of the values of common and labour commodities of different types and the uniform rate of surplus value. Determination of these variables can be formally represented as a parametric eigenvalue problem. *Morishima*'s and *Bródy*'s earlier results are analysed and given new interpretations in the light of the suggested procedure. The main questions are addressed in a more general context too. The analysis is extended to the problem of segmented labour market, as well.

Introduction

In the definition and analysis of the Marxian labour value homogeneity of labour power is usually postulated. This homogeneity of labour can be viewed from different aspects. First, it means the assumption of a uniform *value creating power* of various kinds of labour in all fields of production. Second, labour power is treated as a homogeneous commodity with respect to the level and structure of the *consumption necessary* for its reproduction. Third, as a result of the first two assumptions, labour will also be homogeneous with regard to the *rate of exploitation.* In such case, labour power employed in different areas can be viewed as part of a homogeneous mass of *average social labour.* These assumptions make the analysis significantly easier but, at the same time, they restrict the validity of the resulting propositions to a large extent.

Heterogeneity of labour and its implications for the Marxian theory of value have been for long debated in the Marxist economic literature. Marx himself was not specific enough about this problem and his passing remarks have been interpreted by different authors in different ways. Most of the discussions have centered around the problem of converting skilled into simple labour,* i.e. determination of the abstract labour equivalent of various kinds of concrete labour. Another issue is concerned with the determination of the value of various kinds of labour power. Here the common standpoint is that the value

*We will use the terms skilled and unskilled as synonyms for complicated and simple. According to Marx, the value creating power of a specific kind of labour varies with the degree of its 'complicatedness' (complexity) and intensity. For the sake of simplicity we will disregard possible variations in labour intensity.

of different kinds of labour is determined by the conditions of their reproduction. In the debates these two issues have been linked to each other, since some remarks of Marx seem to imply a rather close relationship between the value of labour and its complexity (value product). This assertion has been strongly opposed by some economists.

Surprisingly enough, the degree of exploitation (the rate of surplus value) has not been explicitely taken into consideration in these debates, whereas it is an obvious intermediary link between the value of labour power and its value product. The assumption of a uniform rate of exploitation across various kinds of labour power and spheres of production seems to be essential to Marx's theory. Marx visualized it as one of the basic laws of the capitalist mode of production:

"Such a general rate of surplus value – viewed as a tendency, like all other economic laws – has been assumed by us for the sake of theoretical simplification. But in reality it is an actual premise of capitalist mode of production, although it is more or less obstructed by practical frictions causing more or less considerable local differences . . .;" [1]

Adoption of this assumption would greatly simplify the problem of value determination in the case of heterogeneous labour power. We will show in this paper that determination of the values of different commodities and various kinds of labour, and the rate of surplus value can be represented in the form of a simultaneous equations system, as an eigenvalue problem. These results are based on Bródy's [2] and Morishima's [3] contributions to the formal analysis of Marx's economic theory.*

The structure of the paper is the following. First, Morishima's proposal for the determination of conversion ratios will be critically reviewed. Based on this critique we will propose a different solution, which, in turn, will be confronted with Bródy's earlier suggestions. Next, we will address the related issues in a broader framework and formulate some general conclusions. Finally, we will illustrate our solution with a numerical example and reflect on the problem of labour segmentation raised by *Bowles* and *Gintis* [5] and *Reich* [4].

The notation used in this paper:

R (n x n matrix): r_{ij} is the quantity of commodity i used in the production of one unit of commodity j,

M (h x n matrix): m_{sj} is the amount of labour of kind s required for the production of one unit of commodity j,

m^* (1 x n vector): m_j represents the unskilled labour power input into the production of one unit of commodity j.**

*After finishing the Hungarian version of this paper I learned from A. Bródy that U. P. Reich proposed basically the same solution, as I. Since then his paper has been published, see Reich [4]. Despite the essential formal identity of our results there are important differences in the underlying reasoning and interpretation.

**The asterisk above a vector indicates a row vector.

F (n x h matrix): f_{is} is the amount of commodity i needed in the social reproduction of one unit of skilled labour of kind s from one unit of unskilled labour.

f (n x 1 vector): f_i denotes the amount of commodity i necessary for the reproduction of one unit of unskilled labour.

N (h x h matrix): n_{rs} is the amount of skilled labour of kind r required for the reproduction of one unit of skilled labour of kind s.

n^* (1 x h vector): n_s is the unskilled labour input requirement for the reproduction of one unit of skilled labour of kind s*.

p^* (1 x n vector): vector of the common (non-labour) commodity values.

w_o (scalar): value of unskilled labour power.

w^* (1 x h vector): values of different kinds of skilled (trained) labour power.

u^* (1 x h vector): u_s denotes the value product of one hour of skilled labour power s, measured in hours of unskilled labour (the ratios for converting skilled labour into simple labour, $u_o = 1$).

The critique of Morishima's conversion ratios

Morishima [3, p. 192f.] presumes, in a way, that unskilled labour power is given for the economy and that the different kinds of skilled labour power are 'produced' from it and used in the production of various commodities. We will show that Morishima eventually treats skilled labour power the same way as the common (non-labour) commodities, i.e. he supposes the same value-process to take place in the production of skilled labour power as in case of common commodities. Morishima defines the values of the common commodities *(p*)* and the conversion ratios of skilled labour into simple labour *(u*)* with the following formulae:

$$p^* = p^*R + u^*M + m^* \tag{1}$$

$$u^* = p^*F + u^*N + n^* \tag{2}$$

It can be seen from (1) and from the concept of the conversion ratios that if the value product of one hour of simple labour is one unity, then skilled labour of kind s produces a value of the size u_s in one hour. From the formal definition of the conversion ratios it is tempting to regard them as the values (quasi-values) of different kinds of skilled labour power, although Morishima carefully avoids this interpretation. As we shall see, it would really be difficult to interprete them as values, at least in a capitalist mode of production. The basic difficulty with such interpretation is that it is not in conformity with the Marxian concept of the value of labour power, which defines it as the value of

*It should be clear that in our interpretation n_s will be greater than or equal to 1, since it contains the unskilled labour to be trained into skilled labour.

the consumption basket necessary for its reproduction. One cannot determine the value of labour power in the same way (total labour content) as the values of common commodities, since the value of labour power is equal only to the labour content of the material inputs necessary for its reproduction. Besides, as we shall see, if one wants to keep Marx's basic assumption about the uniformity of the rate of surplus value, then Morishima's conversion ratios *(u)* cannot be equal to the values created in one hour by different kinds of skilled labour, i.e. they are not the real conversion ratios either.

Let w_s be the Marxian value (the value of the necessary consumption) of skilled labour power *s*. Thus the following definitional equation has to hold:

$$w^* = p^*F + w^*N + w_0 n^* \tag{3}$$

From this the rate of exploitation of skilled labour power *s* (r_s) can be determined by the following equation:

$$r_s = \frac{u_s - w_s}{w_s}, \quad s = 1, 2, \ldots, h, \tag{4}$$

where the numerator is equal to the unpaid labour, the denominator is equal to the paid labour. The term u_s is the 'real' conversion ratio, i.e. the value product of one hour labour measured in terms of hours of simple labour.

If we start from the assumption that labour is homogeneous in terms of exploitation, then the above partial rates of surplus value have to be equal to each other and this equal size is the general rate of surplus value *(r)*:

$$r = \frac{u_1 - w_1}{w_1} = \frac{u_2 - w_2}{w_2} = \ldots = \frac{u_h - w_h}{w_h} = \frac{1 - w_0}{w_0}, \tag{5}$$

where w_0 is the value of simple labour power ($w_0 = p^*f$).

In order to show that Morishima's conversion ratios can not be, in general, consistent with the assumption of a uniform rate of exploitation let us first rearrange equations (5):

$$u_s = (1 + r)w_s \quad (s = 1, 2, \ldots h) \quad \text{and } l = (1 + r)w_0. \tag{6}$$

Now let us substitute these "real" conversion ratios into Morishima's form (2) and divide both sides by $(1 + r)$. As a result we will obtain an alternative definition for the values of skilled labour:

$$w^* = \frac{1}{1 + r} p^*F + w^*N + w_0 n^*. \tag{7}$$

A simple comparison of (3) and (7) will immediately reveal that the values of the various kinds of labour derived from Morishima's conversion ratios will, in general, be different from those implied by Marx's definition. And this proves from a different aspect the fact, pointed out by Morishima himself, too, that his solution will generally give rise to differing degrees of exploitation.

Before giving the correct solution to the problem let us turn our attention to an interesting possibility of interpretation. Namely, there is a single special situation, in which Morishima's conversion ratios could be interpreted as values of different kinds of skilled labour and, at the same time, we could retain the assumption of a uniform rate of exploitation. This special case can be characterized in the following way. Suppose that the social reproduction of skilled labour power can be divided into two separate phases. The first phase is the reproduction of simple, unskilled labour, governed by socio-biological laws. The second phase is the 'skill-production's, subject to the general laws of Commodity production. It is assumed, that the only subject of exploitation, variable capital, is the simple (unskilled) labour. Skilled labour is in no way different from any common commodity product. Workers sell their simple labour power to the capitalists, who in turn use it in different kinds of production processes, partly in the process of skilled labour production. Since skilled labour production is governed by the law of value, the capitalists running this training enterprise will also realize surplus value. The value of skilled labour s is equal to Morishima's conversion ratio (u_s). This value can be divided into two main parts. $(p^*f_s + u^*n_s) + w_o n_s$ is the sum of the consumed constant and variable capital (recall that the employed skilled labour would be treated here as part of the constant capital). The rest of the total value, $(1-w_o)n_s$ is the surplus realized in this commercialised training process.

where

$$\frac{1-w_o}{w_o} = \frac{1-p^*f}{p^*f} = r$$

is the general rate of surplus value.

This interpretation is, however, disputable from different aspects. Among other things it considers the training of labour power a productive process, which seems to contradict the usual interpretation of the notion of productiveness usually confined to the sphere of material production. However, it is worth referring to Marx, namely that passage in the Capital which seems to sustain such an interpretation. He wrote the following about capitalist commodity production as a special commodity production in which productive labour gains a new sense: "That labourer alone is productive, who produces surplus value for the capitalist, and thus works for the self-expansion of capital. If we may take an example from outside the sphere of production of material objects, a schoolmaster is a productive labourer, when in addition to belabouring the heads of his scholars, he works like a horse to enrich the school proprietor. That the latter has laid out his capital in a teaching factory, instead of in a sausage factory, does not alter the

relation. Hence the notion of a productive labourer implies not merely a relation between work and useful effect, . . . , but also a specific, social relation of production . . ." [6]

This quotation is not contrary to the interpretation of Morishima's conversion ratios as values. Another, even more serious, difficulty with this interpretation is, however, the fact that it is contradictory to the empirical observation that workers' wages, in general, cover not only the costs of reproduction of their simple labour power, but they earn more, and that they usually contribute to the costs of their own training. Moreover, even in Marx's view, the costs of training are among the costs which determine the value of labour power. Also, in real life, the owner of skilled labour power is the worker and not the school proprietor as the above interpretation would suggest. Following this idea one could conclude that skilled workers are more or less capitalists: advancing money for their training and getting a surplus out of it. These conclusions are not quite opposite to certain experiences, moreover they seem to agree well with some current concepts of human capital: still we think they are rather disputable.

Thus, in the case of a capitalist mode of commodity production the above value interpretation of Morishima's conversion ratios seems to be unreasonable. Under socialist production relations, however, a similar interpretation of the value of labour power could be more meaningful. In this case the costs of training are covered by society so that Morishima's conversion ratios could be interpreted as the social costs of labour power reproduction and, conclusively, as values.*

A possible correction of Morishima's solution

Analysing the solution suggested by Morishima leads us to an alternative way of determining the conversion ratios. Let us suppose that the value of labour power is determined by the costs of its reproduction. This means that the value of one hour of unskilled labour is defined as

$$w_o = p^* f, \tag{8}$$

while the value of skilled labour is

$$w^* = p^* F + w^* N + w_o n^*. \tag{9}$$

Recall that n_s is greater than 1 and the difference is the amount of simple labour power employed in training labour power s (1 is the trained labour power itself.) Therefore $w_s - w_o$, i.e. the difference between the values of skilled labour s and unskilled labour is, in fact, the cost of training.

*The production price of labour power in socialism is discussed from the same aspect in Bródy [2]

The assumption of a uniform rate of surplus value implies that the relative ratios of the value products of different kinds of labour power are equal to those of their value. Hence the conversion ratios needed for the reduction of skilled labour into simple labour are given by the vector $\frac{1}{w_0} w$.

Dividing (9) by w_0 and denoting the resulting conversion ratios again with vector u we get the following definitional equation:

$$u^* = \frac{1}{w_0} p^*F + u^*N + n^*,$$

or taking into consideration the already known relationship $\frac{1}{w_0} = 1 + r$:

$$u^* = (1 + r)\, p^*F + u^*N + n^*. \tag{10}$$

The above definitions differ from Morishima's formula (2) only in the $(1 + r)$ multiplier before p^*F. Hence we can consider them as its correction.*

Unlike Morishima we derive the ratios from the values of labour power and the uniform rate of surplus value. These variables can be simultaneously determined, together with the values of the common commodities, by solving a parametric eigenvalue problem. We will show this, now. The values of the common commodities can be determined by (1) which can be rewritten in the following form:

$$p^* = p^*R + w^*M + w_0 m^* + r(w^*M + w_0 m^*) = p^*R + (1 + r)\,(w^*M + w_0 m^*). \tag{11}$$

On the basis of equations (8), (9), (11) the full value-system, consisting of p^*, w^*, w_0 and r, can be determined by the following eigenvalue problem:

$$(w_0, w^*, p^*) = (w_0, w^*, p^*) \begin{pmatrix} 0 & n^* & (1 + r)m^* \\ o & N & (1 + r)M \\ f & F & R \end{pmatrix} \tag{12}$$

Under normal economic conditions** the above problem will have a unique positive solution and r will be such as to make the dominant eigenvalue of the

*U. P. Reich [4] arrived at the same correction of Morishima's formula but on a rather mathematical basis.

**In an unpublished thesis the author of this paper has extensively examined the closed (eigenvalue) forms of the value system determination. It has been shown that uniqueness of a positive solution can be guaranteed under reasonable economic assumptions, without making use of the indecomposability assumption.

corresponding matrix equal to 1. It is known that in the case of homogeneous (social average) labour the use of a closed form, simultaneous determination of the full value-system can be avoided. In that case the value-system can be recursively determined: first the values of the common commodities as total labour content, then the value of the labour power and the rate of surplus value. In the case of heterogeneous labour and a general (uniform) rate of surplus value the closed forms seem to be indispensable.

Alternative forms for determining the value-system

The above analysis supports and extends an earlier suggestion of Bródy [2], who outlined the determination of conversion ratios as follows: "All we have to do is to disaggregate (or rather not to aggregate) the labour sector in our matrix A. If under Simple Reproduction we have as many rows and columns for labour as the number of different skills, we will still have a non-negative and irreducible matrix yielding a unique positive left-hand eigenvector: values. The relative weights for different skills, that is, their values can be used thereafter to homogenize labour to a common standard." (Bródy, 2, p. 87)

Bródy's assertion is completely correct but needs some further specification. Bródy based his statement on the analysis of the *no-surplus-value* case and gave no mathematical formulae. He even thought that his solution was not completely satisfying when surplus value existed in the economy. This led him to the exclusion of the uniform rate of surplus value from his investigations. We will concretize his description and put it in a mathematical form which differs from ours and also, we will show that his suggestion works in the case of a uniform, different from zero rate of surplus value, too.

We have to remind the reader that in case of an aggregated labour power sector Bródy assumes that the reproduction of labour power does not require labour directly. This could hardly be sustained unless only simple labour were taken into consideration. Nevertheless, we will show that with some rearrangement of the input matrix and modifying the meaning of the labour power sector one can formally get rid of the direct labour requirement.

Let Bródy's augmented and disaggregated input coefficient matrix have the form:

$$\begin{pmatrix} O & \bar{M} \\ \bar{F} & R \end{pmatrix}.$$

If the reproduction of labour power has direct labour input requirements this matrix cannot be the same as ours, which had the following general form:

$$\left(\begin{array}{cc|c} o & n^* & m^* \\ o & N & M \\ \hline f & F & R \end{array}\right)$$

However, from our input coefficient matrix we can define the components of Bródy's disaggregated matrix in such a way, that it should also give the correct solution.

One need not change at all the columns corresponding to the common commodities, therefore $\bar{M}$ in Bródy's matrix will be the same as in ours, i.e.

$$\bar{M} = \begin{pmatrix} m^* \\ M \end{pmatrix}$$

On the other hand, one has to define $\bar{F}$ in the following way:

$$\bar{F} = [f,(F + fn^*)(E - N)^{-1}].$$

It can be easily shown that with these specifications Bródy's matrix will yield the same solution as ours. We have to check only the equations corresponding to the determination of the values of skilled labour power. This equation will be the following from Bródy's formula:

$$w^* = p^*(F + fn^*)(E - N)^{-1}$$

Taking into consideration that $p^*f = w_0$ and multiplying both sides with $(E - N)$, and after some rearrangement, one will immediately see that equations (9) and (13) are equivalent. And this proves our statement.

It will be useful to dwell upon the problem of equivalence of the above two forms, this time from a purely economic point of view. In order to make one unit of skilled labour power s available for productive employment (i.e. for the production of common material commodities), the labour power sector has to reproduce skilled labour of different kinds in amounts shown in the sth column of matrix $(E - N)^{-1}$.

Matrix F contains the *direct* material inputs needed in the reproduction of skilled from unskilled labour power, whereas matrix fn^* shows the *indirect* consumption requirement for this, which is transmitted by the unskilled, simple labour employed in this process (partly as subject to training). Therefore, matrix $(F + fn^*)(E - N)^{-1}$ contains nothing else but the direct-plus-indirect necessary consumption required for the social reproduction of one unit of various kinds of *productively employable* skilled labour power. Thus, the labour power sector in Bródy's approach should be interpreted in a net sense, i.e. the output of these sectors are not different kinds of labour power in general, but labour power available for productive use.

It is also interesting to note that the above interpretation is more in line with the traditional definition of necessary consumption or necessary product at national level. In the political economy textbooks the above concepts are defined as the direct and indirect consumption requirements of workers employed in material production. The above exercise not only shows how the indirect requirement can be accounted for, but also indicates an alternative way of defining the necessary consumption of productive workers.

From the above considerations one can also derive a way in which the double counting of simple labour power to be trained into skilled one can be avoided. It should be clear that for the purposes of planning the physical side of the reproduction process the above augmented input coefficient matrices are not quite suitable. Instead of them it would be more appropriate to use the following form:

$$\begin{pmatrix} o & (n-1)^* & m^* \\ o & N & M \\ f & F+fl^* & R \end{pmatrix}$$

This form of the overal input coefficient matrix can be equally well applied in the analysis of both the value and the physical aspects of the reproduction process.

To show this, let vector q be the production level of the common commodities, vector h the amount of skilled labour of various kinds and h_o the amount of labour left unskilled

(thus $\sum_{i=o}^{h} h_i$ is the total available labour time). The product of the above input coefficient matrix and vector (h_o, h, q) gives the commodity input vector required in the production of the different material and labour commodities. Disaggregating the conditions of physical equilibrium will yield the following inequalities:

$$(n-1)^*h + m^*q \leqslant h_o,$$

the use and the source of unskilled labour,

$$Nh + Mq \leqslant h$$

the use and the source of skilled labour of various kinds,

$$fh_o + (F + fl^*)h + Rq \leqslant q,$$

the size of replacement and necessary product related to the gross product (the difference of the two sides is the surplus product).

The above relations can be rewritten in the following condensed form:

$$\begin{pmatrix} o & (n-1)^* & m^* \\ o & N & M \\ f & F+fl^* & R \end{pmatrix} \begin{pmatrix} h_o \\ h \\ q \end{pmatrix} \leqslant \begin{pmatrix} h_o \\ h \\ q \end{pmatrix}$$

Note that if we write equalities instead of the inequalities then the equilibrium conditions of a self-supporting economy will appear in the form of an eigenvalue problem.

The value-determining form, the equivalent of (12) will in this case be the following one:

$$(w_0, w^*, p^*) = (w_0, w^*, p^*) \begin{pmatrix} o & (n-1)^* & (1+r)m^* \\ o & N & (1+r)M \\ f & F+fl^* & R \end{pmatrix}$$

Reflections on an old debate: skilled and unskilled labour

We do not want to reproduce the whole debate, but still we would like to recall its main elements. At the core of the debate one can find some scattered, seemingly contradictory references in the Capital about the reduction of skilled to simple labour. The following quotations will shed light on the nature of the problem.

"All labour of a higher or more complicated character than average labour is expenditure of labour power of a more costly kind, labour power whose production has cost more time and labour, and which therefore has a higher value, than unskilled or simple labour power. This power being of higher value, its consumption is labour of a higher class, labour that creates in equal times proportionally higher values than unskilled labour does." [6, p. 197]

Note that Marx implies only a mutual correspondence, not some kind of one-way causality between the skilfulness of labour and the value of labour power that exerts it. More skilled labour is the manifestation of a labour power having greater value and, from the reverse aspect, labour power of greater value results in more complicated labour. Only the training costs seem to bring some kind of causality into the description. We will come back to this later. Under the above quotation we can read in the footnote:

"The distinction between skilled and unskilled labour rests in part on pure illusion, or, to say the least, on distinctions that have long since ceased to be real, and that survive only by virtue of a traditional convention . . . Accidental circumstances here play so great a part that . . . the lower forms of labour which demand great expenditure of muscle, are in general considered as skilled, compared with much more delicate forms of labour . . ."

And finally to the reduction of skilled labour:

"Experience shows that this reduction is constantly being made. A commodity may be the product of the most skilled labour, but its value, by equating it to the product of simple unskilled labour, represents a definite quantity of the latter alone. The different proportions in which different sorts of labour are reduced to unskilled labour as their standards are established by a social process that goes on behind the backs of the producers, and, consequently, appear to be fixed by custom." [6, p. 44]

These quotations have been frequently and in many ways interpreted. We will also try to summarize how we understand them. Let us begin with the last one! According to our interpretation Marx says nothing more than that if one believes that the basis of the exchange value is labour value (the abstract labour content of the commodity) and ex-

change is an ordinary empirical fact then this reduction of various kinds of labour to one common standard must be carried out in practice. On the other hand, according to Marx, this reduction takes place without deliberate and exact measuring, but through trial and error. What can be the "real" ratios saved and distorted by tradition? This question is partly answered in the second quotation. Here again two elements seem to be important. The first one is that Marx emphasizes the deforming influences of tradition which may give rise to considerable and random deviations between the prevailing and real conversion rates. Secondly, he points to the close relationship between the complexity of labour and the qualification of labour power. This element pointedly appears in the first quotation. Marx here says that greater training costs result in more skilled labour and, on the other hand, in a labour power of greater value. In fact, Marx rather clearly declares that labour is assumed to be more complicated (skilled) only because it incorporates greater training costs. Another interesting element in the first quotation is that if the value of some labour power is higher then its value creating power is necessarily greater, too.

Even among those who tend to accept a high correlation between the reproduction costs (value) and skilfulness (complicatedness) of labour there is a disaggreement whether it should be understood as a linear correspondence. The assumption of a uniform rate of surplus value, see equations (6), clearly implies such linearity.

Nor is it quite clear how one should determine the consumption of various groups of labour which can be viewed as socially necessary for their reproduction. In our approach we adopted a view by which the necessary consumption was divided into two parts. One part was given as a uniform consumption pattern necessary for the reproduction of simple, unskilled labour power. Skilled labour consumed more than this only through its training process. Therefore, our approach could be viewed as a *normative* one.

The above solution is, however, not quite satisfactory from a *descriptional* viewpoint. Could the observed consumption of different labour power groups be regarded as the consumption socially necessary for their reproduction? Marx emphasizes that random factors, traditional agreements may significantly divert observed consumption from the socially necessary one. Socially necessary consumption is generally a rather loosely defined concept (in case of homogeneous labour, too.) Consumption of labour power is to a large degree a biologically, ethically, socially and historically determined distributional problem. This is emphasized by Marx himself, too and many authors tend to consider consumption necessary for the reproduction of labour power equal to observed consumption. The question becomes more complicated when heterogeneous labour is considered. In this case it would be a hardly acceptable answer (though a possible interpretation), that the inputs necessary for the reproduction of the different kinds of labour power are equal to their observed, actual consumption patterns. The observable differences in cultural and living levels of various groups of workers are hardly justifiable by the different reproduction requirements. More precisely: if we accepted this concept we would base the determination of social inputs necessary for the reproduction of labour power on the actual distribution patterns. Thus the basic question that would

need more investigation can be phrased in the following way. Is there any normative feature in the consumption socially necessary for the reproduction of different kinds of labour power or do we have to consider them as determined merely by the prevailing distribution processes? Anyway, a revision of our previously presented solution only from this point of view would not pose any great problem. All we have to do is to use the actual consumption coefficients of different kinds of labour power and not the consumption of unskilled labour incrased by the training costs.

Another key problem is the determination of the value creative power. Are we right to assume that the value creative powers of different kinds of labour are proportional to their values, i.e. to assume a uniforme rate of surplus value? Although Marx considered the emergence of a uniform rate of surplus value as a tendency-law, in reality this law is obstructed by several factors: differences between abilities, the fact that various forms of education are not available for everybody, differing social prestige of different jobs etc. The question is whether the effect of all these factors could be considered random or not. If not, one should be able to determine in some way either the different rates of exploitation or the value creating power of different kinds of labour. If one can determine any of the two magnitudes then the other can be determined through the value of labour power. If not, the values remain undetermined.*

These are some of the unsolved key problems and the alternative ways to handle them. We leave them without definite answers and in the next part we will illustrate the closed-form determination of the full value system by a numerical example. We will also examine a procedure, in which a uniform rate of surplus value but different rates of exploitation are assumed.

A numerical example

Let us consider an economy where three producing branches are distinguished: industry, agriculture and luxury industry. Let their total output be 1000, 2000 and 100 units, respectively. The input matrix of the economy is the following:

Table 1
Intersectoral flows

Producer	User		
	industry	agriculture	luxury industry
industry	300	400	20
agriculture	200	200	30
luxury industry	0	0	0

*S. *Bowles* and A. *Gintis* [5] suggest an alternative solution in their paper. They define the values as vectors rather than scalars in order to avoid the reduction problem. At the same time the rate of surplus value is treated as a vector as well.

We suppose that workers can be classified into three homogeneous groups: highly skilled, skilled and unskilled workers. Let the labour input matrix, measured in working hours, be as given by *Table 2.*

Table 2
Labour used in production

	industry	agriculture	luxury industry
highly skilled	50	60	10
skilled	400	200	0
unskilled	200	800	60

From the above production data we can calculate the following input coefficients:

$$m^* = (0.20 \quad 0.40 \quad 0.60)$$

$$M = \begin{pmatrix} 0{,}05 & 0.03 & 0.10 \\ 0.40 & 0.10 & 0.00 \end{pmatrix}.$$

$$R = \begin{pmatrix} 0.30 & 0.20 & 0.20 \\ 0.20 & 0.10 & 0.30 \\ 0.00 & 0.00 & 0.00 \end{pmatrix}$$

Suppose that the consumption necessary for the reproduction of one hour of simple labour is given by

$$f = \begin{pmatrix} 0.05 \\ 0.30 \\ 0.00 \end{pmatrix}$$

Let the input coefficients in the training of skilled workers be as follows:

$$n^* = (1.10 \quad 1.05)$$

$$N = \begin{pmatrix} 0.02 & 0.10 \\ 0.00 & 0.00 \end{pmatrix}$$

$$F = \begin{pmatrix} 0.10 & 0.05 \\ 0.30 & 0.20 \\ 0.00 & 0.00 \end{pmatrix}$$

With the above data the solution of the parametric eigenvalue problem (12) will be the following:

$$r = 1.2 \text{ (the rate of exploitation is 120 \%)}.$$

The values of one hour of different kinds of labour power are

$$w_0 = 0.4545, \quad w_1 = 1.0742, \quad w_2 = 0.9206,$$

and finally the values of commodities will be

$$p_1 = 1.9517, \quad p_2 = 1.1913, \quad p_3 = 1.5884,$$

In our example one hour of highly skilled labour turns out to be 2.36 times, skilled labour 2.03 times as complicated as that of simple labour.

Uniform rate of surplus value and different rates of exploitation

Throughout our earlier discussion of the alternative approaches to the value determination problem we have assumed that the rate of surplus value is the same as the degree of exploitation. It is, however, possible to connect the discussed alternatives by retaining the assumed homogeneity of workers in surplus value production allowing though, at the same time, for different degrees of exploitation, a segmented labour power market.* One could reason in the following way. Suppose that the inputs socially necessary for the reproduction of various kinds of labour power can be determined by some appropriate method. Based on this and other input parameters we determine the full value-system assuming a uniform rate of surplus value. Next, taking the resulting value system as given, one can compute the value of the actual consumption of different labour power groups. The actual degree (rate) of exploitation could then be identified as the ratio of the value product to the value of the actual consumption of various kinds of labour power.

But how could one determine the socially necessary consumption of the various labour groups? One possible way to do this could be the following. Total social expenditure of the workers involved directly or indirectly in productive activities should be split into two parts: expenditures connected to living and training (education). Total consumption connected to living expenditures divided by total working hours could be considered as the consumption socially necessary for the reproduction of one hour of simple labour power. The per hour necessary consumption of a particular kind of skilled labour power

*The segmentation problem was raised by Bowles and Gintis [5] and also taken up by Reich [4] Here we propose a somewhat different treatment of the problem.

could then be defined as the sum of the necessary consumption of simple labour power and the per hour training expenditure. This way the cost of training and the historical-ethical element would appear together in the determination of the value of labour power, even the random deviations would be levelled out by means of averaging.

The following example will hopefully illuminate the outlined procedure. Suppose that inputs for reproduction of the groups of workers are known and disaggregated into living and training consumption, is in *Table 3.*

Table 3
Living and training consumption of different labour power groups

	highly skilled		skilled		unskilled		total	
	living consumption	training consumption	living consumption	training consumption	living consumption	training consumption	living consumption	training consumption
industry	24	19	30	30	40	–	94	49
agriculture	135	55	180		250	–	565	175
luxury-industry	0	0	0	0	0	–	0	0
highly skilled	0	4	0	60	0	–	0	64
skilled	0	0	0	0	0	–	0	0
unskilled	0	18	0	30	0	–	0	48

Thus, in our example 137, 830 and 100 units of industrial, agricultural and luxury-industrial surplus product are created in the economy, and for this 184, 600 and 1108 highly skilled, skilled and simple labour hours are utilized. Capitalists use 1892 labour hours and give 94 units of industrial product and 565 units of agricultural product to workers for their consumption. Hence, the living consumption coefficients per hour will be the same as those of necessary consumption of simple labour *(f)* in our earlier example: (0.05; 0.30; 0.00). The training expenditure coefficients are the same, too, therefore the value systems are equal.

With the computed value system we can now determine the value of actual consumption patterns in Table 3 and compare them to the value products of the various kinds of labour. The actual rates of exploitation will in our example significantly differ from each other. The actual rate of exploitation of simple labour power is 195 %, that of skilled labour power is 120 % and that of highly skilled labour is 35 %. Hence the labour power market seems to be significantly segmented.

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РАЗНОРОДНЫЙ ТРУД И ВЕЛИЧИНА СТОИМОСТИ

Э. ЗАЛАИ

В теории трудовой стоимости *Маркса* при анализе величины стоимости рабочая сила обычно выступает как однородная. Эта однородность может пониматься в отношении ряда признаков. Наиболее спорным является сведение сложного труда к простому труду. В этих дискуссиях сложность труда, то есть его способность к созданию стоимости и определение стоимости рабочей силы выступают взаимосвязано. Гипотеза Маркса о существовании единой нормы прибавочной стоимости предполагает прямую зависимость между двумя указанными величинами.

Моришима предпринял попытку определить пропорции пересчета (сведения) сложных видов труда в простой труд. Однако его метод дает как правило различные нормы прибавочной стоимости при разных видах рабочей силы. Его пропорции пересчета при своеобразных условиях могут рассматриваться как стоимость квалифицированной рабочей силы.

При предположении единой нормы прибавочной стоимости стоимость обычных товаров и различных видов рабочей силы, а также норма прибавочной стоимости могут быть определены только одновременно, симультанным образом. Математически определение системы стоимости может быть представлено в форме параметрического уравнения собственного значения. На основании определенных выше стоимостей могут быть выведены и пропорции пересчета. Полученное решение формально может рассматриваться как уточнение уравнения Моришимы. Анализ подтверждает и развивает положения, выдвинутые венгерским экономистом А. *Броди.* Конкретизируя его положения, представленные при определении стоимости матрица полных затрат и сектор рабочей силы получают новое толкование. Это новое толкование открывает возможности для нового подхода к понятию необходимого продукта.

Обзор и анализ дискуссии о неоднородных видах труда выдвигает возможность нового подхода к вопросу сегментированного рынка рабочей силы. Стоимости различных видов рабочей силы можно представить как суммы средних стоимостей средств жизни рабочих и издержек по их обучению. На базе расхождений между стоимостями рабочей силы, определяемых указанным образом, и стоимостями фактического потребления можно судить о сегментации рынка рабочей силы.

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I. FENYŐVÁRI

ON THE HUNGARIAN FINANCIAL SYSTEM

How much has the financial policy of the period following the 1968 reform been determined by the deficit of the state budget and by the indebtedness of enterprises? Has the established structure of financial control stimulated or impeded the evolution of economic development and management of an intensive type? Which are the financial policy means (structure) under contemporary Hungarian conditions that may best further the raising of economic efficiency: dominance of budgetary (fiscal) policy or direct application of credit (monetary) policy means in the control of enterprise management? In the present article the author tries to answer all these questions.

The Hungarian financial system also consists of the triumvirate of *monetary, budgetary and foreign exchange policies.* The task *of monetary (credit) policy* is to ensure the amount of money required by the economy; the function of *the state budget* is to participate in the distribution of the income produced, while *foreign exchange policy* regulates domestic settlement resulting from international relations as well as the use of foreign resources.

Foreign exchange policy has an important part in the financial system, but the two main tools of financial control at national economic level are practically the budgetary and monetary policies. This results from their task, namely, that domestic and foreign monetary sources available for the national economy as well as money created through credit are distributed among the individual income recipients and utilization purposes in these two financial spheres.

Monetary policy is the ensemble of measures aimed at the determination at national economic level of the quantity of money required by the economy for the realization of production and circulation as well as at the inner distribution of this quantity. Since the *money of the economy is based upon credit,* monetary policy decisions and the tools serving the realization of these decisions are implemented through credit policy and thus through the activity of the bank(s) granting credit. As it results from its very authority the credit system fulfils the demand for money of the economy in two forms. It grants *money-creating* – usually short-term – credit for meeting demands for money of material accumulation exceeding savings, furthermore, the banking system grants *money-redistributing* credit from savings and foreign sources for such purposes or markets where efficient capital investment can be expected and where temporary shortage of money or surplus goods are arising.

According to groups of income recipients credit may be asked by and granted to enterprises, to cooperatives, to the state and to the population. Through complicated money redistributing (income regrouping) processes the one originally obtaining credit

hands over a part of credit money; for example, the enterprise pays it to the state budget in the form of taxes, the state budget hands it over to the enterprise as subsidy, etc. However, it is not without importance how the direct utilization of credits issued by the banking system is distributed among the individual groups of income-recipients. The role of the credit system, consequently also of the entire financial system, in the control of enterprise management is basically determined by the circumstance how much of the credit issued – to satisfy money demands of management for financing tasks – is directly used by the state budget and the enterprises, respectively.* In my opinion this is a very important financial policy, what is more, even economic policy issue. Therefore, I try to examine it in this study as reflected by recent Hungarian experience.

Characteristics of the Hungarian financial system after 1968

Centralization endeavours in the financing of management

With the introduction of the new order of economic control and management with 1968 also such measures were taken which wished to put also monetary relations at the service of intensive economic development.

Parallel with the decentralization of a part of central tasks the net income centralized in the state budget decreased and that left with producing units increased. Exclusive financing from the state budget of the expansion of fixed assets was stopped, development funds formed from own income (profits) have become the primary source of enterprise developments. The role of the credit sphere expanded, since previous production (short-term) credits were complemented also by medium and long-term ones granted directly to the enterprises as advances on development funds. With the decentralization of incomes the self-financing ability of enterprises increased, but in such a way that their autonomous development decisions were influenced also by the limiting and selective system of credit criteria.

However, the new money supply system of enterprises was deformed within a relatively short time.

In the years 1968–1969 much more than expected profits were realized in the enterprise sphere. In consequence of increasing own resources development activity, especially the expansion of fixed capital suddenly increased. The financial system delimited by the new system of regulators could not stop this process, what is more, profits realized in prices – and higher than expected – were further increased by budgetary subsidies.

The regrouping of incomes to the sphere of enterprises, strengthened by budgetary subsidies, brought about undersirable results not only in accumulation, but also in financial processes. Participation of the state budget in investment financing increased.

*Here, for the time being, we disregard the population.

Because of increasing amounts of production subsidies, price-subsidies and others the state budget soon ran into deficit.

Increasing participation of the state budget in the money supply to enterprises was the beginning of a process that later on led to the suppression of control by credits and to the development of the budgetary model of the financial system.

It meant some deviation that in 1971 and 1972 the direct role of credit temporarily increased in enterprise management following certain changes in fiancial constructions, more precisely in certain elements of the new economic regulators in 1971. In both years the average credit drawing by enterprises exceeded the dynamics of previous years by 4–6 per cent.

However, despite a growing income centralization the growth rate of budgetary deficits, consequently also the credit demands of the state budget did not considerably diminish in these years, either. The reason was that though the growth in the amounts of various production, price and other subsidies paid by the state budget diminished in 1971–1972 by 8–10 per cent, at the same time investment subsidies exceeded those paid in 1970 by 100 per cent in 1971 and by nearly 20 per cent in 1972.

The "external" control of the money supply of enterprises was characterized practically by the methods used in the first five years of the new economic mechanism even after 1972. In the years when the growth rate of production and development subsidies granted to enterprises decreased (1972, 1976, 1978), bank credits raised by the enterprises began to increase at a more rapid rate. When the use of credits decreased (1973, 1975, 1977) then the growth of subsidies was extraordinarily fast.

Thus, a joint movement (of opposite direction) developed in the control of money supply of enterprises between the budget and the monetary sphere: contraction of the one was accompanied by expansion of the other and *vice versa (Figure 1).*

Such coordination of budgetary and credit money granted to enterprises was correct financial policy practice in itself. The tension was caused by the greater than justified purchasing power flowing to the enterprises through these two channels combined. As a matter of fact, neither the credit policy, nor the state budget (nor both together) could brake the development ambitions of enterprises as well as the increase in consumption funds exceeding estimates. Practically, fiscal and monetary policy continued to meet the money demands of an economic growth of extensive character.

Another – not unimportant – contradiction of the Hungarian monetary system was that, contrary to the concept of the reform, *centralized sources* gradually *came to the fore* in financing both the entire economy and the enterprises; money supply through the state budget had increased. *(Table 1)*

Obviously, the state budget could meet financing tasks of such an extent only if it spent more than its revenues and raised credits to cover deficits. Budgetary deficit and the resulting growth in credits raised were natural concomitants of the facts that, firstly, central control tasks *widened partly spontaneously, partly in consequence of deliberate centralization,* but, secondly, the centralization of net income could not keep abreast of the increasing money demands of the state budget.

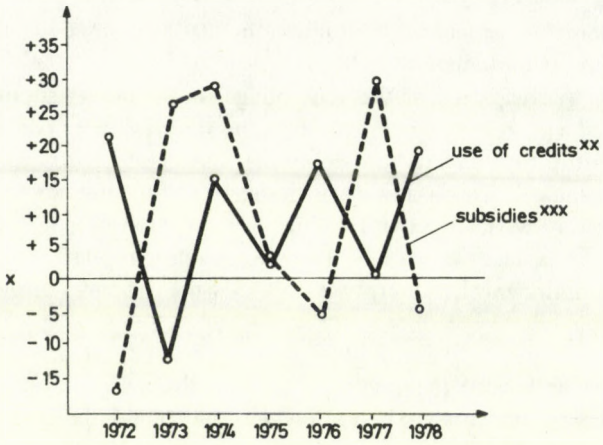

Fig. 1. Changes in credits and subsidies granted to enterprises and cooperatives in the years 1972–1978.

*(+) growth, (–) decrease over the previous year, in percentage

**stock of credit on investment and circulating assets at the end of the year

***yearly amount of development, production, price and other subsidies.

Table 1

Increase in the proportion of budgetary expenses and subsidies

	1970	1972	1974	1976	1978
Budgetary expenses in percentage of GDP	53	54	63	61	62
Subsidies in percentage of profits	80	75	89	99	90

Diminishing regulatory role of credit policy

The role of budgetary (fiscal) policy, i.e. of a credit raising agency whose demands had to be met automatically and unconditionally, increased. The role of credit policy gradually decreased, its possibilities and the field of application of its tools were restricted to credits directly granted to enterprises and cooperatives. However, decisions on credit granting and the applicability of tools developed for the realization of these decisions were distorted and impeded, even in the granting of credits to enterprises.

In the scope of enterprise credits the (otherwise correct) principle was formulated as a basic requirement that the bank should grant any kind of credit only to creditworthy economic units. This requirement materialized in a system of criteria whose elements

Table 2

Difference between net income and profits per 100 Ft of assets engaged in the industry percentages

	1970	1972	1974	1976	1978
Mining	6.5	0.9	−3.8	13.7	14.1
Electric energy industry	3.5	3.6	4.2	4.3	6.0
Metallurgy	11.9	5.5	9.1	5.3	6.5
Engineering	25.0	9.5	10.9	15.1	14.4
Building materials industry	17.0	9.2	9.1	7.7	7.8
Chemical industry	20.2	7.9	7.8	14.3	12.5
Light industry	21.3	3.7	5.2	8.3	7.0
Other industries	15.1	2.9	8.9	16.9	16.6
Food industry	10.0	1.9	−5.6	2.2	−0.6

were: profitability, regular realization as well as the continual meeting of financial obligations on time.

These criteria of creditworthiness had to aid first of all the operative credit decisions of banking agencies. This kind of assistance has, however, become of a somewhat dubious value in the practice of Hungarian credit granting, mainly as regards the criterion of profitability. Namely, because of the high subsidy contents of enterprise profits, it became highly questionable which enterprise could be considered as profitable at national economic level. There were several enterprises which could "earn" profits because they obtained direct or indirect subsidies from the state budget and/or less than average income was drawn away from them. After all, a considerable part of enterprises attained their profitability from bank credits, namely, from those subsidies, allowances payable to them by the state budget only because the latter raised credit to cover its excess expenditure.

Prices and financial bridges complementing the price system diverted relative enterprise incomes from the relative ability to produce net social income. The magnitude and direction of deviations are well illustrated, for example, by the difference between net social income and enterprise profits per unit of assets in the individual branches of the industry. *(Table 2)*

In the case of individual enterprises these deviations were considerably greater and had a negative sign more frequently. The deviation between enterprise profitability and that at national economic level distorted decisions on credit granting mainly because it became difficult (eventually impossible) to make a true appraisal of the *long term development* of the efficiency order between various goals and enterprises.

When credit policy and practical credit granting accepted enterprise profits or some of it modified variants for the basis of the profitability requirement, then practically those effects gained momentum that had resulted from the "manipulated character" of

profits. As a matter of fact, through credits money was regrouped also to such fields where development was not at all desirable, or not to such an extent; furthermore, enterprise demands for subsidies and special treatment further increased because of investments with low efficiency (at a deficit).

It determined first of all top level credit policy decisions that after 1968 development credit quotas aimed at the realization of national economic plan targets and substituting for the orientating ability of the price system gradually proliferated.

However, an efficient functioning of the quota system was impeded, on the one hand, because it reflected contradictions of the plan (but, at the same time it did not allow that tensions be dissolved by credit granting), and on the other hand, because a system of conditions otherwise needed for the efficient application of quantitative credit control has not developed or has changed.

– In consequence of the weaknesses of price and incomes control even central control agencies determining quotas only knew what enterprises, branches and goals had to be developed according to the plan. However, there was only little adequate information available on such issues as *costs,* the *efficiency* with which addressees would invest credits granted to them – usually on preferential terms. When deciding on such credits the banking system had no more (valuable) information, either (or if so, then in vain).

– In enterprise interests relations and management practice endeavours for *development at any* price did not change. Many enterprises made development projects and raised credits because they wanted to enjoy the direct and indirect advantages concomitant with development and to have a share in various allowances connected with major development objectives.

– Price and incomes control created such protection for enterprises where there could always be found loopholes for cases when promises made at the stage of development preparations (when asking for preferential credits) were not or only partly kept. In reality credits within quotas could be asked for without any risk, because some subsidy could always be obtained, even ulteriorly, for development projects of high priority.

– Especially sectoral quotas had the disadvantage that they narrowed down the scope of application of banking tools, because a considerable part of the entire credit quota was distributed at some level of the control and management hierarchy.

From among the tools of credit policy also interest policy was given a much smaller regulatory role then had been imagined at the time of the introduction of the reform. The most well-known reasons for this phenomenon were the following:

– Enterprises remained indifferent to interest costs, because they were indifferent to costs in general, in consequence of the high producer price level and their favourable income position. Even interest could be "included" into the price and thus usually shifted onto the buyers. Interest costs caused no problem even with enterprises where there was no possibility for their realization in prices, since the share of interest within total inputs was insignificantly small. (Only interest on credit directly charging development funds meant an exception here.)

Table 3

Voluntary and obligatory reserve formation with the enterprises (together with agricultural cooperatives) in the years 1968–1978

in percentage

	1960	1970	1972	1974	1976	1978
Total reserve formation from aftertax profits	10	5	13	14	18	27
Obligatory part from total reserve formation	80	92	95	98	87	97

– The rate of interest could not be influenced by the demand for or the supply of credit, because in cases of credits where this could have been taken into consideration possibilities were delimited by quotas.

– Partly consciously, partly as a result of a spontaneous process interest has become an element of net social income whose primary task was to promote centralization of income, occasionally to mediate concealed subsidizing.

– The role of interest on deposits paid after loans from enterprise money holders, was no more favourable either. Namely, the overwhelming majority of enterprise savings is not voluntary, nor led by the intention of obtaining interest income in the function of the length of time during which savings were held, but a consequence of compulsory directives. Within the "zone" of obligatory reserve formation money holding enterprises have no alternative between saving or investing capital, nor between forms of saving with varying interest returns (See *Table 3*).

Some remarks

The realization of economic policy objectives may be promoted with various financial policy methods. The most important task of financial policy is to apply the most efficient one of available tools and solutions. This is a precondition of the active role of finances, of their ability to contribute to the planned development of the national economy, and to indicate trends impeding development, harmony or disharmony between plans and possibilities.

It may be asked with good reason whether, instead of the structure and practical methods of financial control outlined in the foregoing, a financial system relying, for example, on a more general extension of monetary policy would not have more efficiently promoted the realization of reform objectives in the entire regulatory system of the new economic control and management.

I think that answering the question will be made easier by the following statements:

– When the supply to the economy and within this to enterprise organizations with money is realized to an increasing extent through the state budget, then the role of

automatisms will decrease on which – among others – also the concepts of the reform connected with the coming to the fore of monetary relations were built and which result from inner laws of movement of financial processes. If goods produced by means of credit cannot be realized or investing of income regrouped through credit involves losses, then money will be "blocked" in circulation and credit not repaid will indicate an upsetting of the balance between goods and money. If the state becomes the most important debtor (to a considerable extent because of the direct financing of production and realization) and cannot repay its credits for a long time, then it cannot be unambiguously stated from this fact where and how much money was "blocked" in circulation, where the lack of equilibrium arose. In this model the automatism of the formation and liquidation of credit money will cease to be a signalling system and "only" indicates that, because of state debts and credit issued in excess of domestic savings, external sources are drawn in at a rapid rate.

– For having more and more money in circulation in the economy in harmony with growth from year to year it is required that some of the income recipients produces a balance of revenues and expenses showing a deficit. It is indifferent from the viewpoint of equilibrium whether this deficit appears with the enterprises or with the state, but only if there exists a system of requirements relying on real value relations which determines the decisions of all groups of income recipients on the utilization (investment) of money nearly to the same extent. If no such system of requirements exists, or if it is distorted, then it seems to be expedient to choose the "lesser evil". In the financial system this lesser evil would have been direct control through credit means.

Namely, the credit system possessed the applicable tools (principles of credit granting, interest, information basis, etc.) already at the introduction of the reform with which the negative effects of price and incomes control could have been mitigated without hurting enterprise independence. It would have meant a more efficient system of requirements if the own enterprise funds had been completed by credits with concrete cover (goods and expected income), repayable within a detemined period and bearing interest than the expansion of subsidies.

– It is likely that even the primacy of the credit system would not have made avoidable the development of chronic deficits in the balance of payments, i.e. a deterioration in external equilibrium relations. However, it can be assumed – starting from the foregoing – that the channeling of a part of export and import subsidies into the credit sphere, on the one hand, as well as an active foreign exchange policy, on the other, would have more strongly restrained these unfavourable processes.

– The state budget has become the central figure of the financial policy of the 1970s not only as monetary regulator, but it has come into lime-light also as "independent" economic subject. The reason for this was first of all the rapidly increasing budgetary deficit.

Despite the fact that the deteriorating financial position of the budget was a necessary consequence of well-known quantifiable external factors and inner economic policy decisions, the state debt meant serious burdens for the economy. However, the actions

restricting the purchasing power aimed also at mitigating budgetary deficits (1971, 1975–76, 1978–79) did not lead to favourable and lasting changes, but stimulated economic organizations for defensive saving behaviour at the same time.

When evaluating the functioning of the financial system until now some factors that have restrained the putting forth of the active role of financial policy through their effect mechanism must not be neglected.

Simple assignment of financial processes has been characteristic in several fields of planning and management even in the last period. Enterprises firstly planned how much investment was needed for the given period, how the production should increase, etc. and financial sources were "gathered" only subsequently.

Lack of the orientating power of the price system necessarily resulted in the central control of resource allocation, the spreading of subsidies and in a weakening of the profit motive. Thus also the role of money has become of secondary importance – at least for the enterprises.

Neutralization by budgetary means of a considerable part of *external effects* on the national economy required an increased central allocation of monetary assets. This practice led to a situation where the information system furthering the ability of enterprises to adapt themselves to new requirements has become unreliable.

The differences in prices, quality and profitability changes for the enterprises – but also for the national economy – according to the realization of products and services domestically, on CMEA or on world markets resulted in a deviating order of value and a complicated system of preferences and dispreferences.

Possibilities for improvement of the financial system

Financing – by monetary means

For improving the financial system and in the interest of formulating a more efficient financial policy the changes carried out in 1980 provide a proper starting basis.

From this viewpoint I consider most important the changes in the system of producer prices and in incomes control. In the new price system world market price effects regulate not only prices of products realized in foreign trade, but – directly or indirectly – also the entire domestic price system. Domestic prices will much more widely and definitely transmit the growing efficiency requirements of international competition than they did previously. Enterprises will compete with prevailing effective international prices and, consequently, there will be no more guaranteed prices or incomes. The normative control of enterprise incomes formation and utilization will better help in the comparison of economic results and in ranking enterprises and activities according to efficiency.

In the interest of creating harmony with the changes, the supply with money of the economy and within them of enterprises could be made more efficient also by the rearrangement of some elements of the financial system. Such budgetary and credit

policy practice ought to be followed through which in all fields where automatism of the formation, survival and liquidation of money can be enforced, the monetary assets required would be directly ensured by the credit sphere.

To this end a part of enterprise subsidies maintained also after 1980 should, in my opinion, be gradually transformed into credits in the years to come. Only a part of them because – from this viewpoint – state subsidies may be divided into two groups:

Subsidies (price subsidies, dotations) diverting costs and/or incomes, for some group of enterprises or cooperatives from those resulting under real market prices cannot be transformed into credit. Namely, the reason for the creation of money regrouped by the state budget under this item is state intervention whose maintenance and elimination, respectively, do not depend on the realization of goods (income). If these subsidies were transformed into credits, neither a real cover for credit, nor a real credit term could be determined. For similar reasons subsidies maintained by the state first of all for living standard policy reasons, in order to give preferences to consumers by means of reduced (or not increased) prices, cannot be transformed into credit either.

Over and beyond that, all production and development subsidies should be granted to the enterprises in the form of credit. Complementing own enterprise funds by credit instead of budgetary subsidies is justified because *credit is the source through which harmony between intentions of central control and management as well as enterprise independence may most efficiently be enforced.*

Support given in the form of credit would have significant direct advantages. The "external" financing of development and current production would be centralized practically in one hand, in the banking system. In this one-channel system of supply with money the chance of enterprises to obtain monetary assets also for carrying out not properly efficient actions would diminish.

"A subsidy is good if it destroys itself." [1] The existing turnover (and stock) of supporting credits granted with real objective, cover and expiry would automatically indicate the rate of realization of the subsidized objective by enterprises and also at national economic level. Banking methods would be more apt also for continuous corrections (e.g. for the acceleration of processes) than conditions of direct budgetary subsidies.

The new price system and normative incomes control will gradually create the conditions necessary for differentiation of enterprise incomes according to real efficiency. In a consistent system also financial regulators have to be normatives and the enterprise incomes developed should be corrected only in justified cases. Should this – temporarily – still be necessary, even then it is expedient to grant this in the form of repayable credit, because with the proper choice of credit terms the normative requirements system can be well approached (at least better than in the case of subsidies).

Completion of monetary sources mainly from credit complementing own enterprise funds would result in considerable indirect advantages also for the state's monetary economy (the budget situation) and for top level economic control and management:

It is very likely that modifications in regulators becoming necessary because of the development of basic economic processes would be more easily endured by enterprises,

for example with a partial or general modification of credit terms, than in the form of methods used in the previous practice bringing about shock-effects (withdrawal of subsidies, drawing away of income, raising taxes, etc.).

The government financial apparatus taken in the narrow sense would be exempted from all those administrative burdens which are caused at present by judging (decision making), payment, recording and control tasks.

Even if it were not completely eliminated, the budgetary deficit would considerably decrease. Consequently, the "taxation pressure" on enterprises would become mitigated as would the problems in economic management.

It may be raised as a justified concern that transforming subsidies of about 40–50 thousand million forints into credits would entail such burdens for the enterprises that would lead to defaults in credit repayment in several fields, with the even otherwise considerable level of indebtedness. This concern is only seemingly justified, namely, if the goal supported will be realized – should it take even a longer time than originally imagined – then there will be a possibility to set realistic dates for expiration.

New credit constructions in the interest of increasing efficiency

It is likely that it would be useful not only for enterprises, but even for the national economy if enterprises were given wider possibilities to grant credit to each other. This could be realized, in my opinion, in two ways:

– from among enterprises *cooperating* in the development of a given activity the one possessing the most considerable financial assets should utilize all available credit sources (undertaking simultaneously all conditions) and the further "distribution, regrouping" of credits should be made by this one;

– enterprises disposing also of considerable capital should be allowed to grant credit to the debit of their investible (or temporarily free) money sources to other enterprises with which they maintain some production or turnover relationship.

In certain cases it is conceivable that direct (or intermediary) credit granting between enterprises would result in more efficient smaller investments than the redistribution of money through bank credits. As a matter of fact, it may occur when deciding on credit that the bank is unable to properly appraise possibilities resulting from a closer cooperation of enterprises.

In the Hungarian practice of credit granting the population may be granted only money redistributing credit ("regrouping" a part of their savings). In my opinion it would be expedient to widen the credit raising possibilities of the population by money creating credit constructions made independent of savings.

Mainly in the field of infrastructure, but also in production there are several activities (trade, services, tourism, transport, catering, small-scale industry, etc.) where capital investment is not profitable at present, either because organizations dealing with them are

run with high overhead expenses and/or because a considerable part of expenses is always covered from some budgetary source. In the interest of more efficient capital investment, as well as the reduction of government expenses it would be expedient to give greater scope to private enterprises in this field. This should be supported by development and production (operative) credits. These private enterprises would presumably follow changes in market demands more elastically.

Because income returns of private enterprises exceed the average, the minimum conditions of credit granting ought to be raised to a higher level, which, however, should not prevent such initiatives. It would bring about not negligible advantages even at national economic level if through credit support for private enterprises a part of personal savings could be "sucked in", either directly or by regulating the required contribution to credit from own sources.

There is no doubt that utilization of a part of personal savings for the expansion of private enterprises would diminish credit sources distributable in the state sphere, but this decentralization of sources may be undertaken if in this way more efficient capital investment will become possible.

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О ФИНАНСОВОЙ СИСТЕМЕ ВЕНГРИИ

И. ФЕНЬЁВАРИ

В статье рассматривается место, роль и возможности финансовой системы как неотъемлемой части экономической политики и регулирования экономических процессов.

Характеризуя функционирование финансовой системы в целом и ее отдельных структурных элементов, в частности, денежной и бюджетной политики, автор констатирует, что за период, прошедший с 1968 г., т.е. с начала проведения венгерской реформы управления народным хозяйством, финансовая политика и финансовое регулирование постепенно деформировались. Автор показывает, что вопреки концепциям, положенным в основу реформы, в финансовом обеспечении хозяйственной деятельности, прежде всего — в финансовом обеспечении предприятий, на первый план постепенно выдвинулись элементы централизации. Денежные (кредитные) средства регулирования покупательной способности отступили на задний план, и одновременно с этим с

возрастанием субсидий, льгот, а также вычетов и диспреференций повысилась роль прямого регулирования через государственный бюджет.

Финансовое регулирование все в большей степени использовавшее прямые средства, не смогло удержать покупательную способность в запланированных рамках, снизилось также воздействие и тех автоматизмов, на которых, в частности, строилась концепция реформы управления экономикой 1968 г., выдвигавшая на первый план денежные отношения.

В целом, как указывает автор, ослабла способность кредитной политики управлять экономическими процессами и сигналиризирующая роль движения кредитных денег. Преобладание бюджетных средств в финансировании экономики привело к тому, что большая часть выданных банковских кредитов была использована бюджетом, то есть заемщиком, дефицит которого (т. е. невозвращенный кредит) не указывает на то, в каком именно звене экономики имеют место неполадки, где и в какой степени нарушено товарно-денежное равновесие.

Автор считает, что совершенствование финансовой системы должно опираться на финансовую политику, применяющую прежде всего денежные (кредитные) рычаги. Хозяйственные задачи, в первую очередь временные или долгосрочные потребности предприятий и кооперативов в денежных средствах, необходимо решать за счет банковских кредитов. Только такая система финансирования может сочетаться с системой требований, направленных на повышение общей эффективности хозяйственной деятельности.

Благоприятную «среду» для дальнейшего развития финансовой системы создают перемены в сфере регулирования цен и доходов, вступившие в силу в Венгрии с 1 января 1980 г.

Предложения автора о структурной перегруппировке финансовой системы дополняются некоторыми соображениями о конкретных способах финансирования, суть которых состоит в том, что кредитное перераспределение всех общественных сбережений должно происходить исключительно на основе критериев эффективности.

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P. CHVOJKA

GENERAL PROBLEMS OF INTERDEPENDENCE AMONG INDIVIDUAL COMPONENTS OF THE CMEA INTERNATIONAL MONETARY SYSTEM*

The author attempts to evaluate existing (or possible) forms of monetary equivalent functioning in the international economic relations of the CMEA countries. He confronts the collective currency of the CME countries (the transferable rouble), individual national currencies of these countries and freely convertible currencies of the capitalist countries from the viewpoint of necessity to make use of them in creating the basic functional prerequisities for the development of international economic integration, i.e. in value interlinking the national and international spheres of the CMEA countries.

It certainly is not by mere chance that great attention is being paid by the relevant decision-making and executive authorities as well as by theoreticians, at the present stage of development of planned cooperation among the CMEA countries and of its transition to international economic integration, to the problems of international monetary and payment relations among the CMEA countries. Theoretical discussions as well as all measures undertaken in this sphere aim at promoting further development in mutual cooperation and at the realization of inherent advantages; the point in question as a matter of fact, is the creation of *basic functional prerequisites for the development of this cooperation.*

The existence of a common – international – measure of value and of a universal equivalent (means of purchase and payment) in mutual contacts among integrating countries, i.e. the existence of *international money,* is a prerequisite for an optimum development and intensification of all international economic processes and for stimulating the interest of individual countries in completing these processes in the form of international economic integration.** This money should perform all basic monetary functions (in-

*On the basis of a paper submitted to the conference of researchers of CMEA–countries on monetary and financial problems (7–10th October, 1980 – Sopron, Hungary). (A review of the conference can be found on pages 359–363) – The editor.

**The advantages accruing to individual countries from their participation in the international division of labour and economic integration – as well as any other effect accruing from the relationship between socio-economic entities separated by different ownership – can only be ascertained and realized *in terms of value.*

What is ultimately involved is the growth or decline of national income which exerts either stimulating or destimulating effect on the countries concerned. Their economic interest in cooperation and intensification of integration depends on the existence of possibilities to increase the effect (evident, i.e. realized or at least realizable effect) which would accrue to them from such cooperation.

Here, interests of individual countries and those of the community as such meet: economic integration should become a factor accelerating their development and should yield objective advantages to individual countries as parts of the community and thus to the community itself (and *vice versa*).

cluding those of a means of accumulation, a means of building up foreign exchange reserves): it should provide not only for international comparability and an *"ideal" expression of value relations and magnitudes* in the development of various forms of international cooperation, but also for *real transfer of corresponding value equivalents* among the countries concerned.

Under the conditions of international economic integration, an obvious solution of this problem seems to consist in a *collectively created (or, directly common, supranational)* currency of the community.* In accordance with the Comprehensive Programme, such a collective currency which would in all respects fulfil basic functions of international money for the CMEA countries is to be represented by the transferable rouble. Its functional chracteristics, determined mainly by the current conditions prevailing on the international market of the CMEA countries, do not however allow it to play any other role than that of a medium of mutual commodity exchange among the CMEA countries.

International trade relations cannot, however, remain the only expression and the only possibility of intensification of mutual relations and of interlinking national economic reproduction processes which should be typical for the international socialist economic integration. The part of international relations of the CMEA countries going beyond and above the framework of a mere exchange of commodities as *international flows of the output of more or less isolated production processes* in individual national economies is ever growing – and continues to grow; *international participation in production,* i.e. immediate linking of production factors from various CMEA countries (e.g. in the form of joint ventures) will become ever more frequent; the same process of harmonization and, with an increased international movement of persons, of *interlinking, will affect national spheres of consumption.* The process of integration necessitates, therefore, that *national currencies of the CMEA countries* be also made use of, to a certain degree, for an optimum development and intensification of all international economic processes. They should first be linked to the system of collective currency "ideally" (through their rates of exchange) and, later on, also in "real" terms, i.e. through convertibility to the transferable rouble.

Similarly, the need for contacts of the CMEA countries with the capitalist world market and the capitalist monetary system presupposes the existence of certain links between the system of collective currency and/or national currencies of the CMEA countries and *convertible currencies of the capitalist countries.*

All in all, this obviously means that in order to increase the functional role of money in international relations of the CMEA countries, entering the stage of international integration, it is necessary to reckon with both *the parallel existence and optimum*

*This common, *supranational* currency could be created by merging individual national currencies on the basis of a *monetary union* as a result of the finalization of the process of monetary unification, including also inner monetary processes and relations. It would not only fulfil its functions in the international exchange of goods and services but, at the same time, it would function in the domestic economies of all integrating countries (see, for example, the Werner plan which was supposed to provide a solution to monetary problems within the West-European integration).

utilization of all these possible forms of monetary equivalent. Considering the necessity of an organic interlinking and a purposeful limitation of their functioning to certain spheres or areas of international economic relations and, further, of the simultaneous provision of a monetary link between the sphere of domestic economies of individual CMEA countries and their external economic environment (including the capitalist world market), it will obviously be necessary to arrive at a new formulation and systemic definition of the relationships among the *transferable rouble,* individual *national currencies of the CMEA member countries* and *convertible currencies of the capitalist countries.*

Transferable rouble

Transferable rouble represents a basic element of the entire system of monetary, payment and credit relations of the CMEA countries as their collective currency. Processes of a value-based *commeasuring* of the mutual exchange of goods and services as well as of mutual credit granting are linked to the transferable rouble and expressed by this rouble. The entire system of *balancing* claims and obligations created and their *settlement* based on the transferable rouble as well. Transferable rouble thus covers that decisive area of mutual economic activity which after all – and in initial stages of development exclusively – reflects the range and depth of integration linkages among the CMEA countries.

This system, under its present arrangement, is not necessarily directly linked, by means of its value relations, to national value, price and monetary systems of individual CMEA countries and it can, therefore, function in a relatively autonomous manner. This is caused, on the one hand, by the *linkeage between the transferable rouble* and *contract prices* (i.e. by the nature of these prices) and, on the other hand, by the incorporation of the transferable rouble into a certain *system of planning and management of national economies of the CMEA countries and of their mutual relations* (characterized by separation of the sphere of domestic economy from the international sphere as well as by certain methods of plan implementation in both spheres through the planning of balances more or less in physical terms and without using actively functioning value categories for a mutual interlinking of the two spheres).

Both these facts affect the operation of the transferable rouble in its present form as money in mutual relations among the CMEA countries. Its links to contract prices and its determination by the nature of these prices which decide about the content of the transferable rouble in its *"ideal"* function as a measure of value* predetermine also the operation of the transferable rouble in its other monetary functions (where it is expected

*In the functioning of money as a measure of value, "the expression of the value of commodities . . . is a merely ideal act . . ." Marx states. Similarly: "When . . . money serves as a measure of value, it is employed only as imaginary or ideal money." [1] The notion of *"ideal" functioning of money* as used by us should be interpreted in this very sense.

to ensure *real* linkages – corresponding to contract prices – to commodities on the international market of the CMEA countries). In this regard, however, its operation is both conditioned and ensured also by factors *other than prices* (i.e. the very system of planning and management, separation between the domestic and international economic spheres, low level of utilization and efficiency of value categories in the planned interlinking of these two spheres etc.). Therefore, when analyzing the conditions of functioning of the transferable rouble we should always direct our attention

- both at the analysis of its "ideal" function as a measure of value, i.e. at *price formation,* and
- at another important aspect of the matching of money and commodities on the international market of the community which consists in the *commodity "backing" of these prices* as corresponding amounts of money by relevant *commodity equivalents,* i.e. in providing the guarantee of the "reality" of the valid prices under current conditions.

It can obviously be said in general that the two aspects are mutually more or less organically linked (or, on the contrary, separated from each other) depending on the degree in which the functional mechanism of the measure of value, i.e. price formation, respects (or, on the contrary, disregards) and, through resulting price magnitudes and relations, reflects (or, does not reflect) economic conditions within the community concerned and of its market where this money works. Depending on this, then, *prices alone* (provided that they are "economic" and, in this sense, "real") are capable of creating such links between money and commodities which correspond to "ideally" determined relations, or – on the contrary – their transformation into commodity equivalents must be ensured by certain *supplementary mechanisms.** By means of such mechanisms, "ideally" determined relations are asserted as decisive and valid for the functioning of money in the processes of international exchange of commodities and in respective value tranfers on the international market concerned.

When applying these conclusions to the conditions in the international economic integration of the CMEA countries, we can obviously state that the very "ideal" functioning of the transferable rouble represents an obstacle to its full utilization as real money. Prices at which the CMEA countries trade with each other and which are expressed in transferable roubles in their mutual transactions (contract prices) are based upon world prices formed on the capitalist world market. World prices reflect substantially different socio-economic conditions and express other production, market (and, from the socio-economic point of view, distribution) relations than those typical for international economic relations and for the economic integration of the CMEA countries. As a matter of fact, these are *"alien" or "outside" prices* in relation to the economy of the CMEA countries. They do not express the specific situation prevailing on the CMEA market,

*Because of the limited extent of this article, the author limits himself here to a brief outline of the conclusions reached in his deliberations which can be found – together with the relevant argumentation – in his book dealing with the monetary problems of the CMEA countries [2].

characterized by different cost level and relative costs, different supply and demand relations, different scarcity relations. They do not correspond to either the needs or the proportions of production in and trade between the CMEA countries. By definition they are not capable of assisting in the removal of existing discrepancies or of stimulating elimination of existing disproportions resulting from historical development; they rather tend to conserve the latter or even to make them more acute.

However, to disregard world prices and to establish fundamentally different relations motivated by the needs of the integrating CMEA countries is only possible to a very limited extent, it is always accompanied by the risk of subjectivism which leads to undesirable consequences through breaking the links with the value and price system of the world market. (We have in mind here particularly impairment of the realization of advantages accruing from the international division of labour and international equivalent exchange, from participation in the achievements of the scientific and technological revolution etc., or the splitting of the criteria of international economic activity of the CMEA countries: for their mutual contacts on the one hand and, for their contacts with the world market on the other hand.)

Although this is an important problem, we cannot now deal with it as such. From our point of view, however, it has important *consequences for the very functional role of money* on the international market of the CMEA countries:

If the prices used do not correspond to real value relations at this market, if they are not organically linked with the conditions prevailing in the community and in national economies within the community, they do not serve as an instrument for active regulation of this market and as an instrument of continuous optimization of the links between the national economies and this market adequate to existing conditions.

This means, then, that

1. *it is not possible to ensure at all the obtaining of the required goods at existing prices* (which affects the exchange of goods as such and determines a certain, more or less non-economic system of "obtaining the required goods from a partner");

2. *it is thus not possible to ensure the obtaining of the required goods as equivalents of the relevant amount of money* at existing prices (which affects not only the exchange of goods itself and the functioning of the mechanism of this exchange but also the functioning of the monetary equivalent, *the functioning of money as such*).

Linked to an "alien" price system, the transferable rouble is necessarily affected by the above fact in its functional role. Its operation in the capacity of a universal means of purchase and payment is not derived organically from its operation in the function of a measure of value. Since its functioning as a measure of value, i.e. in price formation is not linked to the existing production and market conditions in the CMEA integration the transferable rouble expressing "alien" prices cannot function *by itself* as a universal means of purchase and payment; as a matter of fact, it cannot function as fullfledged money. *Its real functioning is conditioned by its "ideal" functioning.*

Under this situation, arriving from prices to real commodity equivalents must be ensured outside the original mechanism of the formation of "ideal" relations between

money and commodities. The economic function of money (which is, to a considerable degree, put out of operation due to the use of "alien" prices in mutual relations among the CMEA countries) must be substituted by certain *supplementary systems* to really match money and commodities. Implementation of the given relative prices is ensured and the economic consequences of the inconsistency of these prices with the actual conditions on the CMEA market are at the same time circumvented through their use: the exchange of goods is treated "in kind", individual items are related to each other "directly", more or less according to their use values and the degree of their importance reflecting the needs and preferences prevailing on the market. Based on the scale of their importance, desirability and scarcity, individual commodity lines ("hard" and "soft" commodities) entering the exchange are balanced with a view to achieve, as far as possible, a zero balance between the partners concerned. Prices – and thus also the money expressing these prices, i.e. the transferable rouble – play, to a large degree, only the role of a purely recording and accounting instrument. Rather than through relative prices, economic criteria of the exchange are asserted through *mutual linking of commodity items* as the latter objectively form groups distinguished by the level of their relative scarcity or by the share of inputs in short supply (and thus, by the level of their desirability), while their above characteristics have not been adequately reflected in existing relative contract prices.*

Mutual linkages within desirable ("hard") commodity items (or, within non-attractive, "soft" ones) can be achieved without great difficulties only through a *bilateral* balancing of the mutual exchange of these commodities between the two partners. Thus conditoned bilateralism of international trade relations at the same time solves, in a sense, the problem of functioning of money on the CMEA market: through *balancing out individual items,* a global balance of *total volumes,* i.e. exports and imports as a whole, is being achieved. In this way, there are no claims and obligations of a purely monetary nature that would be practically unrealizable (without "backing"), unable to be offset against corresponding commodities, against demanded use values which would have to be agreed upon with the partner concerned in the form of counter-settlement and ensured in his national production plans.**

The need to mutually equalize the commodity volumes to avoid – under theoretical conditions of full transferability of rouble amounts – the emergence of virtually unusable for the creditor sums of money, not "backed" by desirable commodity assets, often leads to a situation where *relative prices of individual commodities entering into bilateral exhange are subordinated to the requirement of a total resulting balance.* In such cases, they are, in fact, no more world prices (as adapted on the basis of generally agreed criteria with a view to certain facts etc.) which, as it has been explained, by definition do not

*Striking under the present conditions of the above linkage is the fact that the degree of scarcity (i.e. also of "hardness") of individual commodity items depends, to a large extent, on the possibility of their sale for hard currencies.

**Under existing conditions, there is, namely, no other way to ensure a "commodity backing" for rouble assets on the CMEA market.

correspond to the immanent conditions of the CMEA integration. Neither are they, however, prices which would be "economic" in the sense used by us, i.e. prices which would reflect the conditions of the production and market equilibrium within the economy of the CMEA community.* So far, they are not yet prices that would act as an agent of common plan intentions and as an instrument of the implementation of the CMEA economic policy.

Commodity linkage and the reciprocal provision of or demand for allowances and concessions which shift, in bilateral negotiations, relative prices in one or other direction and affect the universality of the common price system on the CMEA market as well as the adequacy of the very relative prices to common conditions of the CMEA economy, exert additional unfavourable effects on the functioning of money at the CMEA market: not only is transferable rouble, as an agent and means of expression of the described processes, *not characterized by a desirable conformity of its functions,* i.e. its function as measure of value and that as a means of purchase and payment, or as a means of accumulation; also *its performance in the very function as a measure of value* – i.e. its just "ideal" functioning – *on the international market of the CMEA countries is neither homogeneous nor consistent.* In this function, the transferable rouble is considerably "partialized" in individual bilateral relations between the CMEA countries (which contradicts to the development objectives of the CMEA integration calling for a homogeneous value base in order to find common optimum solutions).

All the above aspects which affect the functional role of the functional role of the transferable rouble represent, at the same time, factors *affecting the value conditions of multilaterality* in mutual relations among the CMEA countries.

National currencies within the system

When summarizing what has been said so far, we can state that the link between the transferable rouble and the commodity whose exchange is being mediated is more or less of *"non-monetary"* nature: *"commodity-backing" of the money is being ensured by other than monetary means*; in fact, it must always be so ensured separately for each specific exchange operation. Universal equivalent – money – lacks the attribute of universality. It lacks it in the extent to which commodity backing must be ensured always in physical quantitative terms in any given bilateral relation between the creditor and the debtor (or, any other partner on the market whom the holder of transferable roubles would like to purchase the required commodity from).

This is not a sort of a problem which could be resolved just by the introduction of a system of multilateral balancing of mutual exchange of commodities as such. We have seen that the reasons for the existing partialization of the system are of *value nature.* Transferable rouble cannot function as a universal means of purchase and payment because nominally identical value magnitudes – amounts of balance, assets in transferable

*The price formation of individual commodities is subject mainly to the criterion of the effect of those prices on the total balance of exports and imports between the partners concerned, aimed at achieving a global balance in bilateral balances of payments [3].

roubles – have *different real contents in different national relations.* (In fact, different roubles are involved.) They differ with respect to commodities which can be acquired for them in a given bilateral relation, i.e. which "back" them in mutual trade between the CMEA countries because of the fact that transferable roubles concerned are linked to relevant partners differentiated in terms of their potentials to deliver goods, and namely

– as *use values,* i.e. in terms of the potential to deliver certain demanded goods (*inter alia,* goods of a certain required quality, techno-economic parameters etc.);

– as *values,* i.e. at certain prices.

This is actually an expression of *national* qualities of the respective rouble amounts which thus *function as if they were national currencies.* National balances in transferable roubles, because of their characteristics *vis-à-vis* the world of commodities, actually act for national currencies: they are "nationally partialized" as if the given claims and obligations in transferable roubles were expressed – after their conversion on the basis of the corresponding exchange rates – directly into national currencies. Although the transferable rouble should represent both a manifestation and an instrument of a direct link in value terms with economic conditions of the community as a whole, as they should be expressed through the valid relative prices in the exchange of goods on the CMEA market, and it should, in this respect, fully substitute for individual national currencies which are, through their value relations, linked with national processes of reproduction and with their results, it seems to us that *the transferable rouble is, in its functioning among the CMEA countries, considerably determined by their very "national hinterland".* As a collective currency, however, it cannot actually *by itself* capture and express these *nationally* relevant aspects and relationships.

This should not be understood as a negative evaluation of the system of transferable rouble as such, but only as the demarcation of the sphere (and, in this framework, of conditions) of its functional role: transferable rouble in its present form is capable of functioning as a medium of exchange on the CMEA market, namely in the context of a certain system of planning and a certain form of contractual arrangements of mutual delivery of goods. Should we stress international trade among the integrating countries as an important sphere of realization and manifestation of international economic integration and, should we accept as a main criterion the development of this trade *without analyzing the extent and forms of its linking with internal conditions of individual national economies,* then the stress laid upon the exclusive role of the collective currency is, to a great extent, justified. Collective currency is – after certain partial improvements – capable of functioning in this sphere as a means of accounting allowing for an undisturbed course of international trade within its planned structure and volumes.

However, our conclusions will be different if we orient ourselves to higher stages of development and intensification of international economic integration. In this case, we should approach international economic integration as the linking of the reproduction processes of the countries concerned not only through the *sphere of circulation,* through international trade (which is, moreover, separated from the spheres of circulation within individual countries), but as a gradual linking of individual national economies in the

sphere of production as well. This is, however, necessarily connected with *mutual value and price interactions among individual national economies,* which should, in the long term, culminate in a merger into a single system of values and prices in the community. Under these assumptions, the collective currency (transferable rouble) proves to be an insufficient instrument for the realization of integration processes. The main argument behind this statement is represented by systemic barriers to the proper "integration-forming" functioning of the collective currency which consist (in its present form) in the *detachment of the collective currency from the functioning of national currencies.*

We should then distinguish two aspects:

1. the functioning of the collective currency as a *means of exchange in the international trade* between the CMEA countries (and thus – in a narrower sense of the processes of international economic integration, or within its initial phases – also as a means of integration);

2. the functioning of the collective currency as a *means of integration in the full sense,* to the full extent of the concept of international economic integration which we have characterized as linking the processes of reproduction in the countries concerned not only through international trade carried under the conditions of a strict separation between domestic and external economic processes, but through the planned interaction of value– and price–forming factors between the two spheres of the economy and with their impact reaching the sphere of production.

On the basis of this distinction between the two different aspects of functioning of the collective currency which are usually being confused, we shall be able to define the potentials and limits of the functioning of the collective currency (transferable rouble) in the two aspects. It is obvious that *even the most perfect functioning of the collective currency as a means of exchange* (see *para 1* above) *cannot meet the requirements raised towards the functioning of money as a means of integration in its higher phases* (see *para 2* above). We can, on the other hand obviously state also that certain problems existing in the functioning of the transferable rouble as a means of an ever growing exchange on the CMEA market are, to a great extent, caused by the fact that, in constructing the system of transferable rouble, "integration-forming" criteria as outlined by us in *para 2* above have not been taken into account. These criteria, however, prove to be important already under present conditions of CMEA integration.

Value linkage, penetrating as far as the sphere of production in individual national economies, i.e. a certain "value homogenization" of economic environment within the entire CMEA community, represents indeed an inevitable *basis of decision-making processes* concerned with an optimum participation of national economies in the international division of labour, with specialization and cooperation of production with partner countries etc. At the same time – provided that other conditions are met, i.e. mainly the existence of a functioning international means of purchase and payment – it represents also a *prerequisite of the realization of advantages* accruing to individual countries from these processes. It represents thus also a basic stimulant of further intensification of integration processes.

All this can hardly be achieved without establishing real links between the transferable rouble as a collective currency of the CMEA countries and their individual national currencies.

General basis of such links between the transferable rouble and national currencies of the CMEA countries (and, similarly, among their national currencies themselves) is represented by *real rates of exchange.* Through them, national currency units as representatives of the entire system of values and relative prices existing in the national economies concerned should be linked with the transferable rouble which represents and expresses relative prices and price levels prevailing on the CMEA market. Economically founded exchange rates should objectively interlink corresponding value and price systems between the national and international spheres of the socialist economy. (In this case, we have in mind "ideal" linking, in fact, an aspect of functioning of an internationally valid measure of value through a specific measurement of the value of the currency units themselves; it allows for a passive commeasurability and comparability of relations among the whole value and price systems which are linked to these currency units.)

The exchange rate problem will become particularly important if exchange rates are to be used not only for mutual comparability of these value and price systems, but also as a basis for their "real" linking, i.e. when corresponding currencies are expected to link and integrate these systems "physically", through their mutual convertibility.

In order to create and continuously reproduce conditions of this convertibility of currencies (as a basis for their wider than only domestic, i.e. national functioning), exchange rates should also fulfil *active* functions. The problem of interlinking individual value and price systems cannot be reduced only to finding and setting more or less real rates of exchange among currency units which are linked to these systems while letting the systems *continue to function and develop in separation* (or, while leaving the international system to be on the whole "alien" and "unlinkable" in its functioning to the relevant national systems). Hence, the heart of the matter is to ensure active functioning of the exchange rate in inward direction and between the two, i.e. international and national, value and price systems, and to *evoke, by exerting a two-way influence on the relevant value and price formation processes, desirable reactions in individual national economies* and on the CMEA market,* which are necessary to achieve consistency be-

*It is ever more clear that this is a problem of involving the "microsphere" (i.e. the sphere of enterprises). Without the involvement of the microsphere of individual national economies and without its organic interlinking with the area of external economic activity – i.e. without an "international interlinking of national microspheres" – we probably cannot think of international economic integration as such. (And this problem acquires high importance from the point of view of the need to increase the efficiency of these processes.) National economies obviously cannot be integrated just along the "top levels". The development of integration components should also be accompanied by a shift in the level of planned establishment and realization of these contacts in downward direction, towards the microsphere, with all inherent consequences related to the creation of conditions to ensure direct and operational contacts in the framework of the relevant long-term agreements based on the coordination of national economic plans.

tween value and price relations and reproduction and market conditions in the CMEA community.

From the viewpoint of a real interlinking of the national and international spheres of the economies of the integrating countries of the CMEA (or, in other words, of their "value homogeneity"), the transferable rouble and its rate of exchange perform at present only a part of what could be performed by national currencies when appropriately introduced into the system of functioning of the transferable rouble (or, when functioning alone). Without their utilization, it is impossible to develop the *active (price forming) function of the exchange rates* in the direction "from within outward", i.e. towards the international CMEA market: exchange rates can now be used only to reflect (more or less passively) the conditions prevailing on the international CMEA market (or on the capitalist world market) into individual national economies through bringing domestic prices closer to foreign trade prices. This, however, does not solve the problem of the (reversed) *value linking of national economies into the common value- and price-forming system* that would be capable in the future to express, in the sphere of international CMEA trade, their economic – production and market – conditions and to create, in this way, the prerequisites for the functioning of the corresponding monetary equivalent. It is obvious that national currencies with their economic background reflected in national prices of the relevant traded commodities have to play here the role of a future basis for an organic formation of common "economic". prices on the CMEA market.*

It seems that it is only on this basis that a "commodity realism" of monetary relations within the economy of the CMEA countries and on their market can be achieved in an economic way. Money and commodities would be matched (i.e. prices would be formed as "real" ones) in relations that would correspond to international – integrational – conditions, but with close linkage to economic conditions and price-forming processes on national markets. *Resulting relations would then become not only a basis of the "common parametric system" as such but also an agent of parameters determined by the latter, i.e. a guarantee of their real turning into demanded use values* (or, in other words: of the commodity backing of the monetary units concerned). Keeping in mind what has already been said about this problem, our general conclusions can be formulated as follows: should a given currency (or given currencies) – linked with prices at which international exchange of commodities takes place within a certain economic community – become international money performing all its basic functions, it should provide, through its "hinterland", for the possibility to purchase all given commodities at these very prices. It actually means that it should reflect by means of these prices (or, by means of its exchange rates or by both), and at the same time evoke for the future, the production and market equilibrium within the community concerned and on its market.

*These organically formed, "proper" prices of the CMEA market should, however, even then be also linked to the world prices and to the world market as a certain alternative able to widen the spectrum of possibilities when searching for the most efficient solutions to economic development of the CMEA countries.

It should, therefore, react to changing conditions within the community and its components and continuously stimulate for preservation of the production and market equilibrium (which through its consequences means the very existence of a sufficient amount of goods at existing prices and thus, the "real" nature of these prices). Obviously this can only be achieved under the conditions of a close *two-way interaction between the national and international spheres of the economy of integrating countries.*

In favour of the utilization of *national currencies* in this respect speaks *inter alia* the fact that these currencies are through their value relations as well as through their commodity backing organically linked with their "national hinterland", with the respective national economies and with the respective spheres of material production. The linkage between national currency units and commodities is with given price relations "universal" and "absolute", i.e. does not call for special arrangements between the money holder and commodity producer. (This is always the case within the country concerned; a similar relation between foreign money holders – if at all possible – is formed of course by means of national economic and political regulations of foreign trade relations. In the case of the CMEA countries, the establishment of such relations has so far been directly made impossible by the state monopoly of handling foreign exchange, through its provisions on banning exports and operations with national currencies abroad as well as by the state monopoly of foreign trade. Introduction of the convertibility of currencies would – depending on its scope and nature – call for appropriate changes in this respect.)

In the case of the *transferable rouble,* these links are much more indirect. The Comprehensive Programme states the following on its commodity backing: "The socialist collective currency (transferable rouble) has a real commodity backing which is based upon the planned development of the turnover of commodities among the CMEA member countries at agreed contract prices established on the basis of world prices . . ." (Section 7, Article 3). This means that the transferable rouble is not backed by an "own material production basis", representing a guarantee of an "anonymous" commodity coverage which would be at any time available according to the wishes of the holder of rouble assets. The transferable rouble becomes, in fact, linked to commodities only *in the sphere of circulation,* namely through the volumes of exports from and imports to individual countries as agreed upon and ensured contractually in advance. As we have seen, it functions under present conditions only in connection with physically (quantitatively) expressed volumes of relevant use values because *otherwise the required commodity backing cannot be guaranteed.** It plays the role of a medium of exchange to the extent within which this exchange, in line with trade agreements and their specification in

*See, for example, existing problem with the commodity backing of credits granted by the CMEA International Investment Bank in transferable roubles. It is difficult to make use of them, i.e. to find a partner on the international market of the CMEA countries who would supply, in exchange for them, goods required by the recipient of credit. (Another aspect of the same problem is represented by commodity backing of the transferable rouble in cases where its convertibility to capitalist currencies would be required; the use of individual national currencies appears to be a more hopeful approach in this case as well.)

relevant quota lists, is ensured by the national economic plans of the partner countries and implemented by authorities exercising the state monopoly of foreign trade.*

Following the introduction of corresponding changes, the use of national currencies as a medium of mutual economic relations between the CMEA countries could lead to an *improvement in commodity backing* on the CMEA market. This would represent a negation of the present "desertness" of those sums in transferable roubles which have no explicit guarantee of commodity backing in trade agreements and quota lists, and which are difficult to transfer to a partner. Should national currencies play the role of an internationally accepted means of purchase and payment, this problem would not arise: those countries which emitted these currencies would in all cases be responsible for commodity backing.** Commodities would be purchased in those countries to where currency units "belong by their origin", and, subject to the availability of commodities to be purchased, corresponding currencies would also be "purchased". They would serve as a means of purchase and payment, and possibly as a means of accumulation and, in this respect, they would in fact act as *international money*. In this case, a number of national currencies would function in place of a single – collective – currency (or in addition to the latter). (The collective currency could in this case continue to represent a medium of commodity exchange in the area of physically defined volumes – quotas – where even its present form meets basically all requirements in CMEA trade.)

"Alien" currencies within the system

It has become gradually obvious that the system of the transferable rouble requires for its functioning not only a link *to the sphere of domestic economies* of individual CMEA countries, but also a certain real *"outside link towards the external economic environment*, i.e. towards the capitalist world market and its monetary system. (Under the conditions of mutual convertibility of Western currencies, this link is identical with the link to the economies of individual capitalist countries.)

*We can conclude on this basis that the transferable rouble is by its nature linked to the physical, quantitatively negotiated CMEA trade (where national planning centres must ensure the meeting of these obligations correspondingly: also more or less "in kind", by allocating tasks to lower planning and executive bodies). Its functioning presupposes, therefore, rather direct control methods than economic ones that would be based on efficiency criteria, mediated by an active use of the exchange rate, and on the value-based interests of the production sphere itself. The link between the transferable rouble and the specific system of formation and implementation of the contractual relations between the partners and their realization by each partner (which is *inter alia* represented by the existing form of implementation of the state monopoly of foreign trade and foreign exchange monopoly) corresponds at present to a more or less directive method of planning and control of the national economy in general.

**Should these currencies circulate abroad and should they be accepted without problems as real representatives of value, then they could of course mediate (among third countries) also links to commodities which may not be at all supplied by their own ("parent") national economy.

This link – as an *"ideal"* link only – has been provided from the very beginning of the transferable rouble system, and that by the exchange rate of the transferable rouble to the US dollar and other convertible currencies; in recent years, however, the importance of a *real* link has been growing. It is so because convertible currencies of the capitalist countries are being used in mutual payments between CMEA countries and the extent of using them has been ever growing. (As a matter of fact, we face here an aspect of the very functioning of convertible currencies of the capitalist countries as international money: as a *means of value* they actually function immanently within the value, price and monetary system of the CMEA countries insofar as contract prices are based on prices prevailing on the capitalist market. At present, this "ideal" functioning of convertible currencies as international money in mutual relations of CMEA countries has been extended by their performing also *other monetary functions.*) The problem of the link to the monetary system functioning on the capitalist world market can obviously be expected to become more important both with a view to further continuous utilization of advantages derived from participation in the international division of labour and international trade etc., and with a view to the prospects of ever extending relations with 'third world' countries. (Thus, not only economic aspects are involved.)

Although the use of convertible currencies of capitalist countries does not obviously represent the core of a solution to the problem of international monetary relations among CMEA countries, it does represent a highly topical matter. However, it has not yet been actually analyzed as a theoretical and practical problem. (As a matter of fact, only Hungarian economists have dealt with it in more detail.) So far, the problem is not clear either with respect to strategic principles or forms of their implementation, i.e. of ways and forms of such links between the socialist monetary system and convertible currencies of the capitalist countries which would meet the objectives and principles of the development of international socialist economic integration. So far, objectively valid conclusions can hardly be derived.

We can only state in general that the problem should be approached with a view to transforming this "alien element" – certain "anomaly" which up to now defies the "rules of the game" although it participates in the game whether we want it or not – into an "element within the system". *In fact, it has already been within* (at least in the sense of "ideal" functioning). It seems to be in an inverse-proportional correlation with other existing components of the system (with various possible forms of utilization of the monetary equivalent): this "alien element" grows in importance in a degree to which the existing system and its components are unable to keep up with the ever growing requirements raised towards the functional capability of the international monetary equivalent in the field of mutual relations among the CMEA countries. Although the aspect of *original (external) functional capability* (i.e. of the applicability of convertible currencies as international money not only in mutual relations among the CMEA countries, but above all within their "parent environment", i.e. on the capitalist world market) is of fundamental importance, it seems expectable that an *improvement in the functional capability of the system of the transferable rouble would to a great extent lessen the*

pressure to use convertible currencies as a means of purchase and payment on the CMEA market.

It has been shown above that such an improvement of the system of transferable rouble is closely related with incorporating national currencies of the CMEA countries in the system. Individual system components – transferable rouble, national currencies of the CMEA countries, convertible currencies of the capitalist countries – are thus *interdependent*; in analyzing any of them, one should never loose sight of their mutual interlinking nor neglect their mutual – indeed systemic – relationships.

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ОБЩИЕ ПРОБЛЕМЫ ВЗАИМОСВЯЗЕЙ ОТДЕЛЬНЫХ ЭЛЕМЕНТОВ МЕЖДУНАРОДНОЙ ВАЛЮТНОЙ СИСТЕМЫ СТРАН-ЧЛЕНОВ СЭВ

П. ХВОЙКА

Статья представляет собой попытку оценить существующие (или возможные) формы денежного эквивалента, действующего в международных экономических отношениях стран-членов СЭВ. Исходя из необходимости создать функциональные предпосылки для развития международной социалистической интеграции, основой которых является стоимостная взаимоувязка внутренних экономик этих стран, автор анализирует роль их коллективной валюты (переводного рубля), их национальных валют и свободно конвертируеных валют капиталистических стран.

Переводный рубль, как основной элемент международной валютно-расчетной системы стран-членов СЭВ, связан с контрактными ценами, которые основаны на ценах капиталистического мирового рынка. Они для стран-членов СЭВ фактически ценами «чужеродными», которые — под влиянием ряда и других факторов — не могут обеспечить органически, т. е. самы по себе, получения желаемых товаров на международном рынке стран-членов СЭВ. Тем самым они не обеспечивают и получения товаров как эквивалента соответствующих денежных сумм. В этих условиях роль экономически функционирующих цен подменяется определенными дополнительными системами реального сопоставления денег и товаров; это значит натурализацию взаимного обмена товарами, т.е. его потоварную увязку и двустороннее балансирование между отдельными странами. Переводный рубль так — но и по другим причинам — не может функционировать в качестве всеобщего эквивалента: номинально одинаковые активы (сальдо) в переводных рублях имеют в различных двусторонних отношениях отдельных стран различное реальное содержание и выступают «национально обособлены», т. е. фактически в качестве национальных валют. Стоимостная взаимоувязка, охватывающая и сферу производства отдельных интегрирующихся стран (т. е. своего

рода «стоимостная гомогенизация» экономической среды в масштабах всего содружества стран-членов СЭВ как предпосылка интеграции), однако предполагает и прямое действование национальных валют (их обратимость в переводный рубль и их взаимную обратимость).

В той мере, по которой существующей валютной системе социалистических стран не хватает функционально полностью развернутого денежного эквивалента, выступают в области платежей между этими странами даже свободно конвертируемые валюты капиталистических стран. (Связь с ними всегда опосредствует курс переводного рубля к этим валютам, в которых выражаются цены на мировом рынке, как связь всего лишь «идеальную»; в последнее время эти валюты функционируют в международной валютной системе стран-членов СЭВ в определенной мере и реально.) Свободно конвертируемые валюты так в существующих условиях може выступают как один из — взаимно обусловливающихся — элементов этой системы.

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INTERRELATIONS OF PLANNING AND COMMODITY-MONETARY ELEMENTS IN THE DEVELOPMENT OF SOCIALIST ECONOMIC INTEGRATION*

The results achieved in connection with the practical application of the propositions of the Comprehensive Programme of socialist economic integration demonstrate the strengthening, both in theoretical and practical aspects, of the conception concerning organic unity of different forms of cooperation in the planning activity domain with wider use of commodity-monetary relations as the principal function of the control mechanism for the mutual economic and scientific-technical links between CMEA member-countries. But the development of individual elements forming above mentioned mechanism has been uneven and led to different results. Up to now commodity-monetary instruments have found limited application to the pre-plan phase of the choice of concrete integrational measures.

Practice shows that the control mechanism of economic cooperation can be improved only as a complete system including all its elements. To this end a complex solution to several complicated problems of joint planning activity is required as well as an improvement of the organizational and control systems of foreign economic relations in CMEA countries, a real use of the principle of mutual advantages in economic relations and a coordinated development of instruments to be applied in foreign trade, monetary-financial and credit policies.

A key problem of further intensification of socialist economic integration between CMEA-countries is at present how the control mechanism of this process can be improved and first of all, how the necessary harmony between planning and the commodity-monetary elements can be ensured.

This complicated problem has been discussed in socialist countries in many professional periodicals, studies and at scientific conferences for years. Let us recall here only the debates on the economic laws of socialism and on particularities of these laws appearing in the mutual relations of socialist countries, on the planned character of international economic relations and of the socialist world market, on the order and methods of the formation of contract prices in mutual trade, on the character and role of monetary and financial relations in international trade, etc. By now there is abundant economic literature available on these problems.

Theoretical debates of CMEA-countries became especially vivid in the period when the Comprehensive Programme was elaborated and adopted. In the Comprehensive

*On the basis of a paper submitted to the conference of researchers of CMEA-countries on monetary and financial problems (7–10th October, 1980 – Sopron, Hungary). (A review of the conference can be found on pages 359–363) – The editor.

Programme member-countries started from the statement that "the system of economic and technical-scientific cooperation is based on general laws and regularities of building socialism, on fundamental principles referring to the control of socialist economy as well as on an organic connection between plan coordination as a basic method of organizing cooperation and commodity-monetary relations to be utilized more widely." [1]

This coordinated standpoint was a principled answer to the problem discussed by experts of CMEA member-countries for several years, namely, what the control mechanism of integration and cooperation should be with special regard to the role of planning and commodity-monetary elements in the further development of cooperation.

In the period passed since then the concept of an organic link between plan coordination and commodity-monetary relations, enforced to an ever increasing extent as a fundamental element in the control mechanism of economic and technical-scientific cooperation between CMEA member-countries, has been justified both theoretically and practically.

The commodity form of exchange between CMEA member-countries and the planned character of cooperation

The overwhelming majority of specialists of socialist countries share the view according to which the essential features of socialist economy are appearing at international level in the process of socialist economic integration. In the relations of CMEA member-countries between each other the same production relations and economic regularities are appearing – as regards their socio-economic character – as are enforced within the socialist economy.

The planned character relying on the social ownership of means of production as the most general law of economic development in individual socialist countries basically affects also the planned relations between each other. Ever intensifying, long-term and permament production and technical-scientific relations characterizing socialist economic integration also necessitate a close cooperation in planning. Such economic problems of great importance as the supply of individual national economies with energy raw materials and fuel, realization of structural changes, the ensuring of proportionality, or formulation of the strategy of cooperation may be solved only through planning. The plan ensures the joint utilization of material and financial means of CMEA member-countries for the solution of the most important socio-economic problems concerning certain countries and the entire community, for increasing the efficiency of relations and for the linking of integration measures with national economic plans.

At the same time, the commodity production in sovereign member-countries persisting also in socialism results in the fact that their exchange realized under circumstances of cooperation and economic integration takes place in the form of sale and purchase of goods, i.e. as exchange of goods. Impulses and requirements resulting from exchange realized on the international market and aimed at the acceleration of technical

and scientific progress as well as improvement of the efficiency of production and of the quality of goods are utilized in a planned way for improving cooperation in the sphere of material production, for increasing the volume of output, for renewing the assortment of goods and mobilizing reserves. The purpose is a conscious exploitation of particularities of the realization of products appearing on the market for the planned control of reproduction and not let it become subject only to the play of market forces.

All this indicates that the commodity form of mutual relations between CMEA member-countries does not contradict the planned character of cooperation. The social division of labour among various fields of uses takes place here not through spontaneous functioning of the law of value as in a market economy, but on the basis of the law of planned and proportional development; demand and supply are not developing according to market competition, but in a way determined by the plan.

The organic unity between planning activity as well as commodity-monetary relations in cooperation directly follows from the interrelations and systems character of the economic laws of socialism. Both components exist only in this organic unity and not as mechanisms functioning parallelly and relatively independently of each other; they cannot replace each other.

Further development of joint planning activity involves a better utilization of commodity-monetary relations, of the law of value, of value categories as objects and tools of planning, functioning as the unity of material-physical and value categories. In socialist cooperation commodity-monetary relations form an element of plan relations. Though they have a very important part in linking the general and specific interests of member-countries, in ensuring the principle of mutual advantages and equivalence, commodity-monetary relations alone can not define the strategy of cooperation and their functioning can be successful only if it is realized in close interrelation with, and based on planned forms of cooperation.

In the interest of a planned development of socialist economic integration foreign trade, monetary-financial and credit relations have to be treated as factors required for the preparation and realization of measures to be coordinated in the framework of joint planning activity. They have to contribute first of all to the acceleration of technical-scientific progress, to increasing the efficiency and stability of foreign economic relations and to the best possible satisfaction of needs.

Value categories are aimed, on the one hand, at measuring socially necessary inputs and distributing social labour in the international division of labour in harmony with efficiency requirements. On the other hand, value categories are functioning as a tool of economic stimulation aimed at an efficient and continual realization of measures concerning scientific, production, technological and foreign trade cooperation and harmonized in the framework of plan coordination, interstate agreements and contracts. The application of value categories exceeds by far the frameworks of the turnover sphere. Value categories are applied for shaping proper national economic proportions just as for accounting the economic effects of integration measures or for stimulating the preparation and realization of these measures.

It is already a generally known fact that all attempts trying to neglect commodity-monetary form enforced in the circulation of the social product within and between socialist countries impede the planned development of these countries and impair efficiency.

Uneven development of the elements composing the control mechanism of socialist economic integration

The results achieved through the practical implementation of proposals made for the organic linking of the plan with commodity-monetary relations just as the arising deficiencies indicate that some elements of socialist economic integration did not develop at the same rate and this has various consequences. Through the further development of planning cooperation between CMEA member-countries, as the fundamental organizational form of cooperation, certain forms of planning have come to the fore to an even greater extent than envisaged in the Comprehensive Programme. Let us only mention here the elaboration of long-term special-purpose programmes of cooperation, bilateral, long-term, general agreements between the Soviet Union and European CMEA-countries on production specialization and cooperation, or the coordinated plan of many-sided integration measures.

Mutual foreign trade, monetary-financial and credit relations of CMEA member-countries expanded, tools regulating them were further developed to a certain extent (changing the principle of the formation of contract prices, application of more correct proportions between rates of exchange of the transferable rouble applied in commercial and non-commercial settlements, expansion of the sphere of credits granted for investments).

At the same time, there are several problems included in the Comprehensive Programme concerning the further development of commodity-monetary relations that still await a practical solution (introduction of multilateral settlements, creation of convertibility between the transferable rouble and national currencies, uniform exchange rate of national currencies). Up to now we have not succeeded in creating a uniform system for the regulation of commodity-monetary relations of CMEA member-countries, meaning thereby an organic connection between such tools as contract prices, international socialist credit, rates of interest, rates of exchange, etc. furthermore, that value categories be enforced in the same way both in domestic and in international turnover. All this is first of all connected with such external and internal factors whose importance should be reassessed from many aspects, since the related solutions proposed until now are, as a matter of fact, only repetitions of concepts elaborated in the late 1960s and early 1970s.

Forms of joint planning activity required for the realization of long-term cooperation became stronger. At the same time, commodity-monetary tools were originally devised to serve the realization of five-year agreements on mutual deliveries. The realization of long-term special-purpose programmes of cooperation as well as of long-term

bilateral programmes raises new requirements towards these tools from the viewpoint of both the working out of the final efficiency of measures, computed for 10–15 years, and the ensuring of those economic conditions that are required in order to protect the individual member-countries from losses resulting from sudden changes in terms of trade.

Though multilateral cooperation in planning strengthened, this is still mostly of a formal character. There is, namely, a contradiction persisting between the multilateral determination of basic objectives and concrete tasks as well as the bilateral regulation of economic and organizational conditions of their realization (formation of contract prices, keeping a balance in settlements, etc.).

The cooperation of CMEA-member-countries became closer in spheres prior to production (technical-scientific and investment cooperation). At the same time, principles and methods of the planned utilization of value indicators required for the realization of these forms of foreign trade relations are not clearly elaborated as yet.

As international specialization of production becomes deeper and wider, together with cooperation in the sphere of fuels and raw materials, the trend to determine turnover between each other in physical terms becomes stronger and stronger. This phenomenon is connected, on the one hand, with the objective necessity to ensure steady and guaranteed delivery of some concrete products in a predetermined quantity and on time. On the other hand, this trend is a result of existing deficiencies in the planned utilization of value indicators and impedes further development of a mutually advantageous socialist international division of labour, an efficient utilization of its advantages, which results in a continued relative inelasticity of mutual deliveries, in strengthening rigid endeavours at keeping bilateral equilibrium and in a one-sided development of the commodity form of socialist international credit.

Analysis of all these phenomena, mentioned above in general terms, offers the conclusion that there is a definite contradiction between integration decisions coordinated in physical terms and the economic conditions of their realization. Economic conditions of cooperation do not yet form an organic part of joint planning activity at all levels and thus do not ensure their efficient functioning as a system. Commodity-monetary tools are utilized in periods preceding planning and founding concrete integration measures only to an insignificant extent. One of the most important reasons for this is that the individual countries use various methods for evaluating the efficiency of these measures and their economic impacts on basic processes of intensive reproduction (increase in the productivity of labour, acceleration of scentific-technical progress, decrease of the material and energy intensity of production, etc.).

The objectively existing contradiction between material-physical as well as value forms of socialist production is often expressed through the violation of the unity of these two forms and the lack of harmony between commodity and money flows. Commodity-monetary tools are not yet properly concentrated on the solution of most important tasks or on the realization of cooperation strategy coordinated in the framework of joint planning. One of the "bottlenecks" in the cooperation of CMEA-countries is the monetary-financial sphere.

However, it must be noted that reasons of the above-mentioned situation should not be sought after first of all in the monetary-financial sphere itself. Solution of such tasks of fundamental importance and of complex character as the extension of multilateral settlements by means of the transferable rouble, endeavours for multilateral equilibrium or the application of the transferable rouble in the trade outside the CMEA should obviously be preceded by ensuring certain preconditions first of all in the field of material production, planning and foreign trade.

Practical realization of these recommendations of the Comprehensive Programme is a complicated and long process that may take place only gradually, parallel with ensuring the necessary economic preconditions. These preconditions are among others: development of production specialization and cooperation; supply of the CMEA-market with goods of adequate quality better meeting needs; deepening and further development of the coordination of national economic plans, within that of the multilateral coordination of plans on long-term economic cooperation; further development of cooperation in mutual trade including various forms of foreign trade and problems of price formation. This process may take place parallel with the growth of economic potential, with the gradual approximation and levelling of economic development levels of CMEA member-countries and in proportion to the growth of their general export potential.

No one-sided development of monetary-financial relations separated from other elements of the control mechanism of socialist integration can be imagined in the future, either.

All control methods and forms serving the process of integration and cooperation have to correspond both to the determined goals of management, and to inner material preconditions of their realization, as well as to external circumstances in the given concrete period.

Nowadays, when the majority of CMEA member-countries enter a decisively intensive path of development requirements raised towards the control mechanism of cooperation are also growing. This mechanism that has ensured up to now the proper development of mutual relations first of all in quantitative respects, will have to promote more and more the evolution of qualitative factors serving the deepening of socialist economic integration.

In the course of this, as is proven also by practice, the control mechanism of economic cooperation and integration may be further developed only as a uniform system, taking all components into consideration. A closer and more organic connection between plan coordination and commodity-monetary relations postulates a further development of joint planning activity and of the organizational and control system of foreign trade in the individual member-countries, a consistent enforcement of the principle of mutual advantages as well as a coordinated development of foreign trade, monetary-financial and credit tools.

The development of "external circumstances" within a reasonable period has to be taken into consideration, too, first of all development trends of the capitalist world economy, capitalist monetary crisis, inflation and sharpening competition. When activat-

ing commodity-monetary tools the real weight of countries of the socialist community in the world-wide division of labour and on the world market has to be reckoned with as well.

To discuss all these questions in the framework of a single article would be a hopeless venture. Therefore, we choose only some of them and by means of these try to make palpable the essence of problems and possible variants to their solution.

Problems of cooperation and practical possibilities of their solution

Cooperation in the field of planning activity

Changing over to a decisively intensive path of development, the increasing number and complication of tasks in mutual cooperation as well as the intensive development of international specialization and cooperation of member-countries obviously increase expectations towards ensuring production relations in a planned manner. With regard to the socio-political character of activities going on in CMEA member-countries, cooperation in the field of planning, and especially plan coordination, will remain a basic method of intensifying integration also further on. The necessity to carry out joint planning in a complex, uniform system is growing and this system would be linked together by consultations in the fields of economic and technical-scientific policy, plan coordination, long-term and bilateral programmes, the coordinated plan of multilateral integration measures, and thus national interests of the individual member-countries would be in harmony with the interests of the entire socialist community. Important elements of this uniform system would be cooperation to be realized in the field of science and technology, investments, production, mutual deliveries and settlements as well as credit relations – all planned in a coordinated way. Multilateral long-term plan coordination, coordination of medium-term plans as well as yearly plans of mutual cooperation have all to be harmonized for the case if production programmes changed in the course of a five-year plan-period. Planning cooperation in the framework of the CMEA must be more and more extended also to the sphere of commodity-monetary relations.

There is a great need to strengthen harmony between the material-physical and the value aspects of planning. Elimination of contradictions between the material-physical as well as the value aspects of relations among CMEA member-countries is possible first of all if we succeed in a planned and optimum harmonization of economic interests of all member-countries on the basis of the principle of mutual advantages. Economic interests of the individual member-countries have one of the principal places in the system of joint interests. Therefore, a correct distribution of advantages expected from participation in the international division of labour is very important for the harmony of national interests.

Efficiency computations referring to foreign economic relations, national efficiency normatives expressing the interestedness of individual member-countries in integration

programmes are indispensable means of accounting for value categories in the course of the joint planning activity of member-countries as well as of the harmonization of national economic interests. Therefore, a scientific determination of the effectiveness of foreign economic relations of the individual member-countries as well as of joint ventures is one of the most important preconditions of joint planning activity.

Mechanism of the functioning of foreign trade

Further development of the organization and control of foreign trade raises a series of complicated and topical problems. Thus, for example, further development of the regulation of mutual deliveries on the basis of long-term commercial agreements is a problem to be solved yet. The problem is to ensure a close connection between tools serving for the mutual exchange of goods and planning as well as the intensification of cooperation in the field of material production. This affects first of all new requirements connected with the promotion of trade agreements, agreements on production specialization and cooperation, etc. attached to the coordinated plan of multilateral integration measures, as well as such other questions as, for example, the order of concluding trade agreements on mutual delivery obligations following from the above agreements. It would be important both from theoretical and practical viewpoints to elaborate the foreign trade aspects of longterm special-purpose programmes of cooperation.

The trade of CMEA member-countries between each other is characterized by gradually increasing volumes of deliveries realized in the framework of long-term agreements and by the strengthening of multilateral elements. But these processes are made more complicated by deficiencies in the existing system of settlements, by inadequate supply of certain commodities and by endeavours to keep a balance in the trade of individual goods or commodity groups within the global equilibrium of trade. Requirements connected with the quality of products delivered are not always met in the practice, because technical parameters of products offered by exporters often do not meet the increasing demands of users. This and several other conditions of the functional mechanism of trade between each other impede the change-over from a bilateral order of mutual deliveries and settlements to a multilateral one. In consequence, endeavours for bilateral balance in the trade of CMEA member-countries between each other are maintained just as is the application of fixed quotas in the planning of deliveries despite the fact that the possibility of multilateral settlements is technically given for the International Bank of Economic Cooperation.

As to the question of determining foreign trade quotas, its examination requires a differentiated approach according to several researchers. Namely, it has to be reckoned with that under contemporary circumstances it would be irrealistic to raise the requirement to completely eliminate quotas. A greater elasticity of mutual turnover can be created only parallel with the development of production for export and the elimination of shortages in certain goods. At the same time, it must be seen as well that CMEA

member-countries have reached by now such a quantitative and qualitative level in several industries (e.g. in the manufacturing of industrial investment goods and in some other fields) that quotas already impede exchanges here. Therefore, forms of exchange and quota-fixing ought to be modified and the introduction of an adequate preferential and stimulative system promoting the increase of exports of the countries concerned ought to be ensured. This system of export stimulation has to be accompanied by a modification of the system of the domestic distribution of goods in the individual countries in favour of export to other CMEA-countries.

Price formation in the trade of CMEA member-countries between each other

Foreign trade prices have an important part in ensuring equivalence and mutual advantages in the exchange of goods and services. The level of contract prices may strengthen or weaken willingness for international production specialization and cooperation and for the increase of mutual deliveries. Under the present circumstances efforts of economic theory and practice have to be concentrated basically on further development of the prevailing order of foreign trade price formation in the CMEA.

The prevailing price system, as practice shows, has advantages in several respects. At the same time, it can be shown that introduction of the yearly correction of contract prices has had some undesirable effects on planning cooperation. This system of price formation has distorted the structure of mutual deliveries and strengthened the effects of negative processes going on in the capitalist world economy.

The value in terms of money of mutual deliveries coordinated in the course of planning in material-physical terms is permanently changing.

Taking into consideration that the commodity structures traded by the individual countries as well as the growth rates of contract prices of various commodity groups are deviating, changes in prices have differentiated effects on the balance of payments of the individual partner countries and thus already impede to some extent the planned further development of the socialist international division of labour.

The existing system of contractual price formation cannot cope with several problems concerning the mutual advantages and efficiency of deliveries to each other in the framework of foreign trade. The interestedness of enterprises of several countries decreased in concluding agreements on international production specialization and cooperation or in prolonging existing ones.

The fact that there is no organic relationship between cooperation in the field of material production and the price formation of products which are subjects of trade causes problems in keeping a balance between mutual settlements and after all leads to a situation where trade has to be kept in balance in an artificial, forced way by means of contract prices separated from both domestic inputs and the development of world market prices. The inelasticity of the economic mechanism of cooperation is the reason why the CMEA-market is so much sensitive to cyclical changes of the world market.

In economic literature, there are various concepts to be found on the perfection of contract prices valid at present. Attention is focused, on the one hand, on increasing the stability of existing prices, the prolongation of periods between price revisions and, on the other hand, on fixing the principles of deviation from them. (E.g. in case of certain products the rate of changes in socially necessary inputs has to be taken into account.) The system of contract prices has to be adequate, in principle, to the concrete planning and management decisions made in the medium run (coordinated plan of multilateral integration measures, coordination of five-year plans, etc.) and also to long-run ones (long-term special-purpose programmes, bilateral programmes between the USSR and European CMEA-countries on production specialization and cooperation, etc.) in the framework of planning cooperation.

On the other hand, it is often emphasized that contract prices have to further approach to world market level as regards both their present level and the dynamics of their changes. Representatives of this latter standpoint are arguing that in the present order of price formation the cycle of price movements lags behind the world market cycle by several years. Thus even a "phase inversion" can be imagined (the maximum of contract prices coinciding with the minimum of world market ones and *vice versa*) whose negative effects are obvious. Such a negative effect is, for example, that goods mostly demanded are sold on the capitalist market and thus the dynamics of trade of CMEA member-countries between each other weakens, especially with regard to best saleable goods, the volume of reexports unjustified from the viewpoint of the community increases, etc.

There is also such a proposal that researches have to be continued in the direction that the price system has to be based on regional production inputs. Here it is about certain selected commodity groups, first of all whose world market is continually developing. Obviously, there are two main conditions of the wide-range application of this method, namely, that CMEA member-countries reach a level of technology, production organization and qualification of labour in the production of export goods usual on the world market, furthermore, that the mechanism of cooperation and its planning, commodity-monetary and first of all monetary-financial tools be considerably transformed.

Independently of the further development of the existing price system those correction and levelling mechanisms have to be elaborated and introduced in the practice which may protect the CMEA-market from the import of inflation and the transferable rouble from automatic devaluation. There are still some problems in connection with the sliding price basis and stable terms of trade, which arise especially sharply in connection with international product specialization and cooperation. Furthermore, the elaboration of scientific forecasting methods of contract prices causes difficulties which would be very important to overcome from the viewpoint of an economic foundation of long-term cooperation plans.

Intensification of production and trade relations of CMEA member-countries gave the task to science to study even more thoroughly new requirements raised towards prices of the trade between each other as the acceleration of technological progress by means of

prices, further development of the division of labour and resource allocation. Another similar problem is the role price should have in the transformation of production structure resulting from increasing inputs (especially at the beginning).

Socialist international credit

The ever increasing uniting of material and financial assets of CMEA member-countries in the interest of solving enormous tasks of socio-economic development and of the fastest possible utilization of technical and scientific achievements, lends an ever increasing importance to socialist international credit as a tool of planned accumulation and resource regrouping.

The most important condition of the effective functioning of socialist international credit is the creation of an organic link between commodity and money flows. In the socialist planned economy based on the principle of balanced linking of the production and distribution of goods the problem of commodity coverage of credits granted by socialist countries and their international banks to each other in transferable roubles requires a decision corresponding to the conditions of planned economy.

In case of inter-state credits granted by CMEA member-countries the question of commodity coverage does not even arise, since when concluding the agreement the parties concerned directly discuss all matters connected with the nomenclature of deliveries. However, when a credit is granted by the International Investment Bank this problem is always arising. The Bank granting the credit in transferable roubles has practically no possibility to exercise any influence on the allocation of credits to actual contractors nor on the process of their being turned into commodities. Since member-countries of the International Investment Bank have only limited possibilities to deliver investment goods originally not foreseen in their national economic plans, the volume of deliveries to the debit of IIB-credits is much less than would be enabled by the financial means of the Bank.

It is obvious that a solution for the problem has to be sought after in the perfection of the planning of foreign trade turnover between each other, in a closer connection between planning in material and in value terms, than previously. This should be realized on the basis of a thorough prognostication of world market prices and conjuncture. Special attention should be paid that long-term special-purpose credits be organically integrated in the system of joint planning (meaning by this that the actual commodities serving to cover IIB-credits should be reflected in full detail in the coordinated plan of multilateral integration measures and in national economic plans. It is a proposition worth noting that priority should be given to machine, equipment and material purchases from IIB-credits granted for this purpose in transferable roubles. From the viewpoint of solving the above problem coordination of national investment programmes is of great importance. Such coordination will create further possibilities for ensuring commodity coverage for long-term special-purpose credits granted on multilateral basis.

The above problem is closely connected with the problem of the currency structure of IIB-credits. As a matter of fact, the major part of IIB-credits is granted in convertible currency, though the capital of the Bank would allow credit granting rather in transferable roubles. From the total volume of credits granted by the IIB in the years 1971–1979 the share of credits in transferable rouble was about 22 per cent. Plans for the allocation of transferable rouble credits are usually fulfilled to 65–85 per cent.

From the limited role of the transferable rouble in investment credits granted by the IIB serious problems are arising for the trade of CMEA member-countries between each other. In order to be able to repay credits raised in convertible currency debtor countries are forced to direct a part of their export and the output of the project built up, to the capitalist market. This, then, further sharpens the problem of commodity coverage of the transferable rouble. The same results from the fact that the part of mutual turnover directly settled by member-countries in convertible currency is growing. This trend leads to a growing share of products – first of all those of good quality and in demand – that can be bought on the CMEA-market only against convertible currency.

Therefore, the basic reason for the relatively low demand for IIB credits granted in transferable rouble is that these credits have no guaranteed material or commodity coverage and, as a consequence, those raising credit sometimes cannot order the equipments necessary for them. The essence of the problem obviously lies in the qualitative characteristics of the currency of credit, the transferable rouble, and in the complete lack of its necessary money functions. This conclusion is supported by the circumstance that in case of payment in convertible currency all orders are accepted even if the given amount of the commodity in question was not included in the plans originally.

An immediate solution to this problem has to be sought after, taking into consideration that the developed situation undermines the prestige of the collective socialist currency.

Preserving the real value of the collective currency

From the viewpoint of increasing the role of the collective currency one of the most important tasks is to preserve the real value of claims and debts expressed in it. The essence of the problem is that external factors (lying outside the system) causing a permament rise in prices applied in the trade of CMEA member-countries between each other endanger the inner equivalence of the individual credit transactions. As a matter of fact, when repaying credits granted for a longer term, the creditor obtains a nominally identical, but in physical terms a smaller material or commodity equivalent – because of rises in contract prices in the meantime.

It cannot be doubted that this problem has a negative effect on the development of socialist international credit, as it limits credit resources for the individual member-countries and socialist international banks. In the opinion of experts the stability of value of long-term credits can be ensured by the following methods:

– an active exchange rate policy to determine the relationship between the transferable rouble and currencies of capitalist countries;
– consideration of changes in prices when establishing rates of interest on credits.

Beside the above solution variants experts of certain countries proposed, in the course of preparing certain cooperation agreements on joint investments, that prices of products with which credits will be repaid should be fixed in advance, together with the average prices of machines, equipments, etc. as well as of services rendered to the investment for the period of deliveries.

Raising the rate of exchange of the transferable rouble relative to capitalist currencies so that it expresses real changes in its purchasing power allows the level of contract prices and thus the purchasing power of the transferable rouble to remain stable. This exchange rate policy does not impede us in transposing relative world market prices to contract prices according to the general principles of price formation accepted in the trade of CMEA member-countries between each other. At the same time, exchange rate policy alone cannot solve the above problem properly. Therefore, the possibility of raising the rate of interest should be examined as another possible way of correction. For the practical realization of a more active interest rate policy a series of theoretical and practical questions have to be clarified, namely, the role of interest in the integrational cooperation of CMEA member-countries, how to ensure the commodity cover for interest, how to found the economically justified level of the rate of interest, what criteria should be applied to the revision of the rate of interest and when, and how to differentiate the rate of interest according to various kinds of credit and credit sources, etc.

Interrelations between domestic control systems of national economies and economic mechanism of cooperation

The efficiency of the conrol mechanism of socialist economic integration is directly connected with the efficiency of the domestic systems of control and management of the national economies. Practice has shown that precisely in these domestic systems of control it is especially important to considerably intensify the relationship between planning elements and independent accounting (khozraschot) relations. The main problem is the necessity to increase the independence and economic interestedness of enterprises and associations within the framework of the state plan, further develop socialist democracy in production, objectively evaluate quantitative and qualitative results of economic activity and the development of independent accounting from the viewpoint of the entire national economy. This latter includes, for example, the closing of the gap between producer prices and real production inputs and international market conditions, the minimizing of state subventions and unfounded high profits. More concrete forms have to be found for strengthening the interrelation and interdependence of tools used in international relations and national economic mechanisms.

The circumstance that in the course of improving their domestic systems of economic control and management CMEA member-countries have solved a great many common or at least similar problems makes more and more urgent to exploit such reserves of cooperation as the exchange of experience: it has to be made more lively at all levels and in various forms.

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Every experience obtained in the course of realizing recommendations of the Comprehensive Programme referring to an organic linking of planning elements with commodity-monetary ones prove the depth and correctness of Lenin's thesis according to which partial problems can only be solved after fundamental, principled questions have already been clarified.

Further development of the control mechanism of socialist integration among CMEA member-countries should be ensured in the present period by relying on the theoretical bases already established and tested in practice and by intensifying researches into and elaborating scientific-methodological recommendations concerning the following problems:

a) strict preservation of the unity of material-physical and value aspects with all forms of joint planning acitivity of CMEA member-countries. One of the necessary preconditions for this is to strongly rely on commodity-monetary instruments in the stage of the foundation and preparation of integration measures. To this end, the comparative analysis and coordination of methods used by the participating countries for computing the efficiency of cooperation have to be accelerated (programmes of international production specialization and cooperation of investments, exchange of services, etc.);

b) the absorptive capacity and stability of the international CMEA market have to be increased, mutual trade expanded. In the interest of this it would be necessary:

- to eliminate existing deficiencies of CMEA foreign trade prices while preserving the basic principles of price formation;
- to examine more deeply the requirements raised by the intensification of production and commodity (market) relations of CMEA member-countries towards prices applied in the trade between each other, as for example, acceleration of technological progress, division of labour, further development of resource allocation by means of prices;

c) a problem to be solved yet is further development of the monetary, financial and credit relations of the CMEA-region. In connection with this it would be expedient to deeply and many-sidedly analyze the situation developed in this field and to elaborate practical recommendations for ways to better utilize monetary and credit means for the realization of integration decisions. For this firstly a well-founded concept on the uniform control system of commodity-monetary relations themselves would be needed.

The study of the above mentioned and other problems by the groups of experts and wide discussion of them at international symposia and theoretical-scientific conferences in the framework of CMEA would help to work out practical recommendations in this domain.

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ВЗАИМОСВЯЗЬ ПЛАНОВЫХ И ТОВАРНО-ДЕНЕЖНЫХ КОМПОНЕНТОВ В РАЗВИТИИ СОЦИАЛИСТИЧЕСКОЙ ЭКОНОМИЧЕСКОЙ ИНТЕГРАЦИИ

К. ЛУФТ

Результаты, достигнутые в связи с практическим применением положений Комплексной программы социалистической экономической интеграции, показывают, что концепция органического сочетания форм сотрудничества в области плановой деятельности с более широким использованием товарно-денежных отношений как основной направленности механизма управления экономическими и научно техническими взаимосвязями стран-членов СЭВ в целом утвердилась как в теоретическом, так и в практическом плане. Причем развитие отдельных элементов названного механизма происходило неодинаковыми темпами и привело к различным результатам. Пока еще слабо используются товарно-денежные инструменты на предплановой стадии обоснования конкретных интеграционных мероприятий. Как подтверждает опыт, механизм управления экономическим сотрудничеством может быть улучшен только как целостная система, включающая все элементы. Для этой цели требуется комплексное решение ряда сложных проблем совместной плановой деятельности, так же как и улучшение систем организации и управления внешними экономическими связямистран-членов СЭВ, действенное использование принципа взаимной выгоды в экономических отношениях, равно как и согласованное развитие инструментов, которые должны использоваться во внешней торговле, валютно-финансовой и кредитной политике.

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S. RICHTER

HUNGARY'S FOREIGN TRADE WITH CMEA PARTNERS IN CONVERTIBLE CURRENCY*

Inter-CMEA foreign trade settled in dollars has been boosted by the combined impacts of long unsolved problems of traditional CMEA cooperation system, the world economic changes of the 1970s, indebtedness of the CMEA countries and the limitations of their convertible commodity funds. Some types and the pattern and perspectives of foreign trade settled between CMEA countries in dollars is reviewed in this paper on the basis of Hungarian experiences.

Why does Hungary settle trade with her CMEA partners in convertible currency

The question asked in the title needs another two ones to be complete. Why do Hungary's European CMEA partners trade *with Hungary as well as with each other* in the key currency of the West?

In the quest into the causes correlations reveal themselves, each of which is separately not unknown to economist engaged in the problems of the CMEA. These symptoms together have led in particular interaction to the swelling of dollar-settled foreign trade turnover, sporadically and negligibly existing already in the 1960s, to a turnover amounting to about 10 percent compared to Hungarian trade settled in roubles with the countries in question.**

The first and most important correlation concerns foreign trade prices. The same items in the export of CMEA countries had and have *different prices according to sales relation, that is, two simultaneous prices for the two main markets*; one expressed in transferable roubles in the turnover *inside the CMEA* and another price of another order of magnitude expressed in dollars on the world market.***

What are the historical precedents to this "price cleavage"? The problem of prices has always been one of the most frequently disputed issues of the CMEA cooperation system. The prices of the two markets parted with each other in the early 1950s during

*On the basis of a paper submitted to the conference of researchers of CMEA-countries on monetary and financial problems (7–10th October, 1980 – Sopron, Hungary). (A review of the conference can be found on pages 359–363) – The editor.

**The study covers the following countries: Bulgaria, Czechoslovakia, Poland, the German Democratic Republic, Romania, the Soviet Union.

***Of course the "band" in which transferable rouble prices disperse is rather wide since prices of the same product are known to differ considerably by countries [1]. Also dollar prices, show a dispersion – but in a narrower "band". The substance is that both the extreme values and the average prices are determined by different factors in the case of the two bands; they agree only by chance.

the Korean boom. The rigid system of the so-called stop prices fixed during the war began to ease only after 1953. Part of the prices were bilaterraly modified by the member-countries admitting (and having admitted) the realities of the world market *ex post.* The "symbiosis" of the stop prices and the new bilateral price deals and the deriving problems raised the need to resolve the price problem "for good". [2] The debate about a common price base, lasting from the late fifties for a decade and engaging enormous intellectual energies, was mostly about whether the intra-CMEA trade should be based upon prices showing their own inputs and conditions of production or upon prices adopted from the world market, "cleaned" from business influences and fixed for a longer period of time. As a matter of fact, this might be put as follows: the point to decide was the *manner: how* prices asserted in internal trade *should differ* from the actual world market prices, the *way in which* the prices of a product should *not* be the same in the two markets. (Although already then there were economists – J. *Mervart* and V. *Černiansky* – who warned against the negative practical implications of the different price levels and price proportions of the two world markets [3].)

A new dimension was brought about in the late sixties by the findings of empirical studies and the strivings after economic reform. In 1969, Béla Csikós-Nagy said: "The crux of the matter is not a capitalist world market pricing principle or a price base of our own but the alternative *of a "physical" or a monetary system of economic cooperation"* [4]. But recommendations for a more active assertion of commodity (market) and monetary relations remained mostly on the level of theoretical debates. The Comprehensive Programme approved in 1971 considered the price problem and the other partial problems already in another approach: it aimed at resolving long unsolved problems in the perspective of the socialist economic integration.

A new situation was brought about by the 1973 price explosion and the extensive readjustment of price proportions: the sharpening conflicts of interests necessitated approximation of the prices of the two markets. The "sliding price base" adopted in 1975 and formed as a solution by five-yearly moving averages tried to integrate the interests attached by net raw material exporting countries to higher raw material and fuel prices and those of net raw material importing countries to protract the price changes over time, as well as those of national planning agencies attached to the relative stability and predictability of prices and price changes. But the price proportions and levels of the two markets came nearer to each other only relative to the 1974 state of affairs for, because of the world inflation that used to be very slight earlier, the five-year lag did not produce as dramatic disproportions as those encountered after the price explosion in much shorter intervals.

In summary, we can state that up to now the CMEA cooperation system does not possess a mechanism by which it could cope with the new price sensitivity of the world economy *here and now,* that is, at any point of time there still are two prices for any export item depending on the direction of sale.*

*It is very important to note that in sales and purchases for roubles the role of price is not exclusive in the course of inter-state negotiations but it is price and counter-deliveries together that

In the two years following the 1973 price explosion it seemed to the economic leadership of the European CMEA countries that the radical readjustment of price proportions was an internal affair of the countries making up the capitalist world economy and the difficulties affecting the CMEA countries could be parried by dispersing the burdens whereas the losses suffered in foreign trade could be compensated by accelerated economic growth [5]. In one or one and a half year after the price explosion it was not yet realized that the economies of mainly Western Europe and North America showed signs not only of mass unemployment and rocketing inflation but *also* of gradual structural adaptation to the new world economic conditions.

To guarantee the old conditions of smooth growth for the enterprises became feasible only through damping the impulses arriving from the world market. As a result of this economic policy the enterprises could not feel the force of the new world market requirement in their management. Flexibility and better adaptivity did not become vital for them nor did, consequently, shifting to more material and energy saving products that would cope with rapidly increasing technical requirements as well [6]. Introduction of stimulation for structural adaptation was made difficult by regrouping enterprise incomes through budgetary intervention with the aim of levelling the position of the enterprises and a similar allocation of external resources while the indebtedness of the different CMEA countries was steadily increasing [7]. Because of the conservation of the earlier production structure economic growth – involving imports in the better case unchanging in physical terms but because of the increasing world market price level increasing in terms of value – was rather fast for a while after the price explosion but slackened by the end of the decade, and did not produce a quality break-through in counter-balancing the more expensive import from the West, in turning out products of the manufacturing industry whose foreign trade prices could follow the general trends of world market price rises.

Without structural adaptation, however, the given export commodity funds in which raw materials and fuels as well as intermediary products make up the lion's share,* and which are expanding at the same rate as before are no longer sufficient to promote exports to western countries.

Boosting of the production of these commodities in conformity with the acute needs hits not only natural barriers. The most important retarding factor is the extremely high capital intensity. In the short run the manufacturing industry and in the longer run the entire national economy suffer from a regrouping of resources into the extracting and basic materials industries. There is limited opportunity to draw more western capital into these industries because of trade balance problems in the case of the small CMEA countries and because of other reasons in the case of the Soviet Union.

count. (E. g. when in return for a product sold much below its price one can get a relatively still cheaper product, then the profitability of the transaction cannot be judged only after the export price.)

*In the exports of the small CMEA countries to Western countries primary energy, raw and basic materials and intermediary products represented a share of 50 percent and for the Soviet Union 88 percent in 1975. Adding agricultural materials and foodstuffs, this share was found to be 71 percent for small CMEA countries and 92 percent for the Soviet Union [8].

A higher export performance in the dollar area therefore strongly depends on the *redistribution* of the fuel, raw material and intermediary product commodity fund available to the national economies between exports to the rouble and the dollar areas and domestic sales. The part of this commodity fund used at home is indispensable for the smoothness of the domestic production processes and for maintaining the attained supply levels in the different countries. It follows that the export commodity fund destined to the rouble area might serve as the main supplementary resource for the commodities necessary for an export offensive in the dollar area.

At the beginning of CMEA cooperation deliveries of fuel and raw materials constituted its backbone because of the drive at finished product-centered autarky. The raw material delivery relations established over many years are very close but unidirectional between the small CMEA countries and the Soviet Union while they are mutual and not so very close between the small CMEA countries. The member countries coordinate their import intentions many years before the actual deliveries at bilateral plan coordination negotiations where the mutual assurance of primary energy, raw materials and intermediary product deliveries serving for foundation of the next five-year term of economic development remain the major issues. It is consequential upon the very slowly changing production structures of the different CMEA countries with still high import (and therein mostly imported material) intensities that proportionally expanding imports settled in roubles continue to be an important condition to the normal functioning and growth of their economies. If for any reason the regularly coming import consignments from the rouble area fail to arrive or increase at a rate below the requirements of the economy of the different CMEA countries this disturbs the production process or leads to purchases for convertible currency.

So the basic formula is as follows: At present the regional foreign trade cooperation system of the CMEA operates in a world economic environment that is now hypersensitive to price changes. Its member countries are becoming more and more indebted to countries outside this system of cooperation. Consequently, the convertible export commodity fund that has already been a bottleneck is under heavy pressure – precisely because of the efforts at reducing indebtedness – which works towards a shift of proportions in the direction of sales outside the CMEA. At the same time as the member countries are strongly interdependent in the field of raw material deliveries they are in bad need of expanding the mutual trade in these products but in the traditional system of cooperation no means are found to solve this inconsistency.*

The substance of the inconsistency (and at the same time the clue for – short-term – solution) is the following: through indebtedness these countries are not forced to enhance their sales to countries outside the CMEA but to try to maximize their receipts in convertible currencies whether the purchasing country is a CMEA member country or

*It is on purpose that I do not analyse the doubtlessly important role of joint investments in solving the said inconsistency, because this study is an attempt to reveal solutions given in foreign trade itself.

not. Another way of solution would be the creation of a type of transaction where for a certain export item the country could get, if not hard currency receipts yet commodities which, if bought on the world market, would cost her the amount of currency equivalent to the price obtainable for that export item on the world market. This is how trade for convertible currency between CMEA countries has attained a far bigger significance from the early 1970s on than it used to have earlier. It consists of two constituents: the *ad hoc* deals and "constructed" deals as well as of intermediate trade negotiated by merchants of countries outside the CMEA. Owing to the aforesaid the so-called "hard commodities", having a decisive role in the international division of labour between the CMEA countries are exchanged through three channels: the traditional clearing turnover settled in rouble, the direct turnover in convertible currency (*ad hoc* deals and "constructed" deals) and in intermediate trade negotiated through middlemen.

Hereinafter the problems of traditional clearing turnover will be dealt with only inasmuch as they are relevant for subsequent discussion because from here on the features of the turnover between Hungary and the other CMEA countries settled in currencies other than the rouble will be dealt with.

Turnover between CMEA countries settled in convertible currency

The category recorded in statistics as turnover settled in convertible currency is, as mentioned above, a collective name for two different types of transactions: of the *ad hoc* deals and of "constructed" deals.

The *ad hoc deals in convertible currency* are normally initiated by foreign trade companies and are realized after approval by the Ministry of Foreign Trade. Occasionally deals are reached after negotiations on higher levels.

Unlike inter-state clearing negotiations here the commodities intended for sale or purchase are not confronted with each other, the export and import deals are perfectly independent from each other. It follows that, also unlike the practice of inter-state negotiations, the parties need not take into account the balance of the total *ad hoc* turnover with the given country. (The scope of the so-called special account deals is an exception to part of the aforesaid but these deals will be treated later on.)

The *ad hoc* deals are usually initiated by enterprises, so the direct motives for the deals under study must be sought on that level. Different factors affect sales and purchases in reaching a deal. One of the main motivations of *sales* is a powerful interest in earning convertible currency, the second one is a dollar price set higher than the attainable rouble price. The first motive is realized for the enterprise in a way that sales to socialist countries for convertible currency are counted in the export performance to the West and the enterprises get all the special facilities they are entitled to after exports to the West – with which the government wishes to achieve outstanding profitability of export to the dollar area. The different price receipts they can get with the same articles

in the two markets (with differences ranging from a few percentages to multiples) will, even assuming equal incentives for the two markets, "drive" the deals towards the market that guarantees higher receipts. The correlations discussed here certainly hold also for enterprises of the partner countries.

Ad hoc purchases for convertible currency are effected because a particular product is not available for rouble, and it could be bought only from the world market for a higher or the same price. Since, as a rule, as it will be seen below, the overwhelming majority of the turnover consists of materials, fuel and agricultural products, even the same price may be attractive because of lower freight costs. Moreover, occasionally it may be the objective of the purchasing enterprise to maintain established business relations with an enterprise that used to sell for roubles.

The trend of *ad hoc* turnover settled in convertible currency is incalculable and unplannable. The reason is that, owing to the changeability shown by world market prices in this decade, it differs not only from year to year but often from month to month which product can be marketed more favourably or less favourably for dollars than at the relatively stable rouble prices.

Recorded in the category of turnover settled in convertible currency among *ad hoc* deals there exists between the CMEA countries a clearing turnover settled in dollars, the so-called special account deals, looking back to many years. Although it is not recorded separately, this type of turnover shows a number of characteristics different from the *ad hoc* deals. In Hungary the Hungarian Foreign Trade Bank is the gestor of turnover settled through this special account. The Hungarian Foreign Trade Bank takes care that the bilateral clearing accounts should preferably not show more than a minimum difference from zero balance. Thus the sales and purchases are not independent from each other, even if there is no direct confrontation of commodities. Because of the restrictions enterprises are often reluctant to do business transacted through the special account, they find direct *ad hoc* sales for convertible currency free from any counterdelivery obligations or interventions more appealing.

In the other kind of convertible-currency deals, the "constructed" deals, the parties express their intention to buy and sell by directly confronting their export items. Use values are regularly confronted also at inter-state clearing negotiations (hard item for hard item, soft one for soft one, or machine for machine, material for material). There is still a substantial difference between these two kinds of confrontation. In inter-state negotiations the tactics applied in different confrontations is not independent from the bargaining positions emerging in the course of confronting the other items. Moreover, it is not independent from commercial-policy considerations to be pursued towards the country in question, foremost from the balance wished to achieve. In addition, the prices are set on basis of the valid CMEA principles of price formation.

In contrast, the conditions of a "constructed" deal are not affected by other parallel deals with the given country nor by the valid CMEA pricing principles. The circumstance that in stating the price and the currency of payment the parties are not bound by the CMEA pricing mechanism, that might at the given moment not meet their

interests, allows ample ground for compromises that could not have taken place in traditional frameworks.

Apart from the traditional clearing turnover settled in rouble there exist also "constructed" deals settled in rouble. In the case of "constructed" deals settled in rouble the rigorous confronting of commodities is explained by the limited purchasing power of the transferable rouble. The parties try to negotiate zero balance accords so as to save both of them the trouble of not being able to spend a transferable rouble payment, in case of export-import deliveries of unequal values, on a commodity of the same hardness as his export item.*

In case when obligations are not met the party affected may – in lack of other sanctions – react by withholding deliveries of his export items involved in the previous confronting. On the other hand, in the case of dollar "constructed" deals the confronting of products finds its reason and importance rather in the demand for simultaneously laying down export and import deliveries of big volumes than in providing for the uncertainties of counter-deliveries. The balance of these "constructed" deals is usually not zero or when it is then the reason is quite different from that in the case of rouble "constructed" deals. In this case, namely, the party delivering more need not worry about being unable to spend the amount of the balance. But in some dollar "constructed" deals zero balance deals may be motivated by the intention to completely bar the flow of money. (E.g. forward sale of 100 thousand tons of grain at a fixed date attached to the purchase of an amount of potash fertilizer that could be bought at that given date for the world market price of grain and at the world market price (also of that given date) of potash fertilizer. The actual world market price is a mere ground for bargaining in both cases.)

The dollar "constructed" deals are, except for these with zero balance, "framework contracts" relating to large volumes, reached on the level of planning offices and stating volumes of commodities to be purchased.

Let us examine the aforesaid in the light of figures. The increasing importance of convertible currency trade between Hungary and her CMEA partners is revealed by a comparison of rouble turnover with convertible currency turnover. Between 1971–77 the value of Hungarian exports transacted in roubles somewhat more than doubled, while the exports to CMEA countries for convertible currency increased seven times. The import does not show so striking difference: in the same period the value of import settled in roubles nearly doubled and the value of convertible currency import trebled.

Hungarian convertible currency import from the CMEA countries is lagging behind export not only with respect to its growth rate but also in absolute terms: on the export

*Many agreements on specialization and cooperation also specify zero balance. It also happens that when the balance of an agreement on specialization and cooperation is not zero then a special protocol specifies the articles which the party delivering for a higher value may buy for his surplus. That is, several agreements on specialization and cooperation are reached as "mini" "constructed" deals.

side of our foreign trade with CMEA partners the turnover settled in convertible currency is a much more important item than on the import side. One can form an idea about the importance of convertible-currency turnover by relating the value of turnover settled in convertible currency to the value of export and import, resp., in rouble. Relating the sales for convertible currency to Hungary's export settled in rouble, it is found that while the magnitude of the former never came up to 4 percent of the value of the rouble export in any year from 1971 to 1973, from 1975 to 1979 it was only once less than 10 percent in any year. Such a forward push is not discernible in import. In 1974, the "top year", the value of convertible-currency import from CMEA countries amounted to about 8 percent of the turnover settled in rouble. In the years before and after 1974 smaller rates are found. 1978 was an exceptional year, as, for the first time after a long while, convertible-currency import was higher than export. The negative balance formed clearly because of the drop in convertible-currency export (it was less than 8 percent compared to the value of the rouble turnover.)

The trade against convertible-currency inside the CMEA amounts to a considerable part of Hungary's total non-rouble foreign trade turnover. Its share in export has been over 10 percent for years (in 1974 nearly 14 percent while in the same year the value of Hungarian goods sold to less developed countries amounted to appr. 16 percent of total exports to the non-rouble area). In the Hungarian import the share of convertible currency turnover in the CMEA relation was over 5 percent in 1977–79 but in earlier years it had always been less than that.

The characteristics of trade through mediators of Western countries

The mediated trade is – usually – a very important element of world trade. The mediator offers against a fee his marketing experience, established sales network and accurate and quick transactions, while the party contracting him weighs what would cause him greater loss: the part of price revenue unearned because of the fee or the extra cost of marketing organized on his own. In many cases it is cheaper to commission mediators than the alternative solution. However, when a mediator located in a Western country mediates between the socialist countries he gains from the fact that the company of the seller CMEA country is so badly interested in prompt dollar revenues that it would not mind selling at a cheaper price. It may also happen that a Western mediator is commissioned by a foreign trading company of some CMEA country because of its failure to resolve a conflict encountered in the course of the original negotiations – still about sales for rouble – by means of a convertible-currency deal, or because it is so ignorant as not to know that its goods could be sold to a CMEA partner at a higher price in a direct deal for convertible currency. The buying country's company turns to an agent because it could not get the goods for rouble nor could it buy them for convertible currency directly from the seller e.g. because of lengthy bureaucratic procedures or at worst

because it never knew that the goods in question were available in another CMEA country.

The weight of mediated trade transacted by Western mediators between CMEA countries is smaller than that of direct sales for convertible currency. In export the mediated trade had its dubious "heydays" in 1973 and 1974 when the value of mediated Hungarian export corresponded to 7 and 9 percent, resp., of the export settled in rouble. Since then its importance has steadily decreased and dropped in 1977 to one percent of the rouble turnover.

In import it was significant in 1974 and 1975 and attained a value of about 8 and 6 per cent, resp., compared to Hungarian import settled in rouble. The drop of mediated import was also significant but less than what was found with exports. There were several attempts at the suppression of mediation. Under the present conditions the *ad hoc* deals are capable of replacing the functions of mediation. The recent losing of ground of mediation is due in the first place to the fact that the foreign trade authorities of the member countries took the possibility of this substitution into consideration.

Commodity patterns of trade between CMEA countries transacted directly in convertible currency and through mediations of Western countries

The commodity pattern directly transacted in convertible currency and through mediation show remarkable similaritites both in Hungarian imports and exports. Examining the turnover data disaggregated to the level of commodities a big part of the commodities can be found in both turnovers, or are found one year in the direct convertible-currency turnover and in another year in the mediated turnover.

In the *export* the dominating items are agricultural products and products of the food processing industry. Their share in direct convertible-currency export to CMEA countries was over 50 percent in every year except 1972, and from 1975 on agricultural and food products amounted to two-thirds or more of the turnover. These products' share in the mediated export was 90 percent in 1973-75 but considerably decreased thereafter. Another significant item of Hungarian export consists export consists of products belonging to the commodity category of materials and intermediary products. Their share varies with good or poor grain crop both in the direct convertible-currency turnover and in the mediated turnover.

In the *import* in 1971-1975 the products bought from CMEA countries for convertible-currency and in 1971-72 the products bought through Western middlemen were predominantly materials and agricultural products alternately having smaller or bigger shares. In the mediated import considerable volumes of primary energy (Soviet crude oil) had been important already at the beginning of the period under study, that is, before the price explosion, in 1971-1973, and this gradually became dominant. In the direct convertible-currency import from CMEA countries, from 1976 on, the share of primary

energy increased from one-third to over 50 percent, while the share of agricultural products sharply dropped.

It is worth noting that machines, equipment, industrial consumer goods play a very small role in both the direct and the mediated convertible-currency trade between the CMEA countries.

Summary

The phenomena reviewed above – the *ad hoc* turnover in convertible currency, the "constructed" deals and mediated trade – are necessary elements of the existing conditions and must be reckoned with as long as the circumstances producing them do not change substantially. It is untimely to consider to eliminate or even to reverse them. But the question immediately arises whether there is any objective limit to the growth of convertible-currency turnover and the spreading of "constructions" between the CMEA countries?

In *principle* the sphere of dollar settlements may expand in intra-CMEA turnover until the concerned countries are interested in "rechannelling" the "hard" commodities from the traditional clearing turnover to any form of deals settled in convertible currency. Therefore, the limits to rechannelling are to be found in the increasing scarcity of "hard" commodities in the traditional clearing turnover. Of course, this is merely a theoretical limit since important factors in the intricate system of interests of CMEA cooperation are working towards preservation of the traditional commodity pattern of trade and of the traditional price terms and towards putting off the changes so as to take place in the longest possible time. *Practically* it is the *increment* of the turnover in "hard" commodities that has been sold and bought in the outlined forms in recent years. In the 1980s, along with a predictably slow expansion of the traditional clearing turnover, the increment of trade in "hard" commodities will foreseeably be transacted this way.* Although it is not directly pertaining to the subject, yet it has to be noted that in the 1980s new products entering as rederuption of investment contributions, also involving significant outlays in convertible currency, will obtain substantial weight in the trade between CMEA countries.

In the context of solving equilibrium problems the demand may arise to strengthen cooperation between the CMEA countries by developing their internal trade at a higher rate than their external trade, that is, by asserting a certain tendency towards introversion. Can the experience gained from the analysis of the convertible-currency turnover between CMEA countries provide some guidance concerning introversion?

For all and each of the CMEA countries it is a pressing need to enhance exports to the West. In such circumstances each of the CMEA countries are interested in increasing

*In 1978–79 there were many signs indicating that the forms of commerce presented here would gain ground with a number of important import items not in terms of increments but within the already attained volume of turnover.

the share of the turnover settled in rouble only as importers but the realization of these intentions is confined by the reluctant export intention of all the other CMEA partners. With respect to convertible commodities all the CMEA countries would, in contrast, prefer sales to the dollar area as the rouble received for export items redirected from the dollar area into the rouble area is suitable neither for discharging Western debts nor for being spent on desired goods in any CMEA country. [9] Consequently, in the framework of the traditional system of cooperation sellers are not interested in an introversion that would give preference to exports to the rouble area over export to the dollar area.

An increase of CMEA's internal turnover in convertible products at the expense of external turnover can be attempted only by "internalizing" the world market price conditions, that is, through the expansion of turnover transacted in convertible currency between the CMEA countries and of "constructed" deals relating to the exchange of certain hard items settled in rouble. Considering the kinds of products exchanged in the manner studied here this means that, outside the field of certain materials, fuels and agricultural products appearing simultaneously in total CMEA exports and imports, there is no realistic way to realize the introversion in agreement with the interest of each of the countries concerned. The convertible-currency deals and the rouble "constructed" deals provide an objective possibility for channelling the Western deals into this sphere but, since these commercial forms provide more or less *equal but not better* conditions than the world market, this possibility is not coupled with any economic motivation to trigger the process. This, again, casts doubt on the purposefulness of strivings at introversion even in this narrow sphere. If, in the sign of forced replacement of external import, introversion went beyond the aforesaid limit and extended to high-technology products, then the Western import would be "replaced" by products that are poorer than the alternative offered by the world market in performance and in use value. This would inevitably inflict losses upon the buyer in the short run as he would get poorer quality goods and, in the long run, upon the seller, too, who would establish export capacities for "soft" products as nothing whatsoever would force him to do the contrary. [10] This would certainly throw back the technological development of CMEA member states.

In conclusion, we have to ask the question whether the turnover settled in convertible currency should be taken as a positive or a negative phenomenon in the cooperation of CMEA countries?

Convertible-currency deals should not be analysed in isolation, abstracted from their background. The direct and the mediated turnover settled in dollars have been brought about and maintained by the *possibility* of applying a double valuation in a certain range of goods and by the member countries' efforts at making the best use of this possibility. They are simultaneously a sign of problems in the traditional system of cooperation and a channel for solving part of these problems and, with no alternative promising reform of the system of cooperation in sight, their existence may be evaluated as being positive.

At the same time, it is not reasonable to attribute importance beyond the given limits to the turnover settled in dollars. It is not timely, for many reasons, including the

internal economic mechanism of member countries, to expect that the way of developing the CMEA system of cooperation could be found in a dominating turnover settled in dollars, to be brought about either through a spontaneous process or as a result of deliberate central intervention.

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НЕКОТОРЫЕ ВОПРОСЫ ВЗАИМНОГО ВНЕШНЕТОРГОВОГО ОБОРОТА СТРАН СЭВ С РАСЧЕТАМИ НЕ В РУБЛЯХ

Ш. РИХТЕР

С начала 1970-х годов между странами СЭВ все большее значение приобретает оборот в конвертируемой валюте. Это вызвано рядом различных, но взаимосвязанных причин. Из-за особенностей системы ценообразования во взаимной торговле стран-членов СЭВ товары, которые могут быть проданы как на социалистическом, так и на капиталистическом рынке, имеют различную цену в зависимости от рынка сбыта и это в нынешних условиях ведет к тому, что покупатели заинтересованы, а продавцы незаинтересованы в сбыте данных товаров внутри СЭВ; вследствие задолженности стран СЭВ их экспортный товарный фонд (в основном, топливо и сырье, некоторые изделия-полуфабрикаты, а также продукция сельского хозяйства и пищевой промышленности) испытывают значительное давление, смещающее пропорции сбыта в сторону внерегиональной

реализации. Так как в области поставок сырья страны СЭВ весьма сильно зависят друг от друга, они испытывают насущную потребность в расширении взаимной торговли прежде всего этими товарами, но, в то же время, традиционная система сотрудничества не располагает средствами разрешения этого противоречия. Сущность противоречия и одновременно — на краткосрочный период — средство его разрешения состоят в том, что страны СЭВ пытаются увеличить свои поступления в конвертируемой валюте независимо от того, является ли страна-покупатель членом СЭВ или нет. Вторая возможность — создание такого типа внешнеторговых сделок, при которых страна вместо конвертируемой валюты получает такие товары, за которые на западном рынке она должна была заплатить такое же количество валюты, какое получила бы при сбыте своего экспортного товара на этом рынке.

Первому решению в практике социалистического оборота в конвертируемой валюте соответствует единичная сделка, которая фактически мало чем отличается от прочих сделок, расчеты по которым ведутся в долларах, а второму решению — т. н. конструкционные сделки с расчетами в долларах. В статье дается обзор особенностей этих форм торговли, а также приводятся данные по взаимному обороту стран СЭВ с расчетами в конвертируемой валюте.

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ECONOMISTS AND ECONOMIC THOUGHT

A. MADARÁSZ

SCHUMPETER'S THEORY OF ECONOMIC DEVELOPMENT

This article was originally written as an introduction to the Hungarian version of *Schumpeter*'s book. It first briefly outlines Schumpeter's life & oeuvre and then discusses in some details the logical structure of "The Theory of Economic Development". Neoclassical equilibrium theory forms its starting point but development is a central category. The relationship between statics and dynamics is the determining problem, his famous categories such as innovation, and the entrepreneur, derive from this as well as much criticized, not too realistic abstractions. The book became a classic, but it did not succeed statics and the dynamics, the division reproduces the opposition of abstract logical analysis (equilibrium theory) and the historical and sociological approach (German historical school).

The durability of a scholar's work, or of a theoretical construct, last or not often depends, at least in the social sciences, to the degree to which it lends itself to simplification, whether it provides the raw material for that process of reception where colleagues and the general public, contemporaries and posterity, work free certain leitmotifs from the complexity of ideas and propositions, reducing the scholar's role in the history of ideas and his contribution to the accumulation of knowledge, to certain key words subject to ready recall.

This process, with its own in-built misinterpretations, generally arouses the protest of the historians of economic thought – and of other disciplines as well. Yet it also provides permanent work for all of them, being the producers, and perhaps sole consumers, of increasingly expensive Gesamtausgaben and variorum editions. When it comes to Schumpeter an additional care at seems to be necessary. "The Theory of Economic Development" which is the instrument of simplification, and thus the vehicle ensuring that Schumpeter's work will not prove ephemeral, is, in a certain sense, a paradox part of Schumpeter's oeuvre. It includes his basic ideas, the conceptual pattern and the categories (entrepreneur, innovation, economic change etc.) which were Schumpeter's own through-out his life and which economic theory still links to his name, and yet it largely lacks that broad vision of the socio-economic process which is the most characteristic feature of the oeuvre as a whole. Trying to unravel the paradox one might say that it is precisely this broad vision which offers the key to Schumpeter's contradictory career, making him one of the greatest of the 20th century bourgeois which offers the key to Schumpeter's contradictory career, making him

one of the greatest of the 20th century bourgeois economists, and yet a lonely figure for most of his life, and especially during his American years.*

Joseph Alois Schumpeter (1883–1950), born in Austria, never became as widely known to the general public as *Lord Keynes,* who was born the same year.** His students such as Gottfried *Haberler,* Paul *Samuelson,* and Paul *Sweezy,* differed not only in politics but also on economic questions, that is Schumpter did not found a school. Schumpeter's interest concentrated on economic theory, history, and the history of ideas and, particularly with advancing years, he neglected questions of economic policy, or of mathematical economics – which were growing in popularity, thus keeping off the royal road that led to glory in the eyes of the public and the authors of textbooks. It may well be that Schumpeter lacked successors since – in this age of specialisation – only extraordinarily scholars disposed over the comprehensive knowledge of economic theory, economic history, statistics, sociology etc. which he displayed in his works. There may have been some among his contemporaries who were more familiar with particular fields but none could comparete with him in his universal acquaintance with economic theory and related social sciences. He belonged to the great tradition of past centuries, perhaps the last who was not a specialist but a social scientist able to offer an overall view of the socio-economic process as a whole, to quote his own words about *Böhm-Bawerk,* applying much more to Schumpeter himself.*** He represented a rare, almost unique combination of the originality of mind with encyclopedic erudition.

His working life

Thanks to his family connections Schumpeter soon found himself part of the intellectual atmosphere of Vienna, the Imperial City. Ha attended an elite school, the famous Theresianum, and became acquainted with the city's aristocratic life and manners. It has become a commonplace that a genuine golden age existed in many fields of the arts and sciences in *fin-de siècle* Vienna, a capital of a declining empire, in the ambience

*On this subject see the paper [28] by Fritz Karl *Mann.* However, the example of *Wittgenstein* shows that the causes of this solitude ought to be sought rather in the gap separating the intellectual worlds of pre-1914 Vienna from the Anglo-Saxon civilization than in the intellectual disposition or character of one thinker or another.

**Schumpeter's condemnation of the "General Theory" ("a very special theory") is well-known. A *Plutarchos* is yet to come to analyse the strange ralationships between the two of them, the parallel of their two courses of life often similar in endeavours but rather apples off different trees as to results (Keynes was accompanied by success about in everything while Schumpeter's lot was fiascoes), their two theories and conceptions of the universe which, though meeting at many points yet were basically deverging, in all details and particulars. Nevertheless, see the two most important sources to Schumpeter's curriculum: a collection of essays [21] published after his death and edited by Seymour E. *Harris,* and in it, on this question, a brief outline by A. *Smithies,* "Schumpeter and Keynes" pp. 136–142, and the book [34] of Erich *Schneider,* especially pp. 56–59. I often rely upon these two books hereinafter.

***Schumpeter [13] p. 150

of a "gay apocalypse", a golden age the effects of which radiated far in both space and time. To quote the famous sentence of Robert *Musil*: "Yes, in spite of much that seems to point the other way, Kakania was perhaps a home for genius after all, and that, probably, was the ruin of it". Economics was no exception, though the historians of culture usually leave it unaccounted and do not place it in any context.* Vienna was one of the centres of the marginal revolution which begun dominate economics, (becoming that as it were without precedents, Austria not having had any economists of importance since the cameralists). Carl *Menger,* the founding father of the Austrian school had already retired from teaching by the time Schumpeter started his studies, but Eugen von Böhm-Bawerk and Friedrich von *Wieser,* the other two members of the triad, were then at the peak of their careers, prominent not only in university teaching, but also in scientific life and, from time to time, in the management of public finances. Böhm-Bawerk's influence on Schumpeter was particularly great, and the latter, together with Emil *Lederer* and Ludwig von *Mises*, to mention some who later achieved prominence, attended the famous seminar headed, in 1905–06, by Böhm-Bawerk who had returned from the Ministry of Finances to the university. There Schumpeter also met men who strongly disputed the subjective theory of value of the Austrian school, and its Marx-critique. His acquaintance with Otto *Bauer* and Rudolf *Hilferding,* two leaders, of what came to be known as Austro–Marxism within the Social Democratic Party, probably stimulated his systematic interest in socialism. In Schumpeter's case this interest was linked with a thorough familiarity of Marxism, something that cannot be said of the average orthodox economists of his time.

After graduating Schumpeter first went to England where he was married, going on to spend eighteen months working for the International Court in Cairo, as well as helping to put the financial affairs of a rich Egyptian in order, his only success in practical finances, as his devoted pupil and biographer Erich *Schneider* remarked, not without malice.** His first work, the more than 600 page long "Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie", published in 1908, was completed in Cairo. Its favourable reception opened the gates of an academic career to Schumpeter. The following year, at the age of 26, he was appointed to a chair in Czernowitz, in the Bukovina, the most remote of the Hapsburg crown lands. In 1911 he moved to Graz. Though not elected by the faculty Böhm-Bawerk's support sufficed to secure him the appointment made in the name of the *Emperor Francis Joseph* himself. "The Theory of Economic Development"

*Thus in one of the two comprehensive histories of ideas published recently, in the A. *Janik*–S. *Toulmin* book [23] there is only a single sentence about *Menger* and the Vienna school. The other book [24] by W. *Johnston* although devoting a special chapter to "economists as bureaucrats" and a part in its deals also with Schumpeter: "The Disinherited Heir of the Hapsburg Empire" nevertheless these parts most expressly qualify for what can be said about all *Austrian* chapters: A superficial and sometimes naive synthesis based on a wealth of data. (As for the Hungarian chapters, only the adjective naive holds.)

**Schneider [34] p. 13. After the original version of his article had been published I got hold of the memoire written by Wolfgang *Stolper* about Schumpeter [36] offering a rather simple explanation: "Schumpeter, unlike his predecessor, did not steal".

was published in 1912. He was invited to lecture at Columbia University in New York as a guest professor, and was also awarded an honorary doctorate there. "Epochen der Dogmen- und Methodengeschichte", a survey of the history of economic theories, appeared in 1914.

The Great War and the collapse of the international order opened new fields to Schumpeter. He spent a few months in Berlin, following the November 1918 German Revolution, as an adviser of the Sozialisierungskommission established by the Social Democratic government, with a view to preparing possible nationalizations of German industries. The commission was chaired by Karl *Kautsky*, and Emil Lederer and Rudolf Hilferding, former members of the Böhm-Bawerk seminar, also took part in its work. Schumpeter was not the only protagonist of private enterprise amongst the members but his "Die Krise des Steuerstaates", published in the last year of the war, show him the most enthusiastic supporter of the view that the capitalist market economy was capable of coping with the tasks of post-war economic and financial reconstruction, at least in the given historical situation. One of his pupils asked him why, given his views, he was working for a commission preparing nationalization, and Schumpeter answered "If somebody wants to commit suicide, it is a good thing if a doctor is present".

In March 1919 Schumpeter returned to Vienna at the invitation of another former fellow student, Otto Bauer, at that time Foreign Minister in the Social Democratic – Christian Socialist coalition headed by Karl *Renner*. He became a non-partisan expert Minister of Finance, fifteen years later than his teacher, Böhm-Bawerk, but facing much more difficult times. His task was to put an end to the economic confusion and financial bankruptcy that followed the collapse of the defeated Austrian state, putting a brake on the inflation which was taking wing. Schumpeter had, in a recent work mentioned above, outlined his ideas concerning the scope and methods of post-war reconstruction. He had argued that there were two ways in which war debts could be liquidated and equilibrium restored: one was to give a free way to inflation, devaluing all debts, the other was to cover them by a single progressive capital levy. He favoured the latter, though he was well aware that the unpopular measures required a strong government and major foreign loans.

The 1919 revolutionary year could not meet such conditions. Furthermore Schumpeter, within a short time, found himself in opposition to just about everybody. He was identified as the opponent of Social Democratic foreign policy (which at that time favoured the *Anschluss* to Social Democratic Germany, while Schumpeter wished to establish contact with the victorious Allied and Associated Powers) and as the supporter of free enterprise hostile to planning and nationalization. The bourgeois right showed no confidence in him, seeing a Social Democrat "finding" in Schumpeter, a supporter of a "socialist" capital levy. To the financial bureaucracy he was an amateur and outsider, and the man in the street knew him as the coiner of the hated slogan "a Crown is a Crown" by which he countered the demands for some sort of compensation for the devaluated bank deposits and war loans. The stabilization plan was drafted, but mounting attacks forced Schumpeter to resign in October 1919, before he could submit it to parliament. After further vicissitudes, partly of a personal, family sort, Schumpeter decided to accept the call

of the University of Bonn. In 1925 he returned to academic life, and moved to Bonn. The remaining 25, not so eventful, years of his life were devoted to research and teaching.

His appointment, as it were, signalled the end of the *Methodenstreit,* the notorious methodological dispute familiar to all students of the history of economic thought that had broken out half a century earlier between Carl Menger, the founder of the Austrian School, and Gustav *Schmoller,* one of the most prominent members of the German Historical School. Schumpeter had never unequivocally shared the rigid position of Menger and his followers (his views on methodology will be discussed below), he was nevertheless committed to abstract analysis and pure theory while in Germany for many a long year, only the voice of those who rejected such views and confined themselves to the accumulation of historical facts, had been heard in university lecture rooms. But the break-through was not complete. Schumpeter occupied the Chair of Finances and formally he had no right to lecture on questions of economic theory that went beyond the theory of money and its history.

His years at Bonn, and those in America which followed, were largely devoted to continuing what he had started earlier. In several biographical essays he had expressed his conviction that the "holy, third, decade" was the most important in the life of a scholar. That is when fundamental theories were born and took shape, what happened later was mere elaboration and refinement. One may dispute the general validity of his proposition, but it no doubt applied to Schumpeter himself. The three major works and numerous shorter pieces of this period largely meant the elaboration of theories conceived earlier, and their buttressing by a wealth of historical, statistical, and sociological facts.

The first fruit was the 1926 revised version of "The Theory of Economic Development". This was followed by articles on the stability of capitalism, economic growth and the theory of money, longer papers on the history of economic thought as well as discussions of methodological problems and obituaries. Towards the end of the twenties he started on a comprehensive theory of money, based on his earlier works, but he never completed it, and though later as well he contemplated publication, the fragment remained unpublished by the time of his death.*

In the autumn of 1932 he moved to Harvard. The early American years proved highly productive, including numerous articles and papers besides three major, and bulky, works. The two large volumes of "Business Cycles" appeared in 1939, with a telling subtitle: "A Theoretical, Historical and Statistical Analysis of the Capitalist Process". According to the preface there was nothing new compared to "The Theory of Economic Development". What Schumpeter aimed to do was to control and confirm his theory at the hand of a huge quantity of historical and statistical material covering a century and a half in the economic history of Germany, Britain and the United States, presenting as a concrete reality what "The Theory of Economic Development" had given in abstract outline a quarter of a century earlier. "The ultimate goal is simply a reasoned (conceptually clarified) history, not of crises only, nor of cycles or waves, but of the economic process, in

*It was published only in 1970 by F. K. *Mann* – see [15].

all its aspects and bearings".* The cool and reserved reception were not in keeping with the scope of the enterprise, and the wealth of material crowded into the two volumes.

The next book, on the other hand, "Capitalism, Socialism, Democracy", could even be called a best-seller. Schumpeter himself thought of it as a by-product, as a popularized summing up of sociological essays produced at the time of the Great War, his position on Marx and socialism, and his vision of capitalist development. This work, based on a hypothesis of "creative destruction", the self-destruction of successful capitalism, which carefully surveyed the fate of the whole civilization produced by capitalism, listing an arsenal of arguments and facts supporting its negative conclusion, saw three editions in eight years in the English speaking world. The third book also reached back to the "holy, third decade", the last work of that period, a short, hundred page long survey, that had been reworked and extended through nine years of reconsideration, into the more than a thousand pages of the "History of Economic Analysis", which spanned the subject from its beginnings to its own time. In spite of much one-sidedness and numerous prejudices this is no doubt the most important history of economic thought written in our century, made insurpassable by the rare combination of erudition and originality which made up Schumpeter's genius.** It is the final stone in Schumpeter's life-work, and it was not given to Schumpeter to rewrite, or complete it though he had planned to do both.

Statics and dynamics

Schumpeter is generally considered a product of the Austrian school but his early works already show that his interests far transcended its limits. Looking at his life's work makes it difficult to claim him as a follower of the Menger, Wieser, Böhm-Bawerk tradition, even as the *enfant terrible* of the school. His first major paper dealt with the role of mathematics in economics, surveying, *inter alia, Cournot, Edgeworth, Gossen, Jevons, Marshall, Pareto, Thünen, Walras* and *Wicksell,* reaching the conclusion that the future of economics as a science rests on this method. As Jevons argued, "if economics can be scientific then it must be mathematical". *** Thus, a twenty-three year old beginner confronted the hostility towards mathematics shown by the great members of the Austrian school. Menger, the founding father, had not only fought the historical school as outside intruders, but also against the quantitative and functional approach. He had tried to persuade even Walras, the creator of the general theory of equilibrium. "What an economist is after is not only relationships among quantities (Grössenverhältnisse) but the essence (das Wesen) of economic phenomena . . . How can we, by using mathematical methods, attain to a knowledge of this essence, for example the essence of value, of enterpreneurs' profits, of land rent? "**** Schumpeter, however, regarded Walras as the greatest economist,

*Schumpeter [10] Vol. I. p. 220

**Among the critics, J. *Viner*'s judgement was the most balanced, see [38].

***Schumpeter [1] p. 47

****Carl Menger's letter to León Walras. In Februar 1884. See [37] Vol. II. p. 2.

and characterised the general theory of equilibrium as the only achievement of the "dismal science" which could bear comparison with physics. He mentions Walras and Wieser, in the preface to his first book, as the economists to whom he felt closest. But he adds that he does not wish to participate in the quarrel between schools, rejecting every kind of methodological monomania. The aim should be to employ the right method for a given problem. The custom, following the *Methodenstreit,* of always beginning with an *a priori* methodological confession of faith was, in Schumpeter's view, meaningless, lacking all organic connection with the actual material of the work. The *Methodenstreit* itself was unfortunate since positions that had something to be said for them claimed an exclusive possession of the truth. Pure theorists often used the terms right and wrong where appropriate or inappropriate was the actual alternative. One of the main objectives of Schumpeter's book was to acquaint the German public with recent views in economic theory, that is with equilibrium theory and its applications. Equilibrium theory, he quickly added, had scant importance for practice, but it was crucial for theory, being the precise foundation of the theory of exchange, prices and money, as well as of the explanation of distribution. Since German economists were not familiar with mathematics, he only used mathematical formulae where the line of thought itself was mathematical.*

In a crucial section, defining the limits of equilibrium analysis Schumpeter stated "My argument rested on the basis difference, between the statics and dynamics of the economy . . . Presently the methods of pure theory only suffice for the former, and its most important results are valid only for statics. And yet dinamics and statics differ radically in every aspect, in methodology just as well as in substance."**

There is a suggestion there which, taken out of context, points to a radical confrontation of statics and dynamics, equilibrium and growth. (This impression was strengthened by the fact that, for some considerable time, Schumpeter used this pair of concepts to describe both an economic *situation* and an analytical *approach.* In successive editions of "The Theory of Economic Development" he tried to eliminate this ambiguity. Finally in the preface to the 1937 Japanese edition, he limited the meaning of statics to theories concerned with the conditions of equilibrium, prefering stationary process when describing an economic system which reproduced itself unchanged over a period of time.) The logic of the argument, and the emphasis on the scientific importance of equilibrium theory, make it quite clear that Schumpeter thinks of the theory of development as a further extension, and not as a negation of equilibrium analysis. He is aware of the importance of the theory of development right from the start, arguing in his very first book devoted to equilibrium analysis that "economic development is the most important of all the phenomena which we are trying to explain".*** It is true that similar statements are also found, though not frequently, in the works of economists concerned with static

*See the preface of [2]
**Op. cit. p. XIX
***Op. cit. p. 186

economic analysis, e.g. Alfred Marshall, the founder of the Cambridge School, and one of the most influential of neo-classical economic theorists. According to him: "the Mecca of the economist" lies not in comparative statics, not even in dynamics but rather "in economic biology"* (that is the development and change of the economic system as an organism evolving in historical time). Nevertheless the neoclassical economic theory generally searches for true wisdom in other directions.

Economic development which had once been of central importance found itself outside the mainstream of economic theory after 1870, since subjective value theory was more concerned with a meticulous analysis of the micro-economic aspects of general equilibrium. The question of development was left to the dubious theories of stages proposed by the historical school which were not really convincing. The great majority of neo-classical economists beleived economic growth as a continuous and almost automatic process – apart from disturbing outside factors – not harbouring any phenomena or problems of its own requiring specific analysis. In any event it did not, it was argued, affect what neo-classical analysis had to say. J. M. *Clark* was perhaps the only exception, mentioning his name is, however, justified rather by the influence his attempt to formulate a dynamic theory had on Schumpeter, and not by its intrinsic value. As *Hicks* expressed: the economics of growth was followed by the epoch of statics. This suspension of some of the classic problems and the presumption of automatic and uninterrupted development was in keeping with the spirit of the age and the 19th century faith in progress and evolution.

Schumpeter rejected this suspension, or the presumption of continuous and automatic development. His theoretical system took neo-classical analysis as its starting point, but economic development, that is discontinuous change due to factors that were intrinsic to the system, became a central category. The starting problem was naturally how the link could be forged, how the two states with their "substantial difference" that is the static circular flow essentially reproduce itself, and the development could be reconciled. How could the respective theoretical explanations be linked logically, what factor, essential to development, could be singled out producing a nevertheless valid theory of exchange, prices and distribution. The answer, and thus the essence of Schumpeter's ideas, was first contained in a 1910 article on economic crises: "It is the essence of economic development that means of production which, up to then, had been employed in a defined static manner, are withdrawn and put in the service of new ends. This is here called the process of carrying out new combinations. These are not realized, as it were, automatically, as the customary combinations of statics, but they demand the sort of intelligence and energy over which only a minority of economic subjects dispose. The carrying out of such new combinations is the specific function of entrepreneurs.

The outside form of the process of development varies with the legal forms and principles of organization of the particular economy. One should be aware, however, that the essence of the process is everywhere the same. Whichever way the economy may be

*A. Marschall [30] Preface to the eighth edition p. XII.

organized, there is always a given state of equilibrium. It is always up to the leading personalities to take the economy onto new roads. This happens in an exchange economy when an entrepreneur gains command over the means of production needed for new combinations through demand directed towards them. To do so he must dispose over the necessary purchasing power, be that ready cash, or credit . . . This process is, naturally, only a feature of exchange economies. In a communist economy things are done differently. The leaders there either have to persuade the others concerning the advantages likely to be produced by the realization of their plans, or else they must possess a power of command of some sort. This is, however, a difference of form and not of essence. The basic contrast between static and dynamic processes exists in both kinds of economies. In both the role of leaders is restricted in the case of static processes and accentuated in the case of dynamic processes."*

The basic elements of an explanation of development are thus given, but the problem of the link-up between statics and dynamics is far from being resolved. "The Theory of Economic Development" contains Schumpeter's answer, including a detailed elaboration of the basic ideas. It is however limited in the sense that Schumpeter expounds his views expressly in relation to a capitalist market economy based on classical free competition, though, as the above quotation, as well as numerous sections of "The Theory of Economic Development" also show unambiguously, the validity of his basic idea is not confined to capitalist economies.

Traditionally economic theory, e.g. Adam *Smith* or *Marx,* supposes a hypothetical state of an economic process without development as the starting point when studying the latter. Schumpeter as well starts with a circular flow as conditioned by given circumstances and remaining unchanged throughout its course. He there elegantly sums up the neoclassical theory of his time in clear descriptive prose, without the use of mathematical formulae. The methods and concepts of the Austrian school are given prominence (the ordering of goods according to their distance from final consumption, the land and labour as original factors of production, capital as a produced means of production, the interpretation of the theory of imputation etc.), what is more interesting, however, than establishing the sources of various elements is to discover whether, and if so to what extent, the concepts of statics are modified by the fact that they serve as the basis of a theory of development. Indeed, Schumpeter's circular flow, in spite of all resemblances, considerably differs from both Walras' state of general equilibrium and Böhm-Bawerk's presumptions. In the world of circular flow there is no capital, no accumulated stock of production or consumption goods, there is no economic subject (capitalist or entrepreneur), with the special function of operating or making available this factor of production, and there is no income which can be "imputed" to this factor, that is there is no profit, and interest as some sort of return on capital is also excluded. The circular flow runs on in its channels, without interruption, and is constantly repeating itself. The problem of time, therefore, does not exist for its subjects who know no change, and desire none, there is no

*Schumpeter [3] pp. 284–285

comparison of present and future goods, therefore Böhm-Bawerk's proof of the universality of interest looses its validity. There is money in the world of the circular flow, but only as a medium of exchange. There are no stocks of money, no credit etc. This radical reinterpretation of the notion of economic equilibrium based on Walras' mechanical analogy, the use of extraordinarily strong abstractions excluding capital, profit, interest, the capitalists, credit etc. from the circular flow exposed Schumpeter's theory to attacks which proved difficult to refute, both from the technical and institutional aspects. Some of these will be discussed below. What is more this picture of circular flow did not wish to present an economic model abstracted from every sort of historical determination, nor is there a desire to formulate a historical hypothesis referring to some kind of precapitalist stagnation in the language of abstract theory, the aim is clearly to present the logic of economic mechanism "of a commercially organized state, one in which private property, division of labour and free competition prevail," in other words capitalist production. This was Hamlet without the Prince of Denmark.

Schumpeter's aim was to create an organic link between the circular flow and the description of development. The basic categories of the capitalist economy are excluded from the circular flow precisely because Schumpeter interprets them not as part of the *capitalist economy as such,* but merely as the consequence of *capitalist development.* They can only be understood in the latter context. The negative definitions of the circular flow constitute the essence of development. This also implies that Schumpeter must restrict the notion of economic development, as compared with its conventional usage.

The confrontation of the world of the circular flow and of development can only be complete, the latter can only become a clear counter-pole of the former, if it does not include every possible form of change or quantitative growth, but is restricted to innovation. This is the parting of the ways for Schumpeter and J. B. Clark. Clark, the first who attempted to extend marginal utility analysis to development by employing the notions of statics and dynamics, differentiated five basic types of change: capital growth, population growth, changes in methods of production, changes in the structure of the economy and finally changes in consumer demand. The classification is almost trivial. One of its advantages is that it is linked to the categories of classical economics, establishing dialogue with consequences that are often of pessimist kind which Adam Smith, *Ricardo, Malthus* and John Stuart *Mill* drew from an examination of the effects of economic development (e.g. the connection between capital accumulation and the rate of profit, the consequences of population growth and the mechanization of production etc.). According to Schumpeter a satisfactory theory of economic development cannot be derived from this classification, since every one of its elements has its roots in the notions of statics, and it cannot seize the essence of development. To quote his account of Clark's theory: "The mere growth of capital and population may ensure the conditions of development, but not development as such. All that directly follows is that interest and wage-rates decline, but how these aspects lead to something new coming about has to be explained. A technological advance is as unlikely to be self-generated as organizational

change. It is certain that economic development largely appears in the form of technological and organizational progress, but how this progress comes about, and to what it is due, remains an open question. The fifth factor does not offer a solution either. The large flock of consumers does not drag forward production, on the contrary, those who dominate production dominate and lead the consumers."*

Changes, therefore, which can be interpreted as exogenous factors, such as "natural" growth of capital or population, as well as changes in consumer needs, the most important regulators of the neo-classical mechanism and of movements in the circular flow, belong to the world of statics, not dynamics. True, if the intermediate zone (Böhm-Bawerk's term) is borne in mind the original confrontation of the circular flow and development drops out, and the blood circulation metaphor, the biological analogy which served as the starting point of the description of the circular flow, can no longer be maintained. What remains valid, however, is the basic opposition that derives from the aforesaid, that between the static economic subject (*statischer Wirt*) and the entrepreneur. In what way do they differ?

The features of static economic subject derive from the nature of the circular flow, from the logic of pure economics, though his role in that circular flow is subordinate, and sometimes negligible. Things cannot be otherwise since his behaviour is determined by the logic of economic facts. "Objective" necessity appearing in empirical form makes it unambiguous: it implies routine activity, the repetition of earlier processes, and passive adaptation to the facts and their "small variations at the margins". A search for motives is irrelevant for economics, exact economic theory is not the philosophy of economic action,** argues Schumpeter already in his first work, it is not concerned with the soul, or the psychological motives, it suffices to say that the meaning of the activity of economic man lies in the satisfaction of his needs, rationality being enforced by circumstances and objective facts. In this manner Schumpeter, following the Lausanne School, that is *Pareto* and *Barone*, eliminated value from the description of the circular flow, and psychological aspects from his price theory, aspects which had so often acted as final causes in the arguments of the Austrian School, most acutely in Wieser's work who treated introspection as the fundamental methodological tool of economic theory.

The entrepreneur and innovation

In the conceptual scheme of the world of development the interrelations are reversed. The entrepreneur steps on the scene as the demiurgos of the capitalist process of development, every category is tailor-made to suit him. Development is, therefore, limited to the description of how he carries out of a new combination of means of production, that is to innovation. A mutual and unambiguous correspondence exists between the five noted

*Schumpeter [4] p. 962
**Schumpeter [2] p. 77

cases of innovation (new product, new technology, new markets, new sources of supply, and new forms of organization) and the entrepreneurial function. It is difficult to dodge elevated speech when describing Schumpeter's entrepreneur, since this ideal 19th century capitalist is closely related to other great figures of the romantic movement, for instance *Carlyle*'s hero, or *Nietzsche*'s *Übermensch.* A romantic sensibility is not alien to Schumpeter, though the romantic interpretation of science or economic affairs certainly is, he could not expect any help from in direction for a theory of development meant to rest on precise foundations, in which the entrepreneur had to appear simultaneously as the exception to the circular flow, and its ruler. He looked for that help elsewhere, finding it in a sociological notion which allowed him to link creative development interpreted as unique acts not to actual men but to a generally valid type. Such ideas which took shape around the turn of the century, in the writings of *Trade, Bergson,* Pareto, and others, at a time when the domination of the deterministic faith in progress began to grow shaky, could be described as a sort of elite theory. According to Schumpeter his theory concerning entrepreneurs was part of a much broader one, valid for the whole of society, a differentiation of the leaders and the followers "based on differences in individual abilities".*

The entrepreneur is therefore something *sui generis.* Entrepreneurs, like poets, are born, not made. Foresight, imagination, and, above all, a will enabling him to confront the pressure of routine habits, and the ability to seize up the options present in the new, and to realize them, are what caharcterize the entrepreneur. He is the contrast of static economic subject not only in his behaviour but also in his relation to economic processes. His action is not elicited by the processes and determined by them, on the contrary, it is he who determines developments, he is an actor, not an object.

The description of the entrepreneurial type in itself already strained the limits of the rational conceptual apparatus of economics and sociology, the need to explain the motives at the back of entrepreneurial behaviour, to give an account of the ever renewing springs of action, in other words of the final causes of economic behaviour, carried Schumpeter onto ground that was shaky from the point of view of his own theoretical intentions as well. He is forced to refer to factors like the longing to found a dynasty, the desire to conquer, and the joy of creation. True, Schumpeter argues that not a single proposition in his train of thought analyzing economic development depends on psychological considerations referring to motives, but such an argument is not very persuasive in view of the central role of the entrepreneur. In Schumpeter's theory development after all depends on the entrepreneur, his role determines the whole of the conceptual apparatus, including the need to reevaluate the conventional concepts of economics and to introduce new categories, but once we reach the entrepreneur when explaining the essence of development in economic terms, causal chains are short-circuited and the entrepreneurs' existence and behaviour must either be accepted as a fact of nature, or else as the consequence of obscure psychological motives which do not really satisfactorily explain what is specific to the entrepreneur. By presuming a defined economic attitude

*Schumpeter [9] p. 482

and motivational structure Schumpeter, as was already pointed out by critics at the time, takes that sociological system of conditions as given which is necessary for the entrepreneur's appearance in the first place, not to mention the success of his activity.*

In the first two chapters of his book Schumpeter elaborates the basic notions surveyed so far and the logical skeleton of his theory of development. In what remains of the book – which continues to move on the level of abstract economic theory – this skeleton is, as it were, provided with flesh, facts and categories, eliminated in the course of the discussion of the circular flow are integrated into the explanation of development. Furthermore the aim is to demonstrate the fruitfulness of the approach concerning the problems of the trade cycle, the true test of every theory of development, an area which neo-classical economic theory has never considered an essential part of a theory meant to give an account of capitalism, but merely as a pathological phenomenon that occasionally disturbed the normal functioning of capitalism. This is not the place to describe and discuss the train of thought to its conclusion, even in outline, listing achievements and problems, I will, however, go on to stress a number of aspects that appear to me of greater importance.

The role of credit and the treatment of interest

To start with let me mention the paradoxical role of banking and credit within the process of development. Schumpeter thinks this so important that, listing the characteristics of capitalism, he includes it as the third factor to privately owned means of production and production for personal profit. ". . . the institution of bank credit is so essential to the functioning of the capitalist system that . . . it should be added to the other two criteria".** Since Schumpeter completes the separation of capital as property and the function of capital (generally traced back to J. B. *Say* who first employed the notion of the entrepreneur who combines factors of production, as distinct from the capitalist who makes capital available) by reducing the latter to a single activity, innovation, the importance of the banker grows to an extraordinary degree. He becomes the "capitalist *par excellence*", "the ephor of the exchange economy", who finances new combinations using credits, that is purchasing power created out of nothing. To all appearances the banker is thus not merely the necessary and equal partner of the entrepreneur in the process of production but even more than that. It is he who takes the final decision concerning the activities of the entrepreneur, carrying the risks. The banker has most of the functions, and the power, which, in classical political economy and in Marxist theory, accrue to the capitalist and capital.

It may, therefore, look as if characterizing the description of development as a monodrama of the entrepreneur was misleading. But the metaphor remains valid, though credit logically anticipates the innovation it is nevertheless innovation which creates credit,

*See on it G. Eisermann [17].
**Schumpeter [12] p. 901

since Schumpeter defines the essence of credit with the help of an abstraction ressembling the earlier one. He excludes existing means – goods, services, savings etc. – as sources of credit, and only includes amongst credits those financing investments related to the five types of innovation, excluding consumption and current credits (Betriebskredit). It is therefore the essence of credit that if finances development, creating purchasing power for the entrepreneur. The banker on the other hand who, at first sight – because of his active role, and the parallel nature of the link between banker and interest, and the entrepreneur and profit – seems to be the twin of the entrepreneur, is, in the last resort, an old acquaintance, a variant of *statischer Wirt*. He merely reacts, in a passive way, to development and the credit-needs of the entrepreneur.

Schumpeter's interpretation of interest is the aspect of his work which was most strongly criticised by his fellow-economists. To start with Schumpeter briefly disposes over capital, following in Menger's footsteps, identifying it with credit, that is with that purchasing power (legal tender) which the entrepreneur can avail himself of. (Menger must be specially mentioned since there was no such things as a *common* Austrian theory of capital. Böhm-Bawerk's famous notion of the roundabout methods of production – many of the aspects of which were taken over by Schumpeter – was not accepted by either Menger or Wieser. Wieser looked on capital as means of production used up in the production process – excluding the sustenance of the labour force – which produced a surplus; its productivity proved by its wide application. Menger on the other hand did not produce a systematic theory of capital, only *obiter dicta*. At first he described capital as an intermediate stage between the original factors of production and consumer goods, later however, after Böhm-Bawerk, carrying forward this train of thought, formulated the theory of production roundabouts, Menger revised his views, and rejected Böhm-Bawerk's distinction between original factors of production and capital as a produced means of production. He then defined capital as productive property, that is productive assets in money terms, in the language of the business community.)* Understanding Schumpeter's theory of interest is made more difficult by the polemical character of the exposition. Schumpeter there argues against Böhm-Bawerk and presumes a close acquaintance with the latter's views on the part of the reader. The chapter, therefore, differs stylistically from the work as a whole, a fact to which Schumpeter draws special attention in the preface to the second German edition, claiming that the chapter was specially written for economists whose views differed from his. I shall attempt to sum up the problem in a simplified form, following Schumpeter, leaving out the technical details of the advance economics vs. synchronization economics problem.**

Schumpeter simply eliminates capital, profit and interest from the circular flow, accepting them as features of development only. As regards profit this generally fits in with the notions of orthodox economics. Following Walras zero profit condition became the generally accepted starting point of equilibrium analysis, and Clark even attempted to

*The classic treatment of these ideas can be found in G. *Stigler*'s book [35].

**For a brief sketch of it, see M. *Blaug* [16].

explain profit by the dynamic function of the entrepreneur. Schumpeter continues this train of thought by interpreting entrepreneurial profit as the fruit of innovation, looking on it as a surplus which is linked to development only, and is independent of the actual organizational form of the economy. In explaining its oppearance, and role in the propagation of the new combination, as well as its disappearance, he employs the same logical pattern which Marx used when presenting the use of the more productive processes, with the difference that, for Marx, the transitional extra income which derives from the more productive method, is not profit as such, but "extraprofit". Eliminating capital is more difficult, after the majority of "non" economists take the holy trinity of factors of production – labour, land and capital – as their starting point, identifying interest as the marginal product of capital. For that very reason Böhm-Bawerk was faced with the dilemma of reconciling the rejection of capital as an original factor of production with the explanation of interest as permanent income. The introduction of time-preference served as the solution, that is he higher subjective value of present goods when compared with future goods. In this way a lasting difference came about between the value of factors of production and that of the products as the source of interest. Schumpeter accepts Böhm-Bawerk's notion of capital as an intermediate product, but rejects the existence of any sort of time-preference within the circular flow. The definitions of the latter exclude a different valuation of present and future stocks, needs or incomes, within a process that remains unchanged in time their value or utility necessarily remains unchanged as well. A given quantity of goods used in production always produces the same result, there is no choice between a direct process of production, and the more productive roundabout method, thus there cannot be a surplus which then becomes the source of interest. The more productive technology, that is the roundabout method of production is, within Schumpeter's conceptual scheme, linked to innovation. Interest is therefore a product of development only, presuming its capitalist organization. The source is entrepreneurial profit, from which it is deduced. That is its nature.

This, to a certain extent, meant a return to the classical theory of interest on Schumpeter's part. That was not what the neo-classical economists chiefly objected to: they rejected the presumption of a zero interest rate. In their view this was irreal and also led to a logical impossibility. If the interest rate was zero, the circular flow could not continue since there would be no return on capital and thus its owners (the owners of capital equipment!) had no incentive to withdraw part of their income from consumption and devote it to the preservation of the material stock of capital equipment. Unchanged use, therefore, sooner or later, becomes impossible. In other words, given that in conditions of equilibrium the cost of capital, that is the rate of interest, are zero, then there are no limits to capital use and capital turns into one of the free natural resources of golden age. One may perhaps answer that, given the circular flow, everyone is in an optimum state, the law of diminishing marginal returns implying that, at given income and usefunctions, nobody is of interested in a kind of change, since this would lessen their utilities, but this solution is not satisfactory, and the presumption of a summing up of utilities for an infinite period of time is also disputable.*

*See *Haberler*'s essay on Schumpeter's theory of interest in [21].

The last chapter of economic theory

In his discussion of business cycles Schumpeter returned to the essence of development. The theory of cycles – economic fluctuations in his terminology – was extraordinarily important for him already at that early stage. The first sentence of "Business Cycles" most succintly expresses his view: "Analyzing business cycles means neither more nor less than analyzing the economic process of the capitalist era".* This conviction which he reached early in life was one of the reasons why Schumpeter's theory of cycles, particularly in its early, concise form, though it more or less satisfies all the formal requirements which a cycle theory has to meet (periodicity, cumulative processes in both directions, the upper and lower turning points are all explained), creates the impression that the author considers the examination of the concrete process which produces the alternation of prosperity and depression to be of secondary importance. The essence remains entrepreneurial activity, its appearance in swarms, disturbances in the equilibrium resulting from innovations, the spread and reception of the innovation, and the achievement of a new state of equilibrium. The train of thought is open-ended, even more so when related to other questions, and shows itself receptive to elements that have their origin in a variety of trade cycle theories.

It should be said that in 1911, when the first edition appeared, cycle theory was in its infancy, and just approaching questions such as the possibility of overproduction or the role of effective demand which had been at the core of classical political economy. Men like *Juglar, Tugan-Baranovsky, Spiethoff, Aftalion* etc. on the other hand, who were doing this pioneering work, and on whom Schumpeter largely relied, were highly sceptical, or critical, when it came to neo-classical economics. In the last resort they consciously or unconsciously followed in Marx's footsteps by not attributing the trade-cycle to external disturbances, irregularities of behaviour, imperfections of financial organization and such like, but recognizing it as endogenous to capitalist development.

Schumpeter came from the other side, the world of neo-classical orthodoxy, summed up by Böhm-Bawerk as follows: there is no general explanation of cycles and crises, the question belongs to the last chapter of economic treatises, where all possible reasons can be listed. Schumpeter's last chapter, and his "Business Cycles", which later grew out of it, is the child of a different persuasion. The best way to describe can be found in the paragraph Schumpeter wrote about Marx's theory of crises, about Marx's great unwritten chapter "His topic was capitalist evolution. Everything he ever wrote even his scheme of a stationary society, was written to elucidate this topic . . . Therefore, *all* the elements of capitalist reality were, directly or indirectly relevant also to his vision of the cyclical phenomenon. The "unwritten chapter" would have had to sum up the *whole* of his analysis of capitalism."**

*Schumpeter [10], Preface p. V
**Schumpeter [14], p. 1131

Schumpeter's theory – a curious classic

Schumpeter's work has turned into a classic of the theory of economic development. The term *classic* refers to the character of the achievement, not to the maturity of the views expressed, and the relevance of the expressed and implied questions, not the validity of the answers. Schumpeter did not sum up or complete a school of thought, nor was he the source and origin of a new one. The success of his work implied a failure. The idea of innovation became part of common language of economists, but his whole system of thought remained an oddity, later theories of economic growth did not sail along the course he had charted. Later when, before modern theories of growth "dynamized" Keynes, he presented a major work which he considered to be the completion of the programme outlined in "The Theory of Economic Development" including the integration of later developments in theory, the coldness of the reception not only pointed to his isolation amongst theoreticians, but also retrospectively questioned his earlier success.

Before illustrating those fields where Schumpeter, like a genuine classic, still sounds timely, an explanation must be found for this odd fate of his work.

It would be easy to argue that Schumpeter anticipated his time, and that he could only receive proper recognition when, following the flowering of the aggregate macroeconomic models a more complex approach to development started to cut a path for itself, which paid due attention to the human factor, to institutional conditions and to the microeconomic process of change. There is something to that kind of argument but it would not make it sufficiently clear that the inner tension of Schumpeter's work derives from the centuries old dilemma of political economics and economic theory that is due to the relationship between abstract logical analysis and the historical and sociological approach. According to François *Perroux* Schumpeter's theory of development is an attempt to reconcile these two approaches, translating into the language of marginal utility theory and abstract deductive general equilibrium theory the wealth of historical and sociological material accumulated by the German historical school concerning succeeding economic systems, primarily capitalism.*

He was not able to achieve this aim, however, since the confrontation of statics and dynamics, of the circular flow and the development does not refer to two separate states of a single system expressing the synthesis of the two approaches, but to a division reproducing the opposition between the two approaches, the confrontation of two sets of abstractions on different levels, and with different starting points, that is two different theoretical entities. The description of the world of the circular flow is characterized by an approach exemplifying the functional nature of equilibrium theory, that is the interdependence of quantities and factors. If the same were true of the discussion of development Schumpeter would have to arrive at some sort of system of interrelated quantitative change of defined direction that is an early model of growth, with the basic factors and participants remaining unchanged. But the abstractions of the circular flow make this

*F. Perroux [31] p. 189

impossible. If there is no capital in the circular flow then development cannot, without further ado, turn into capital growth.

The abstractions of the circular flow result in the sort of ideal type of the economy in general which, according to Schumpeter, equally covers the primitive economies of tribes living in a state of nature, and capitalist economies in a state of depression* He intended the depiction of development to be an economic theory, just like the description of the circular flow. There is no historical approach there either, he did not refer to changes in the outlook of participants or in the organization of society etc. And yet that is what Schumpeter does, and he can do no otherwise since, if Schumpeter would not have brought it in from the outside, on the basis of historical and sociological knowledge, together with the outlook of the entrepreneurial type, instituional characteristics, etc. then no sort of logical device known to economic theory could have produced the transition from the circular flow to capitalist development, or even from a primitive economy to capitalist depression. In other words the same sort of change is involved here as in the theory of stages of the historical school. This is not only a problem of transformation, but the subject of the whole theory of development: a new spirit, new forms of organization, new functions, a new age appear on the scene.

The consequences subject economic theory and abstract logical analysis to severe tests, that is why credit, capital and interest cannot be allowed to occupy their real role in equilibrium or development and must be reduced to their essential, that is their dependence on the entrepreneur as the final cause. Arguments with a sociological or historical backing suffer the same fate. The brilliantly told tale of the rise and fall of the entrepreneur must be completed by the uncertain presumption of the appearance of innovations in clusters, for only this starts to permit entrepreneurial activity to become the cause of over-investment without further explanation.

Schumpeter's attempt thus ended in failure. Neither in this book nor in "Business Cycles", in spite of the huge amount of historical, statistical and sociological material the latter book contains, were the two approaches welded into an integral whole. Neo-classical economic theory did not prove a strong enough foundation for Schumpeter's comprehensive vision of the totality of processes that make up the capitalist economy. Early success was followed by late failure not only because of outside factors, such as the change in problem situation produced by the 1929–33 depression or differences in the scholarly traditions within which he worked early and late, but also because close documentation added little to theory, except that it made its weaknesses obvious. To give just one example: the account of the pattern of three cycles (the fifty-year long *Kondratiev* cycle, 7–8 year medium term *Juglar* cycle, and the short, 40 month *Kitchin* cycle) and its proof, using innovations of differing importance and duration to characterize each, elicited a whole series of objections, most clearly formulated by *Kuznets,*** that

*He formulated this in a debate with Böhm-Bawerk. See Schumpeter [6] pp. 615–616 and Böhm-Bawerk [17].

**See Kuznets' review in his collection of essays [27] pp. 105–124

brought out the lack of definition of the concept of innovation, and the circularity of the argument, as well as the fact that many of the figures could not be subjected to verification.

The failure of the synthesis was probably implicit. Though neo-classical economic theory is able to produce a model of growth or technological progress, but the nature of his starting presuppositions, and the mathematical tools used (at least early this century), did not permit the translation of discrete changes by jumps, which were inoperable, into his own language. This failure, however, which was the result of a methodological position which seems sound at first sight but which was bound to slither into eclecticism (every method has its own field, the historical method cannot be used to expound the theory of prices, and abstract theory cannot be applied to the problems of business organization) should not obscure the singularity of Schumpeter's achievement. He was the only one of the bourgeois economists of the post-Marx generation, of all the representatives of the neo-classicist theory, who consciously accepted the challenge. He worked out his own independent theory of capitalist evolution, much narrower than Marx's, confronting the latter in most of its conclusions, but sharing its roots.

Schumpeter's vision – that is what he calls the act of recognition which preceeds analysis, prepared the material for the latter, and focused on the essence of the problem – a theory of development based on the entrepreneur and innovation as a single cause, proved fruitful in many fields. The discussion of the psychological and sociological factors of the entrepreneurial mentality opened the gates to business history, a new branch of economic history, which looked on businessmen not merely as the executors of economic laws, and the impersonations of economic processes, but attributed independent importance to their values, attitudes, behaviour and ambience in studying the process of industrialization. The stress on the connections between credit and development proved most fruitful in the study of the role of banking in the process of industrialization, and the examination of the financing of development. The much criticized category of innovation proved the most viable of Schumpeter's vision. Modern theories of technological change could not be imagined without it. In 1911 when his book was published, Schumpeter, probably tongue in cheek, expressed the wish that it become obsolete and be forgotten as soon as possible. His wish came true in an odd way. His book was first forgotten, but it only became obsolete later. But when it really became obsolete they once again scholars started to remember it truly.

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ТЕОРИЯ ЭКОНОМИЧЕСКОГО РАЗВИТИЯ И. ШУМПЕТЕРА

А. МАДАРАС

Статья написана на основе предисловия автора к венгерскому изданию книги И. *Шумпетера* «Теория экономического развития». После краткого обзора жизненного пути Шумпетера, автор подробно анализирует логическую структуру «Теории экономического развития». Концепция Шумпетера исходит из результатов неоклассического анализа, но ее центральной категорией является экономическое развитие, вытекающее из эндогенных факторов непостоянное изменение. Радикальное различие содержания экономической статистики и динамики находит выражение в противопоставлении статичного хозяйствующего субъекта и предпринимателя. Особенности статичного хозяйствующего субъекта вытекают из статичного кругооборота, из логики «чистой экономики», его поведение и действие детерминируются как объективная необходимость. В системе понятий развивающегося мира взаимосвязи меняются, предприниматель является демиургом капиталистического процесса развития, все категории рассчитаны на него. В соответствии с этим Шумпетер сужает процесс экономического развития на единственную группу явлений — на инновацию. Противопоставление основано на чрезычайно сильных и трудно защищаемых абстракциях, изгоняющих из статики капитал, прибыль, процент, капиталиста и т. д., поскольку, согласно Шумпетеру, их существование является следствием не капиталистической экономики вообще, а только капиталистического развития. Книга Шумпетера сегодня уже является классическим трудом теории развития, его отдельные категории вошли в обиход, однако более поздние теории развития развивались не по его пути. Автор видит причину этого в том, что Шумпетер попытался соединить абстрактный логический анализ и историко-социологический подход, хотел перевести на язык анализа равновесия школы предельной полезности исторические и социологические сведения об особенностях капитализма, накопленные немецкой исторической школой. Однако эта попытка в конечном счете потерпела неудачу, обобщающий синтез не был создан, неоклассическая экономика не могла служить достаточным фундаментом, способным выдержать нереальные представления Шумпетера о совокупном процессе капиталистической экономики. Однако достижения Шумпетера при всем этом не имеют себе равных, так как он был единственным буржуазным экономистом послемарксового поколения, сознательно принявшим вызов и создавшим самостоятельную, гораздо более узкую, чем у Маркса, в основном противоположную ей в своих решениях и выводах, но в отправных пунктах тождественную теорию капиталистической эволюции.

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REVIEWS

L. CSABA

INTERNATIONAL CONFERENCE ON THE DEVELOPMENT OF THE CMEA FINANCIAL SYSTEM

The changing system of world economic conditions and the exhaustion of extensive sources of economic growth have created a new situation and, as a result, set new tasks for the economic growth of European socialist countries. In this context a critical analysis of the economic control and management systems as well as elaboration of ways for their further development were again put on the agenda in European CMEA-countries. It is thus very topical that East-European countries should reconsider issues of the system of economic tools applied in their economic cooperation a decade after the adoption of the Comprehensive Programme of socialist integration.

This was a reason for the Institute for World Economy of the Hungarian Academy of Sciences to organize an international conference in Hungary, Sopron from 7th to 10th October, 1980 on one of the perhaps most disputed issues of the system of economic tools used in the socialist integration, namely, on the problems of monetary and financial cooperation. The last international scientific meeting on this subject was held in Moscow, in 1974. Beside scientific researchers coming from European CMEA-countries the CMEA Secretariat, the International Bank for Economic Cooperation were represented.

In his opening address Academician József *Bognár* Director of the Institute for World Economy of the Hungarian Academy of Sciences drew attention to the fact that the new stage of economic growth poses problems for the socialist countries not only of economic control techniques, but also societal ones. The very slow quantitative expansion is acceptable for social public opinion accustomed to rapid growth only if it is convinced by qualitative and structural improvements as well as by palpable results in meeting previously unsatisfied demands – first of all in the fields of services and investment – that slower growth means no stagnation. If, however, the domestic economics of CMEA member-countries are no longer characterized by quantitative dynamism, but by qualitative and structural changes, then it is difficult to imagine also in CMEA-integration relations that the system of tools of cooperation might remain unchanged. This had been built, namely, on the neglect of commodity (market) and monetary relations and had been linked to separated and autarkic national economic policies. Science must not restrict its activity to defending such theses – as it happened previously – that are then given up without much scrupules in practice some years later. In the contemporary uncertain world economic situation the importance of elaborating action alternatives in due time has grown. Therefore, such expansion of socialist societal structures is required that

natural divergences of opinions concomitant with the elaboration of these alternatives become endurable within this society.

The three-day discussion was, as a matter of fact, of a problem-identifying character and covered a wide range of issues from conditions of development of contemporary cooperation (István *Salgó,* Hungary) to the indebtedness of CMEA-countries (K. *Kazandzhieva,* Bulgaria; Alfréd *Sinkovics,* Hungary); from monetary theory questions (L. *Rusmich,* Czechoslovakia) to joint economic associations and the regulation of the activity of joint banks (Margit *Rácz,* Hungary). This provided a possibility for complex approach and for pointing out the interrelations of individual questions and solutions. At the same time, also the requirement was formulated that by narrowing down the topic a more detailed examination of individual problems would be possible. That also raised the necessity of holding a subsequent conference.

The participants were in agreement that considerable changes took place in the 1970s both in the external conditions of integration and in the domestic economic development of member-countries, furthermore, that the present mechanism of CMEA-cooperation provided no proper solution to tasks resulting from these new conditions. This appears in problems of technological development, innovation, specialization and cooperation as well as in delayed reactions to changes on the world market and, last but not least, in growing balance-of-payments difficulties. As regards the causes of these phenomena views were different and, depending on them, deviating diagnoses resulted in different therapies. In the opinion of a minority progress may be achieved by strengthening the role of forms of planning in physical terms and by a more precise planning of value processes, respectively. This view – represented in its entirety only by N. V. *Shein,* senior researcher at the International Institute of the CMEA – attributes various troubles to exaggerated foreign economic opening (and to the external conditions of détente, having become unfavourable, respectively) as well as to an overestimation of commodity and monetary relations, reflected also in some premature and unfounded solution proposals of the monetary and financial section of the Comprehensive Programme. Resulting from the above, he laid stress upon the – in his opinion unavoidably – increasing role of forms of planning in physical terms, considering important at the same time also to increase the role of value indicators in the interest of serving the former.

Another group considered prescriptions of the Comprehensive Programme as correct and basically up-to-date even today. This group, including most participants, proposed two kinds of therapy:

a) on the one hand finance-technical solutions (this resulted also from the way of putting questions in most papers) mostly closely connected with negotiations on the subject just going on between organs of state administration or to be expected in the nearest future (e.g. the interest problem, preserving the real value of the common currency, judging the possibilities of an "active exchange rate policy" concerning the transferable rouble, etc.).

b) on the other hand, the need for a certain revision of the Comprehensive Programme was formulated, starting from the fact that if keeping the prescriptions and

deadlines of the monetary and financial section was not possible for numerous external and internal reasons, then the Comprehensive Programme should be completed with the new phenomena arising during the past decade and their joint evaluation, respectively, in the spirit of the programme; and concepts that proved to be wrong must be corrected (J. A. *Konstantinov,* Head of Monetary and Financial Section at the CMEA Secretariat).

A conceptual discussion developed also on some theoretical and practical issues apart from judging the Comprehensive Programme. In a very simplified way one question may be formulated by asking whether, on the basis of experiences of the 1970s within the CMEA and on the world market taken in a broader sense, it is still the common artificial international currency that has to serve as key currency of the socialist international monetary system (L. *Rusmich* – Czechoslovakia; K. *Kazandzhieva,* S. *Enev*– Bulgaria; Lajos *Osváth* – Hungary; O. *Selkov* – CMEA International Institute; J. *Dubrowsky,* W. *Zschockhelt* – GDR), or the way of further progress may be the evolution of the money functions of national currencies (among them the world money function), that is, the working out of solutions of internal economic control making this possible (Petr *Chvojka* – Czechoslovakia;* D. *Gotz-Kozelkiewich* – Poland; Kálmán *Pécsi* – CMEA International Institute; Katalin *Botos,* László *Csaba* – Hungary).

When discussing practical solutions it was raised, concerning the determination of the exchange rate of the common currency to the dollar a) what should be regarded as world inflation rate, b) how this should be computed, c) whether all external price changes are to be eliminated (S. *Enev*) or the "purchasing power" of the transferable rouble is decreasing also because of changes in price level resulting from inner reasons (and to eliminate this would be a mistake) (L. *Rusmich*), d) finally, if these two effects can be separated at all practically (H. J. *Dubrowsky*). From a paper examining relations between the International Investment Bank and developing countries (S. *Zhivkova* – Bulgaria) as well as from another one examining conditions of joining the transferable rouble system by third countries (Mrs. E. *Csiki* – Hungary) it turned out that with existing conditions none of the parties was interested in such "trilateral" transactions, following mainly from the problems related to the commodity coverage and the negotiability of the transferable rouble, resulting from inner circulation.

There were further papers dealing with the phenomena brought to the surface by unsolved problems of the existing monetary and financial system. Such one is first of all the problem of turnover settled in convertible currency (Sándor *Richter* – Hungary**) on which only a few publications based on facts were made up to now. Despite this, judgement of the phenomenon led to polarized standpoints depending on whether the share in the foreign trade of member-countries settled in transferable rouble (i.e. the sphere of functioning of the collective currency) or the volume of mutually advantageous turnover

*A study written on the basis of his paper can be found on pages 291–306 of this issue. – Editor's note.

**A study written on the basis of his paper can be found on pages 323–335 of this issue. – Editor's note.

between each other (independently of the currency of settlement) were regarded primary. Similarly fierce polemics were evoked by the proposal raising the possibility of issuing a convertible socialist currency that would be functioning parallel with the present transferable rouble system and could be applied to "hard" goods within the CMEA, as a specific "tamed" variant of this practice (Jenő *Bársony* – Hungary).

The overwhelming majority of participants at the conference – otherwise supporting different conceptual and practical solutions – were of the opinion that the characteristic features of the settlement system in transferable roubles had developed not in consequence of inaccuracies in planning and financial techniques, respectively, but organically followed from the particularities of national planning systems serving as its basis. Whatever the opinion of experts on particularities of the economic mechanism, more precisely, on those of the monetary system, whether they evaluated them either positively or as deficiencies, this relationship was considered to be of outstanding importance (J. A. *Konstantinov,* O. *Arhangelski* – International Bank of Investments, W. *Zschockhelt,* L. *Rusmish,* P. *Chvojka,* Ch. *Luft* – CMEA International Institute,* D. *Gotz-Kozelkiewicz,* K. *Pécsi,* M. *Rácz,* S. *Richter,* L. *Csaba,* K. *Botos*). This relationship has been especially many-sidedly proven by the ten-year practice of the international economic organizations. It is not because of problems of settlement techniques, that the coordinating and enterprising functions of these economic units cannot be regarded as successfully solved or solvable, but because of those rooted in the interestedness and management systems (M. *Rácz* – Hungary).

In his closing speech Rezső *Nyers,* Director of the Institute of Economics of the Hungarian Academy of Sciences, pointed out that the problems of the CMEA monetary and financial systems are still only a topic on the periphery of scientific research, thus we are rather in the stage of exploring and recording problems than in that of theoretical and political synthesis. Namely, in this stage a free exchange of views is expedient and the open identification of different views is the most important task. Science has to reveal problems with responsibility. At the same time, it must go on introdden ways and cover a larger field than politics, since in the opposite case it cannot serve the future of society. In the delayed reactions to world economic changes it had also an important part that science did not prepare practice for these changes and some lag can be experienced also in clarifying the system of conditions of the intensive stage of development. It is sure, however, that in this period planned economy cannot be identified with a system of balance drawn up in physical terms nor with social tasks directly resulting from it.

He emphasized the importance of agreement in the statement that problems of the monetary sphere pointed beyond the financial sphere and could only be solved in connection with problems of the real economy. After a detailed survey of topics discussed at the conference it can be stated that in the present period certain elements of the internal economic mechanisms of CMEA member countries may come nearer to each other, but this does not hold for the entirety of economic control and management. What is more, it

*A study written on the basis of her paper can be found on pages 307–321 of this issue. – Editor

is to be examined as well if it is justified theoretically to raise such a requirement towards the entire system of economic control and management. The economic mechanism based on plan directives is well-known for separating the domestic economy from the external one institutionally and not integrating them. Therefore, even if contemporary national economic mechanisms approximated each other in some model, this would by no means improve the efficiency of international cooperation. Hungary is interested in the deepening of CMEA integration on national and international basis as well. At the same time, R. Nyers said, we see no possibility for returning to the system of domestic economic control and management relying on plan directives and to price formation based on prime costs. We are in favour of the development of the common currency, the increase of its role and are looking for ways of evolving the money functions of the transferable rouble together with other member-countries. At the same time we are interested also in the development of the money character of the forint. We do not know if we succeed at all in achieving convertibility of the forint and if so, by when, but we consider this issue topical. This would be a consequence of the development of the Hungarian economic system and would be a measure increasing the efficiency of Hungary's relations on the world market; but, the forint would not replace the transferable rouble even in this case.

When evaluating the Comprehensive Programme he supported J. A. Konstantinov's view, according to which this document was no Bible (and particularly not at the level of scientific researches) and it has to be sincerely revealed what has been realized of its targets and what has not. Evaluation of the Comprehensive Programme is a task of political organs, but there was a majority view at the conference according to which the tasks formulated in the monetary and financial section have not been realized, i.e. they are topical even at present.

GY. ENYEDI

INDUSTRIAL ACTIVITIES IN LARGE-SCALE FARMS

Industrial activities of large scale (state and cooperative) farms had been among the most discussed phenomena of industrial development in Hungary. Restrictive and incentive policy measures have been alternating over time, indicating a hesitation in judgement on the combination of agricultural and industrial activities within a single enterprise.

As a matter of fact, this combination is, in a certain way, traditional. Pre-war large capitalist estates had a number of food-processing plants, and other small industrial workshops. Cottage and handicraft industries were widespread in rural areas, and there was a number of part-time farmers among miners. Most rural industrial activities in capitalist Hungary were carried out by seasonal workers, part-time farmers and family-based small handicraft workshops, i.e. rural industry corresponded to the traditional family-based labour organization of former Hungarian villages.

Table 1
Share of non-agricultural activities in the gross income of agricultural enterprises
(%)

Year	In state farms	In cooperative farms	In the whole agriculture
1960	7.9	5.9	3.3
1965	12.7	9.0	6.3
1969	13.5	18.0	11.7
1975	18.1	23.6	16.4
1977	38.6	31.8	25.4
1978	42.6	33.1	26.7

Source: [9]

State and cooperative farms developed a number of non-agricultural activities, which have become especially important since 1975 (*Table 1*). Between 1975–1980, their non-agricultural output increased annually by 8 percent, much faster, than either industrial or agricultural activities at national level. It is to be noted that non-agricultural activities have greater importance in state farms than in cooperative farms. Non-agricultural activities include various industrial, building, marketing, retail trade, transportation etc. activities. In 1978 half of the non-agricultural gross income of large-scale farms originated from industry.

65 000 workers, i.e. 3–4 percent of the total national industrial labour-force, were engaged in industrial activities of large scale farms.

Before analyzing the situation of industrial activities in greater detail, a brief summary will be given of the motives of all non-agricultural farm activities in general.

Reasons and perspectives of non-agricultural activities of large-scale farms

Table 1 shows clearly the great and steadily growing importance of non-agricultural activities. The main reasons of their development are as follows:

1. The New Economic Mechanism introduced with 1st January, 1968 largely decentralized economic decision-making to the enterprise level. Both state and cooperative farm management were invested with greater authority for initiating new forms of economic activities.

2. The 1970s witnessed a rapid technological and organizational modernization of Hungarian agriculture. This modernization process was characterized by the development of vertical and horizontal integration. Vertical integration (agribusiness, agro-industrial integration) attracted a number of food processing, machine repairing, storage etc. activ-

ities to large-scale farms. Large scales enabled farms to direct the integration process partly themselves. In case of individual farming such integration was initiated and guided from outside, by non-agricultural organizations (e.g. supermarket-chains). Within this process, the best state and cooperative farms became innovation centres as well as organizational bases for horizontal integration (e.g. production systems).

3. Cooperative farms have always shown much concern for the full employment and income prospects of their members. Cooperative farms also act as social organizations, with the intention to assure labour security, professional training, retirement pensions etc. for their members. The expansion of economic activities has contributed to attaining these social purposes, too.

4. There is no longer any important manpower surplus in large-scale farms – but manpower is used very unevenly *over time.* Technological modernization and specialization accentuate seasonal differences in the use of manpower, they become sharper than earlier. It was this fact that generated fast expansion of part-time farming in developed western countries. Non-agricultural activities of state and cooperative farms incorporate – to some extent – part-time farming into the agricultural enterprise. It is advantageous if a re-grouping of manpower from agricultural to non-agricultural activities and *vice versa* can be carried out smoothly, respecting the interests of both sectors.

5. Non-agricultural activities of large-scale farms contribute to raising profit. Via direct retailing, a part of wholesale profit is retained in the farms, and food processing has similar advantages.

Large-scale farms have a number of small industrial workshops, which despite their generally obsolete technology, are more profitable than agriculture itself. It is a worldwide phenomenon – and Hungary is no exception – that price margins and taxation systems render agriculture the least profitable economic activity. The Hungarian price system, which was fixed by the government, resulted in a much lower profitability for agricultural products, than for industrial goods. This situation also contributed to the fact that almost 40 percent of gross income of large-scale farms was earned through non-agricultural activities, utilizing only 12–13 percent of their labour-force, and 8–9 percent of their fixed assets!

The profit earned by non-agricultural activities has frequently been fed back to agriculture. The most developed agricultural regions are characterized by extensive non-agricultural farm activities. Consequently, non-agricultural activities have widened the gap between rich and poor agricultural regions. (Policy expectations, to the contrary, supposed that non-agricultural activities would develop in poor agricultural areas, and thus low-income farms could raise their income. But lower-income farms had simply no capital for introducing non-agricultural activities.)

6. Over-concentration of state industrial enterprises created favourable conditions for establishing small-scale industrial plants. These small-scale plants are absolutely necessary for rural constructions, services, for producing certain consumer goods, etc. Small-scale industries are more elastic in responding to market demands, and are more suitable for satisfying small-scale or special demands than huge industrial enterprises.

7. Certain non-agricultural activities have been developed by necessity on the one hand, concentrated state organizations did not meet small-scale, geographically dispersed needs of farming. E.g., state-building enterprises usually refuse to build barns, chicken houses or other small agricultural buildings – or they build them very expensively. The same is true for rural schools, roads, for rural infrastructure in general. On the other hand non-agricultural activities represented a kind of self-defence against monopolistic state marketing organizations (e.g. fodder mixing or vine bottling on farms). Several large-scale farms often jointly established limited companies for certain food processing, service or marketing activities – since a single farm could not have achieved economies of scale.

Importance and forms of non-agricultural farm activities

Table 1 shows clearly that non-agricultural activities are very important in farm incomes. These activities have great regional or local importance, mostly in smaller villages. Their general economic weight is modest at national scale – they could by no means seriously compete with state industry or state trade chains.

There are, however, a few food products, which are produced in a sizeable quantity by farm industry. Large-scale farms produce 50 percent of bottled vine, fruit brandy, sausages and dried noodles; 30–35 percent of dried vegetables, bacon and processed eggs, and one fifth of fruit juice within the country's total output.

According to the Ministry of Agriculture, the importance of non-agricultural activities was as follows: (*Table 2*).

In 1978, cooperative farms had 57 thousand million Fts, and state farms 18 thousand million Fts gross income from non-agricultural activities. This sum rose by 64 percent (in cooperatives) and by 39 percent (in state farms) between 1974 and 1978. The growth of gross income from *agriculture* represented 30 percent during the same period.

Industrial plants in large-scale farms

Large-scale farms run but a few modern medium-size industrial plants. Most farm industries are located in small workshops with less than 10 permanent workers. (In 1978, there were 6400 industrial workshops in 2000 large-scale farms, and they employed 65 000 permanent workers.)

Small size is not necessarily a disadvantage: a bakery or a fruit drying workshop does not need any concentration of manpower. Unfortunately no data are available to judge the economic performance of these workshops. They very often use outdated machinery, bought for token payment from the state industry, they pay low wages to seasonal workers, but skilled workers and foreman are well paid; they have very few or no white-collar employees – most of the administrative work being done by farm management.

Table 2
Distribution of gross income of agricultural enterprises by activities (1975, 1978)
(%)

	Cooperative farms		State farms	
	1975	1978	1975	1978
1. Agricultural activity	64.3	59.0	62.5	60.9
2. Industrial activity of which:	13.6	15.0	17.5	22.0
food processing	4.5	5.7	14.3	18.7
wood processing	2.5	1.2	0.3	0.6
mining, manufacturing	4.2	5.9	2.6	2.3
industrial services	2.4	2.2	0.3	0.4
3. Building industry	6.3	6.3	3.7	3.9
4. Retailing	13.0	17.2	15.1	12.0
5. Transportation	2.4	2.1	0.4	0.6
6. Other activities	0.4	0.4	0.8	0.6
Sub-total: non-agricultural activity	35.7	41.0	37.5	39.1
Total	100.0	100.0	100.0	100.0

(*Remark:* The data slightly differ from those in *Table 1* which are based on data of the Central Statistical Office. Data on non-agricultural farm activities are not easily available.)

Some industrial activities – e.g., iron casting – have temporary character and they can prosper just because of weaknesses and shortages of the state industry. Production of industrial consumer goods and providing industrial services need small-scale, elastic units, and farm industry can develop these units, since private industry is restricted. These shops need technological modernization. In the food and wood-processing industry there is a tendency for establishing medium-size industrial plants by association of several farms (e.g., dairy plants of 50–60.000 l/day capacity; wine-processing plants of 2–3,000 tons of grape/harvest capacity etc.).

The great majority of industrial shops are engaged in food processing *(Table 3).*

Development in the second half of 1970s was characterized as follows:

- the total number of industrial shops was diminishing, mostly because of mergers of large-scale farms;
- the role of food industry was strenghtening;
- industrial output was continuously growing.

Table 3
Number of industrial workshops in large-scale farms
(1977)

Industrial sector	State farms	Cooperative farms	Total
Food industry	282	1978	2260
of which:			
dairy plant	15	138	153
meatpacking house	88	173	261
poultry packing house	1	19	20
wine plant	82	317	399
distillery	17	238	255
pickle plant	4	54	58
bakery	2	59	61
noodle plant	–	29	29
Wood-working industry	61	911	972
Local extracting (e.g., gravel mining and building industry)	32	752	784
Other industrial plants	55	604	659

Geographical location of farm industry

Industrial activities of large-scale farms show a rather strong geographical concentration. Fifty percent of the total gross income of farms from industry was located in three neighbouring counties (Pest, Komárom and Bács-Kiskun) (*Fig. 1*). Industrial income was insignificant in SW Hungary and it was below the average East of the Tisza river, too.

Geographical concentration of farm industry could be explained by the following factors:

1. The area is located within 100 km distance of Budapest; most of its parts are highly urbanized and industrialized. Its agriculture is the most intensive in the country. High intensity was both a precondition for developing industrial activity, and also a result of the high profitability of non-agricultural sectors.

2. The urbanized character of the area offers easy access to infrastructure (e.g., high-voltage electricity, running water, sewage), which are lacking in some agricultural regions of the country's northern and eastern periphery.

3. Large urban population provides good possibilities for direct retailing of processed food products. Closeness to the Budapest Industrial Region facilitates cooperation with state industrial enterprises for manufacturing industrial enterprises for manufacturing industrial goods, spare parts, etc.

4. In this "core area" concentration of industrial gross income is much stronger than concentration by the number of industrial shops. The size of farm industrial plants is here more than twice as high as the national average (in terms of both employees and

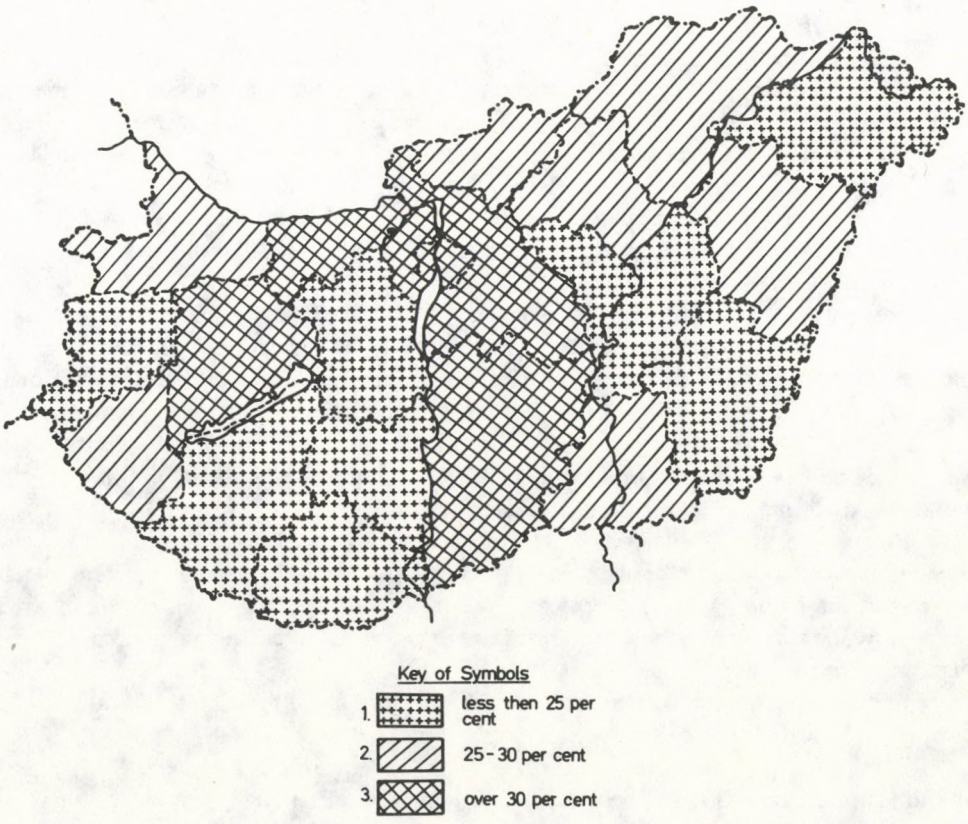

Fig. 1. Share of non-agricultural activity in net production of large scale farms. (1978–64 counties)

output). Food processing is relatively insignificant but manufacturing and chemical industrial activities are widespread. The three above-mentioned counties concentrate 67 percent of chemical industrial workshops, 57 percent of engineering industrial and only 18 percent of food-processing plants out of the country's total farm industry.

Food-processing and the building industry are more or less evenly located over the country. The wood-processing industry is evidently connected to forests.

The actual location differs largely from expectations. First of all those farms developed industrial activities which had accumulated capital for it, and not those which had simply manpower surplus, or needed additional incomes. As a consequence, food-processing is not particularly developed in the Great Plain, where the output of raw material is though the largest; industrial activities are poorly developed in NE Hungary, though there is still a certain rural overpopulation; generally, non-agricultural activities are weakly developed in the poor agricultural zones of mountainous and hilly counties.

Industrial activity in Bács-Kiskun County – a case study

Because of the great difficulties encountered in collecting data on farm industries at national level, we prepared a case study – with the help of local authorities – in Bács-Kiskun county. We do not intend to generalize the experiences gained from this case study. Nevertheless, the county concerned has the largest agricultural area among the 19 Hungarian counties, and forms part of the above-mentioned "core area" of farm industry. Thus its situation has a certain significance on national scale as well. The case study covers industrial activities of cooperative farms only.

There were 103 farm industrial plants on the county's territory in 1976, located in 48 settlements (26 settlements had but a single farm industrial workshop). About half of them had been established between 1970 and 1973; quantitative growth slowed down remarkably after 1973. Cities of the county were formerly large rural market towns. They still have an important agricultural sector. Cooperative farms of the county seat, Kecskemét, ran 11 industrial workshops in 1976, employing more than 1000 permanent workers. One of these establishments had over 300 workers.

Forty percent of industrial workshops belong to the food industry, 37 percent produce industrial consumer goods. In 1976 they employed 10.3 percent of all industrial workers in the county, and they possessed only 3 percent of the gross value of industrial machinery. Twenty percent of the industrial workshops invested less value in machinery than the price of a medium-size car.

Industrial plants are concentrated in the northern part of the county, which is the most closely located to the Budapest Industrial Region.

Forty percent of industrial operatives are cooperative farm members,* 60 percent are hired wage earners. The proportion of women is lower among them than in the total active population. It is remarkable that almost one quarter of workers are commuters. Consequently, cooperative farm industry employs largely off-farm population, it even attracts manpower from neighbouring villages.

The perspective of industrial activities of large-scale farms

Nobody denies – at least not openly – the usefulness of industrial activities of large-scale farms. Their eight percent annual growth between 1976 and 1980 was also forecast in the national plan. But there is no comprehensive, long-run policy concerning farm industry.

In our opinion, farm industry should be developed in the long run, and it is necessary to assure the conditions for its technological improvement. The continued necessity for farm industry in the long run might be explained as follows:

*A cooperative member is a co-owner of the cooperative's goods, and he shares in the net income of the cooperative according to his work performed in common activity.

1. Modern agriculture has a growing need for industrial services. Due to the great number of machines used in large-scale farms, it is more efficient to establish repair shops and other industrial services within farm areas. These workshops can serve the rural population or small local enterprises, too.

2. The production of certain industrial goods – because of small series, or because of dispersed location close to consumers – cannot be efficiently organized by state enterprises. Such small-scale production can be placed in small private enterprises, industrial cooperatives, in enterprises established by local councils and in farm industrial shops. This latter has the advantage that it helps in the smooth seasonal regrouping of labour between agriculture and industry.

The same is true for rural construction: large state enterprises are not suitable to build a barn or a village bus stop.

3. Food-processing should also develop. Local processing diminishes transport costs and transport losses. Special quality of certain products needs small scale and individual treatment.

There is a possibility that cooperative farms will become a *general production organization* of villages, which will integrate agriculture, small-scale industry, building industry and services within a single socio-economic organization. The technological development of farm industry is relatively cheap. Although the manpower employed by farm industry is not too numerous (about 8–10 percent of the total agricultural population), it generates and locates other non-agricultural activities in the villages and contributes to raising the income of rural people. Industrial activities of large-scale farms play an important role in the socio-economic stability of Hungarian villages.

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MEAT PRODUCTION AND CONSUMPTION IN HUNGARY

Animal husbandry is in Hungary the branch of agricultural production with the highest output value. Its most important final product is slaughter animal. Production of the latter increased between 1970 and 1978 by 47.5 percent and amounted to more than 2 million tonnes in 1978.

The size and structure of slaughter animal production – and thus also the meat production of the country – are determined by the livestock, its composition according to breeds and the proportion of dams.

In the period from 1970 to 1978 Hungary's livestock increased by nearly 10 percent in terms of standard animals, but no substantial structural change took place in its composition. More than four fifths of the total stock consist of cattle and pigs. The most powerful increase could be observed with this latter as well as with poultry, but also the share sheep population increased. The proportion of horses fell nearly to half.

Volume, structure and efficiency of slaughter animal production

The decrease in cattle livestock occurring in the early 1970s stopped following the 1972 Government resolution aimed at the complex development of cattle breeding. However, effects of uneven changes in the stock could be felt in the period examined also in the production of slaughter cattle. Between 1970 and 1978 the cattle population was the lowest in 1972 (97.7 percent), then – following another decrease in 1976/77 – exceeded that of 1970 by 1.2 percent by 1978. The proportion of slaughter cattle within the total slaughter animal production decreased from 23.6 percent in 1970 to 16.6 percent by 1978. The stock of cows is smaller than desirable despite the increase of the cow livestock in large-scale farms and the decelerating decrease in that of small-scale producers. An increase in utilized offspring per hundred cows would make a considerable increase possible in slaughter animal production and thus also improvement in the efficiency of production despite the slowly increasing share of cows.

– data on livestock refer to the beginning of a year;
– data of agricultural large-scale farms contain also those of other state enterprises and budget-financed organizations;
– small-scale producers include household plots, complementary and individual farms.

Table 1
Development and distribution of livestock by sectors

Year	Livestock	of which: dams	Stock of	
			agricultural large-scale farms	small-scale producers
	1000 heads		(percentage)	
1	2	3	4	5
		Cattle		
1970	1 926	744	62.4	37.6
1975	2 017	797	68.4	31.6
1976	1 904	760	70.1	29.9
1977	1 887	766	71.4	28.6
1978	1 949	781	72.4	27.6
		Pig		
1970	5 700	480	41.2	58.8
1975	8 293	609	44.0	56.0
1976	6 953	597	48.8	51.2
1977	7 854	675	49.4	50.6
1978	7 850	663	49.3	50.7
		Sheep		
1970	2 251	1 381	85.3	14.7
1975	2 021	1 219	88.7	11.3
1976	2 039	1 261	88.3	11.7
1977	2 350	1 325	89.9	10.1
1978	2 619	1 478	87.9	12.1
		Poultry (together with guinea)		
1970	34 253	32 140	16.7	83.3
1975	33 154	30 715	27.5	72.5
1976	38 667	36 549	22.4	77.6
1977	43 449	41 220	20.3	79.7
1978	43 260	40 699	25.7	74.3

Note: here and henceforth

More than half of slaughter animal production are slaughter pigs. Between 1970 and 1978 production increased by 63.6 percent, the stock of pigs by 37.7 percent. Security provided by production and sales contracts, increasing profitability as well as improving supply with feedstuffs have moderated the earlier characteristic considerable pig-breeding cycles. The shortening fattening period of bacon pigs to meet external and domestic

demands, resulting from breeding activity for many years, increases the intensity of meat production.

Sheep population considerably decreased in the first half of the 1970s (the stock of 1974 was hardly more than 20 percent of that of 1970). Some increase started from the years 1975–76 on and the population of 1978 already exceeded that of 1970 by 16.4 percent. Production of slaughter sheep, well realizable of foreign markets, increased by 28.5 percent between 1970 and 1978. Beside the increase in stock it had been also promoted by the spreading of meat type merino species.

In the period examined the stock of adult poultry increased by 26 percent, slaughter poultry production by 55.4 percent. The stock with high genetic value and the adequate industry-like production technology have raised Hungary's poultry breeding to world level. More than 90 percent of the stock are made up of gallinaceans. The poultry stock of European countries is of similar composition, therefore demand on foreign markets is greater for other species. Increasing the stock of big-bodied poultry species – first of all of geese – would be a favourable structural change.

95–96 percent of the total slaughter animal output are given by four slaughter animals (cattle, pig, sheep and poultry). Within this, corresponding to domestic consumption needs, the joint share of pig and poultry amounted to 77.3 percent of the total output in 1978.

The most important change in the structure of slaughter animal production resulted from the increase of slaughter pigs: a 61 percent increase raised its share in the total by 11 percent. Production of slaughter cattle and slaughter sheep increased to a smaller extent, but their share within the total decreased during the last 8 years. (The structural change coefficients of slaughter cattle and pig between 1970 and 1978 were 0.70 and 0.85, respectively.)

The production of slaughter rabbit approached that of slaughter sheep in 1978 and within the total slaughter animal production this was the most important structural change in 8 years.

In the years 1970–1978 slaughter animal production increased from 1.374 million to 2.027 million tonnes, with significant contributions from both agricultural large-scale farms and small-scale producers. In 1978 54.8 percent of slaughter animals were given by large-scale farms and 45.2 percent by small-scale producers. No relevant change took place in the role and weight of producing farms, but in the average of several years the share of large-scale production is increasing: in the average of 1970–1975 the share of large-scale production in total slaughter animal output amounted to 52.5, while in the average of 1976–1978 to 55.3 percent.

The slaughter animal production of agricultural large-scale farms amounted to 1.111 million tonnes in 1978 exceeding that of 1970 by 45.1 percent. Within total output slaughter pig production has the greatest share (46.1 percent in 1978) and their share in national slaughter pig production was nearly the same (45.3 percent). Slaughter cattle production in large-scale farms increased by 61.7 percent.

Table 2
Development of slaughter animal production

Year	Slaughter cattle	Slaughter pig	Slaughter sheep	Slaughter poultry	Slaughter horse	Slaughter rabbit	Fish	Total
1	2	3	4	5	6	7	8	9
				1000 tonnes				
1970	324.2	691.1	36.9	280.7	9.8	13.7	18.0	1374.4
1975	378.6	1072.1	35.4	354.9	7.8	42.9	22.5	1914.2
1976	345.6	960.6	37.2	383.5	7.5	43.3	21.9	1799.6
1977	325.5	1117.5	41.8	415.5	5.6	43.8	23.0	1972.7
1978	337.3	1130.8	47.4	436.2	5.1	46.8	23.7	2027.3
				Distribution (percentage)				
1970	23.6	50.3	2.7	20.4	0.7	1.0	1.3	100.0
1975	19.8	56.0	1.8	18.5	0.4	2.3	1.2	100.0
1976	19.2	53.4	2.1	21.3	0.4	2.4	1.2	100.0
1977	16.5	56.7	2.1	21.0	0.3	2.2	1.2	100.0
1978	16.6	55.8	2.3	21.5	0.3	2.3	1.2	100.0
				Structural change coefficient				
1970–1978	0.70	1.11	0.85	1.05	0.43	2.30	0.92	1.00

Slaughter poultry production increased in agricultural large-scale farms between 1970 and 1978 by 92.8 percent and its share within total slaughter animal production from 18.4 percent in 1970 to 24.4 percent by 1978. Thus the volume of slaughter poultry production in 1978 was nearly equal to that of slaughter cattle production, since the latter was uneven in large-scale farms despite increasing cattle livestock, and its share within total production decreased from 33.3 to 23.6 percent. Demands of foreign markets are followed by the production structure only partly. Beside the well realizable slaughter cattle the share of slaughter sheep also demanded for amounts only to 3–4 percent, within the total large-scale slaughter animal production, but even this is 86–87 percent of the total national slaughter sheep production.

Slaughter animal production of small-scale producers amounted to 916,000 tonnes in 1978, by 50.5 percent more than in 1970. During the period examined the share of their slaughter pig and sheep production increased. The 619.000 tonnes produced by the former in 1978 were by 65.2 percent more than in 1970, by 21 percent more than large-scale production and this amounted to two thirds of their total slaughter animal production. The 66.7 percent increase of their slaughter sheep production raised their share from 9.8 percent in 1970 to 12.7 percent by 1978. Within their total slaughter animal production the share of cattle and poultry decreased. The number of small-scale

Table 3
Development of slaughter animal production by type of producing farms

Year	Total slaughter animal production (1000 tonnes)	of which:			
		slaughter cattle	slaughter pig	slaughter sheep	slaughter poultry
		production (percentage)			
		Large-scale farms			
1970	766.0	33.3	41.3	4.3	18.4
1975	1027.8	27.2	47.2	3.0	20.5
1976	1005.3	24.9	46.6	3.1	23.4
1977	1091.9	22.8	49.0	3.3	23.0
1978	1111.3	23.6	46.1	3.7	24.4
		Small-scale producers			
1970	608.4	11.3	61.5	0.6	23.0
1975	886.4	11.2	66.2	0.5	16.3
1976	794.3	12.0	62.0	0.7	18.6
1977	880.7	8.7	66.1	0.6	18.6
1978	915.8	8.2	67.5	0.7	18.0

producers keeping cattle is ever diminishing. Following a temporary setback, slaughter poultry production in small-scale farms has been increasing from the mid-1970s on again, but to a much more moderate extent than in large-scale farms. Well exportable pigeon meat and hare are given almost exclusively by small-scale farms.

The production of fodder required for slaughter animal production engages – according to our computations – about 40 percent, i.e. 2.7–3 million hectares of the agricultural area. Two thirds of the yearly fodder consumption, about 7 million tonnes are utilized for slaughter animal production.

Raising the level of slaughter animal production increases the need for protein. The decreasing share of slaughter cattle production, together with the increase of that of slaughter pigs and poultry, also brought about changes in the structure of fodder consumption: the share of branches using fodder with high nutrient and protein concentration increased. Because of the low starch content of hay and bulk-feed there is considerable grain-forage consumption also in cattle and sheep breeding. However, plant growing in Hungary cannot meet the demands of animal husbandry for nutrient despite increasing yields. Thus considerable import has been required for the complementation of protein fodder already for years. Increasing the efficiency of slaughter animal production can be solved only by improving the inner composition of feedstuffs, higher yields of bulk-feed production, improving the state and utilization of hay-fields and pastures and through increased utilization of by-products for feeding purposes. The specific feeding indicators

Table 4

Intensity of livestock and keeping in some European countries, 1977

Country	Cattle	Pig	Sheep	Gallina-ceans	Standard* animals
1	2	3	4	5	6
		Per 1000 inhabitants (head)			
Denmark	608	1535	12	3029	684
France	450	219	206	3912	421
Holland	352	598	58	5044	378
Romania	422	652	967	4230	369
German Demo-cratic Republic	332	703	115	2896	368
Austria	333	516	23	1776	338
Czechoslovakia	319	503	56	2850	330
Bulgaria	204	386	1153	4244	318
Yugoslavia	260	337	345	2476	310
Belgium	296	481	10	3041	309
Hungary	183	737	246	5709	282
United Kingdom	248	137	501	2101	260
FRG	236	335	18	1435	239
Spain	125	251	434	1446	171
Italy	155	161	150	2083	165
		*Per 100 ha of agricultural area*** (head)			
Denmark	105	266	2	524	118
France	75	36	34	647	70
Netherlands	235	400	39	3371	252
Romania	42	65	97	612	53
German Demo-cratic Republic	88	187	31	770	98
Austria	68	105	5	362	69
Czechoslovakia	68	107	12	609	71
Bulgaria	29	55	164	602	45
Yugoslavia	39	51	52	376	47
Belgium	179	291	6	1841	187
Hungary	29	116	39	900	44
United Kingdom	75	41	151	634	79
FRG	109	155	8	664	.110
Spain	14	29	49	165	20
Italy	50	52	48	671	53

*Rate of conversion: cattle = 0.8; pig = 0.114; horse = 0.8; sheep = 0.071; poultry = 0.004.

**Computed on the basis of the 1976 agricultural area.

are not satisfactory, grain-forage consumption is high in every branch with considerable variance among farms.

The territorial intensity of slaughter animal production and per capita production increased by 43 percent between 1970 and 1978. This provided adequate commodity funds also for export beside meeting increasing domestic demands.

By international comparison Hungary's animal husbandry is near to the average on the basis of per capita livestock and that per unit of agricultural area. The reason for this is that Hungary keeps the least cattle in Europe except for Italy and Spain on the one hand, and a considerable part of the agricultural area is taken by vine, fruit and vegetable growing, on the other, furthermore that the state and utilization of hay-fields and pastures are not satisfactory. Corresponding to consumer demands pig and poultry raising is characteristic of Hungary: related to the number of population the most poultry, and following Denmark also the most pigs are kept in Hungary. It results from the breeding of these two species to a considerably greater than average extent that per capita meat consumption is high in Hungary: according to 1978 data it is the highest among European CMEA-countries, but we are among the best even if compared to other European countries.

Sale and utilization of slaughter animals

The sale and utilization of slaughter animals increased by 0.6 million tonnes (44.9 percent), altogether to 1.951 million tonnes between 1970 and 1978. From among sales directions – sales to the state, in shops, on markets and to public institutions, personal consumption of own produce – sales to the state, i.e. state procurement has the greatest importance.

The state is buying agricultural products, within them slaughter animal, in yearly increasing volumes from producers for meeting demands of the population, for export and reserve-building. In 1978 more than 1.4 million tonnes of slaughter animal were bought for central commodity funds with such purposes. This exceeded that of 1970 by 582,000 tonnes, by nearly 70 percent. 63 percent of the 1970 slaughter animal output and already nearly three quarters of the 1978 one were bought by state and cooperative enterprises for the central commodity funds. As regards the quantities purchased, pig, cattle, poultry and sheep was the order. Relative to output the share of purchases was highest in slaughter cattle and slaughter sheep. In slaughter animal purchases the meat and poultry industrial enterprises have the most important part. Pig and poultry as well as other slaughter animal purchases of cooperatives do not even reach 10 percent of all slaughter animal purchases.

Sales in shops, markets and to public institutions increased from 110.000 to 184.000 tonnes between 1970 and 1978, but their proportions in national slaughter animal sales changed only to a small extent. Large-scale agricultural farms increased their slaughter animal sales in shops, markets and to public institutions to more than double while in the case of small-scale producers a decrease of nearly one fifth could be experi-

Table 5

Sales and utilization of slaughter animals
(slaughter cattle, slaughter pig, slaughter sheep and slaughter poultry together)

Year	Sales to the state (state purchase)	Sales in shops, markets, and to public institutions	Personal consumption from own production	Total consumption
1	2	3	4	5
		1000 tonnes		
1970	847.0	109.6	390.3	1346.9
1975	1323.6	168.2	328.7	1820.5
1976	1205.3	173.3	331.5	1710.1
1977	1362.3	188.8	349.0	1900.1
1978	1428.8	183.8	338.6	1951.2
		1970 = 100		
1975	156.3	153.5	84.2	135.2
1976	142.3	158.1	84.9	127.0
1977	160.9	172.3	89.4	141.1
1978	168.7	167.7	86.8	144.9
		Distribution (percentage)		
1970	62.9	8.1	29.0	100.0
1975	72.7	9.2	18.1	100.0
1976	70.5	10.1	19.4	100.0
1977	71.7	9.9	18.4	100.0
1978	73.2	9.4	17.4	100.0

enced. For profitability reasons large-scale farms put a greater part of slaughter animals sold through this channel into circulation.

Personal consumption from own production of small-scale producers amounted to nearly 340.000 tonnes of slaughter animal in 1978, by 50.000 tonnes less than in 1970. Small-scale producers consume mostly pig and poultry. They consumed 37 percent of their 1978 output as against 60 percent eight years earlier.

Determinant sources of state and cooperative purchases and thus of the formation of central commodity funds are large-scale agricultural farms. The major part of procured slaughter animals – both by species and altogether – comes from them: in 1978 nearly 90 percent of all slaughter animals were sold by large-scale agricultural farms – with shares differing by breeds. About one fourth of the nearly 1.3 million tonnes of slaughter animal sold by large-scale farms in 1978 – 54.000 tonnes of slaughter cattle and 262.000 tonnes of slaughter pig – were supplied by small-scale producers.

Sales of slaughter animals through large-scale agricultural farms are advantageous both for cooperatives undertaking realization and for small-scale producers owing to the more favourable, stimulating state procurement premium. It can be attributed to this fact that the quantity of slaughter cattle and slaughter pigs sold through agricultural cooperatives was in 1977–1978 already more than that sold directly. During eight years the amount of slaughter cattle taken over from small-scale producers for sale increased to more than threefold and that of slaughter pigs to nearly seven-fold. As a result of deviating growth rates, 83 percent of all slaughter animals handed over by agricultural cooperatives for sale in 1978 were slaughter pigs and 17 percent slaughter cattle as against 70 and 30 percent, respectively, in 1970.

The overwhelming part of slaughter animal sales of large-scale agricultural farms results from dynamically growing slaughter pig sales. The amount of slaughter cattle sold by large-scale farms (and also produced by them) developed unevenly between 1970 and 1978 and changed only to a small extent. Slaughter poultry sales increased by 89 percent during the same period. From the slaughter animal output of large-scale farms by breeds slaughter poultry sales remained the most important item also further on: in 1978 92 percent of the total output was sold to the state, the amount being nearly 250 thousand tonnes. From slaughter sheep large-scale agricultural farms increased their sales only to a small extent, much under the average, as a consequence their share in all slaughter sheep purchases decreased by 8 percent.

Between 1970 and 1978 the commodity producing character became stronger in the slaughter animal production of small-scale producers. The number of small-scale producers keeping animals and raising slaughter animals – and at the same time also consuming them – decreased as a matter of fact. Small-scale producers handed over the major part of their yearly growing and concentrated output to the state – first of all because of the security of realization and more favourable profitability. The amount of slaughter animals purchased from these producers directly or indirectly for central commodity funds increased to threefold between 1970 and 1978; they sold already more than half of their 1978 output to the state while in 1970 only one fourth.

However, the proportion of procurement by breeds relative to production is influenced also by the slaughter animal consumption of producers. For example, personal consumption of small-scale producers is high in poultry, thus the share of purchases amounted only to 8 percent of production in 1978. On the other hand, there is a reversed situation with slaughter sheep: relatively few sheep are slaughtered by small-scale producers for household consumption, they sell more than 80 percent of the output to the state. The share of small-scale producers in all slaughter animal purchases almost doubled during eight years, taking direct sales and those realized through agricultural cooperatives jointly into account. This increase can be attributed to the strengthening of various sales forms established between small-scale producers and cooperatives.

In the production and sales of slaughter animals by small-scale producers slaughter pig has the most important part. In 1978 the amount of slaughter pig purchased directly and indirectly from small-scale producers exceeded 360 thousand tonnes the highest

Table 6
Slaughter animal purchases from large-scale agricultural farms

Year	Slaughter cattle	Of which: taken over from small-scale producers	Slaughter pig	From this: taken over from small-scale producers	Slaughter sheep	Slaughter poultry	Total
1	2	3	4	5	6	7	8
			1000 tonnes				
1970	268.9	16.0	316.4	37.6	29.0	129.6	743.9
1975	306.3	43.2	523.1	113.9	27.1	193.0	1049.5
1976	273.9	43.3	492.0	100.6	29.5	213.9	1009.3
1977	278.6	44.7	672.1	211.5	30.5	227.5	1208.7
1978	301.2	53.8	696.0	261.9	34.8	245.0	1277.0
			1970 = 100				
1975	113.9	266.7	165.3	302.9	93.4	148.9	141.1
1976	101.9	270.6	155.5	267.6	101.7	165.0	135.7
1977	103.3	279.4	212.4	562.5	105.2	175.5	162.5
1978	112.0	336.3	220.0	696.5	120.0	189.0	171.7
			Distribution (percentage)				
1970	36.2	6.0	42.5	11.9	3.9	17.4	100.0
1975	29.2	14.1	49.8	21.8	2.6	18.4	100.0
1976	27.1	15.8	48.8	20.4	2.9	21.2	100.0
1977	23.1	16.0	55.6	31.5	2.5	18.8	100.0
1978	23.6	17.9	54.5	37.6	2.7	19.2	100.0
			In percentage of total purchases				
1970	85.6	5.1	87.3	10.4	95.4	92.6	87.8
1975	84.9	12.0	72.1	15.7	86.3	93.9	79.3
1976	85.7	13.6	78.8	16.1	87.3	94.1	83.7
1977	90.0	14.4	87.1	27.4	87.1	92.5	88.7
1978	93.2	16.7	87.0	32.8	87.7	92.0	89.4

figure ever recorded. The basis for the increase in production and purchases was provided by the bigger pig livestock and the shorter fattening period. The increase of purchases was largely promoted by production and sales contracts concluded with small-scale producers.

Slaughter cattle purchases amounted to 75.000 tonnes in 1978. The increase in slaughter cattle purchases was connected with the growing ratio of slaughter. In 1978 small-scale producers sold twice as much slaughter poultry and 3.5 times as much

Table 7

Slaughter animal purchases from small-scale producers

Year	Slaughter cattle	Slaughter pig	Slaughter sheep	Slaughter poultry	Total	Slaughter cattle	Slaughter pig	Total of slaughter animals
						handed over to agricultural cooperatives		
1	2	3	4	5	6	7	8	9
				1000 tonnes				
1970	45.1	46.2	1.4	10.4	103.1	16.0	37.6	53.6
1975	54.4	202.9	4.3	12.5	274.1	43.2	113.9	157.1
1976	45.6	132.6	4.3	13.5	196.0	43.3	100.6	143.9
1977	30.9	99.8	4.5	18.4	153.6	44.7	211.5	256.2
1978	21.9	103.6	4.9	21.4	151.8	53.8	261.9	315.7
				1970 = 100				
1975	120.6	439.2	307.1	120.2	265.9	266.7	302.9	293.1
1976	101.1	287.0	307.1	129.8	190.1	270.6	267.6	268.1
1977	68.5	216.0	321.4	176.9	149.0	279.4	562.5	478.0
1978	48.6	224.2	350.0	205.8	147.2	336.3	696.5	589.0
				Distribution (percentage)				
1970	43.7	44.8	1.4	10.1	100.0	29.8	70.2	100.0
1975	19.9	74.0	1.6	4.5	100.0	27.5	72.5	100.0
1976	23.3	67.6	2.2	6.9	100.0	30.1	69.9	100.0
1977	20.1	65.0	2.9	12.0	100.0	17.4	82.6	100.0
1978	14.4	68.3	3.2	14.1	100.0	17.0	83.0	100.0
				In percentage of total purchases				
1970	14.4	12.7	4.6	7.4	12.2	5.1	10.4	7.9
1975	15.1	27.9	13.7	6.1	20.7	12.0	15.7	14.5
1976	14.3	21.2	12.7	5.9	16.3	13.6	16.1	15.2
1977	10.0	12.9	12.9	7.5	11.3	14.4	27.4	23.7
1978	6.8	13.0	12.3	8.0	10.6	16.7	32.8	28.1

slaughter sheep than in 1970. With thisdynamic growth their share in the total purchases of these two breeds increased from 12 to nearly 21 percent.

In 1978 the total amount of cattle, pig, sheep and poultry slaughtered in the country amounted to 1.7 million tonnes, or 46 percent more than in 1970. The volume of animals slaughtered in the meat industry increased from 672.000 tonnes in 1970 to 1.1 million tonnes (165 percent) in 1978. In this period the number of slaughters increased in large-scale agricultural farms and other economic branches, too, while less and less animals were slaughtered by the population. The amount resulting from slaughters by the

population decreased by almost 60.000 tonnes between 1970 and 1978, but it still amounted to 393.000 tonnes in 1978, exceeding thus the joint and yearly increasing volume of slaughters in large-scale agricultural farms and other national economic branches outside the industry by 74 percent. Domestic slaughters, first of all those in the meat industry being of greatest importance determine, at the same time, the up-to-date processing of slaughter animals, very important from the viewpoint of exports and widening the range of assortment for the population.

The major part of slaughter animals drawn into the central commodity funds is processed by the two industries purchasing slaughter animals, namely, by the meat and poultry industries both for domestic use and for export. The joint volume of cattle, pig, sheep and poultry slaughtered in the processing industries amounts to about 80 percent of all slaughter animal purchases. A part of slaughter animals purchased – mostly cattle and sheep – are exported alive. In exports some favourable changes could be observed in recent years: the share of livestock export decreased: nevertheless, in the export of this group of products (livestock, meat, meat products) livestock was still considerable, amounting to 31 percent in 1978. In another comparison it may be stated that about 14 percent of all slaughter cattle, pigs and sheep purchased in 1978 were exported alive.

Increasing slaughters in the meat industry were enabled by the increase in slaughter animal purchases and in slaughter-house capacity. The volume of slaughters increased by 83 percent with slaughter pigs and by 77 percent with slaughter poultry. From cattle and sheep slaughters of the meat industry developed unevenly, a considerable part of cattle and sheep, 26 and 52 percent, respectively, in 1978, were exported in the form of live animals. There was a considerable yearly fluctuation as regards the export of live pigs (ranging from 3000 to 55.000 tonnes), but except for 1971 this amount never exceeded 7 percent of the total procured amount. The amount of exported live slaughter poultry is negligibly small, the overwhelming part of poultry purchased will be processed in Hungary and put into circulation domestically or abroad as slaughtered poultry.

Commodity relations between the meat and poultry industries as well as home trade

The population is supplied with meat and meat products to an ever increasing extent by two industries, namely the meat and poultry industries. From among them the meat industry is of greater importance.

In the years 1970–1978 the meat industry sold about two thirds (in the average of 9 years 65.8 percent) of available meat commodity funds for the purposes of domestic supply and somewhat less than one third of it (averagely 30.5 percent) for export. Domestic consumption increased during this period to a somewhat greater extent than the entire commodity funds, while export sales rose to a somewhat lesser extent: domestic consumption in 1978 was, by 45.5 percent, while export sales by 43.4 percent more than in 1970.

Table 8
*Utilization of meat commodity funds**
(in terms of bony meat, percentage)

Denomination	1970	1975	1976	1977	1978	1978 in percentage of 1970
Commodity fund altogether	100.0	100.0	100.0	100.0	100.0	145.1
From this:						
Domestic consumption altogether	66.2	64.2	70.2	62.2	66.3	145.5
Home trade	58.9	55.1	60.3	53.0	56.8	140.0
Other domestic utilization	7.3	9.1	9.9	9.2	9.5	189.0
Export sales	30.6	31.7	23.8	33.3	30.2	143.4
Stocks at the end of the year	3.2	4.1	6.0	4.5	3.5	153.8

*Joint data of the meat industry, agricultural farms and consumers' cooperatives.

Meat commodity funds (slaughter animals purchased, imported meat, etc.) increased in terms of bony meat nearly by 50 percent, by 0.18 million tonnes between 1970 and 1978.

The planned and delivered amount of meat increased by yearly 4–5 percent on average between 1970 and 1975. However, the growth rate of sales came to a sudden halt in 1976 – in consequence of the raising of consumer prices with July 5th. Because of decreasing demand home trade did not make use of the ensured amount in the second half of 1976, what is more, not even in 1978, thus sales in 1976 were by 2.8 percent, those in 1977 by 5.0 percent less than in 1975 and even those of 1978 exceeded the 1975 data by hardly 1.2 percent.

Meat handed over to home trade is put at the disposal of consumers partly in the form of raw meat – so-called carcase meat – and partly in that of various meat products. Demand for meat products exceeded that for carcase meat because of changing consumer habits on the one hand and because of a smaller rise in their prices than in those of carcase meat on the other. The amount of meat products delivered to home trade increased by 42.1 percent between 1970 and 1978, while that of carcase meat by only 18.3 percent.

Moderation of the turnover in carcase meat delivered by the meat industry to home trade after 1976 is connected, beside the rise in consumer prices, partly also with the fact that the regional slaughter houses of agricultural farms and general consumers' and sales cooperatives are putting carcase meat into circulation in growing amounts.

A considerable part of carcase meat handed over to home trade – in 1970 75.4 and in 1978 80.6 percent – was pork, whose share further increased, while that of beef

Table 9

Volume and composition of meat delivered by the state meat industry to home trade
(in terms of bony meat)

Group of products	Amount delivered in the years of					1978 in percentage of 1970
	1970	1975	1976	1977	1978	
1	2	3	4	5	6	7
			1000 tonnes			
Carcase meat	145.6	177.4	167.7	160.2	172.3	118.3
Meat products	72.0	94.0	96.0	97.6	102.3	142.1
Together	217.6	271.4	263.7	257.8	274.6	126.2
Preserved products (salami, canned meat, etc.)	13.0	17.0	17.0	19.0	18.0	138.5
Total	230.6	288.4	280.7	276.8	292.6	126.9
			In percentage of all deliveries			
Carcase meat	63.2	61.5	59.7	57.9	58.9	
Meat products	31.2	32.6	34.2	35.2	34.9	
Together	94.4	94.1	93.9	93.1	93.8	
Preserved products (salami, canned, meat, etc.)	5.6	5.9	6.1	6.9	6.2	
Total	100.0	100.0	100.0	100.0	100.0	

decreased at the same time from 23.6 to 19.0 percent. The hardly 1.0 percent share in 1970 of other types of meat (veal, mutton, etc.) diminished to 0.4 percent by 1978.

About two thirds of slaughtered poultry are exported and only one third is used domestically. The overwhelming part of poultry used up domestically is sold by the home trade network. Slaughtered poultry has an ever increasing importance in the supply of the population with meat: the volume of slaughtered poultry delivered to home trade has exceeded that of beef sold as carcase meat by about 25–40 percent in recent years.

Sales of poultry products through home trade are influenced, apart from the quantity of available commodity funds, also by the level of supply with pork. When supply with pork is good, demand for poultry is decreasing and *vice versa.* Namely, prices of poultry products are high in Hungary as compared to those of pork, at least according to the value judgement of consumers.

A considerable part of poultry products handed over to home trade consist of slaughtered chicken and products made of it. (Namely, the overwhelming part of geese and turkey and a considerable part of duck are exported.) As regards the composition by breeds no considerable change has taken place in recent years (the share of slaughtered chicken and its parallel products was 84.9 percent in 1972 and 85.3 in 1978). However, composition according to the way of processing became considerably modified answering consumer demands. The share of poultry less processed, left undrawn (with or without guts) decreased from 78 percent in 1972 to 23 by 1978, while the share of more processed poultry (drawn and cut up) increased from 22 percent of 1972 to 77 percent by 1978.

Development of meat consumption

The level of nutrition is determined basically by the consumption of animal proteins, within this of meat and meat products. With rising living standards nutrition becomes more up-to-date, and is accompanied by a growing consumption of meat and meat products containing proteins of biologically higher value in large quantities.

Meat consumption in Hungary was at a low level in the period prior to World War II and also in the following years. A change in consumption started with the mid-1950s: since then per capita average yearly meat consumption almost doubled, with a continuous growth. During the last two decades the structure of food consumption changed in a favourable direction and concerning per capita meat consumption Hungary is highly ranked even by international comparison.

Per capita average yearly meat consumption developed according to plans in the years 1976–1978, and amounted to 71.2 kilogrammes in 1978, exceeding that of 1970 by 13 kilogrammes. Beside a dynamic increase in consumer demands the available commodity funds also allowed a considerable increase of the export of livestock, meat and meat products. Increased export and consumption were made possible by a usually even growth of production between 1970 and 1978, by about 45 percent altogether. In 1978 nearly three quarters (757.000 tonnes) of the meat produced were consumed by the population.

The structure of meat consumption did not considerably change even in the long run: corresponding to consumption habits, consumption is the highest in pork in Hungary even at present, more than half of total meat consumption is pork. 85–90 percent of pork is used up domestically. A much smaller part of other meat types is consumed at home. In 1978 57 percent of poultry, 52 percent of beef and veal and 13 percent of mutton production served for domestic nutrition. In the total per capita meat consumption of 1978 poultry had a share of 23.8, beef and veal 12.8 and mutton only 0.3 percent. (Fish consumption developed unevenly between 1970 and 1978 and is very low amounting to 2.6 kilogrammes in 1978, that is, only 0.3 kilogrammes more than in 1970.)

Table 10

Per capita yearly average meat and fish consumption

Year	Total meat consumption*	of which:				Fish consumption	Fish and meat consumption together
		beef (veal)	pork	mutton	poultry		
1	2	3	4	5	6	7	8
				Kilogramme			
1970	58.1	10.2	29.8	0.6	14.2	2.3	60.4
1975	68.5	7.5	41.4	0.4	15.3	2.7	71.2
1976	67.5	10.1	37.1	0.3	16.5	2.7	70.2
1977	68.9	8.6	40.3	0.2	16.2	2.5	71.4
1978	71.2	9.1	41.5	0.2	17.0	2.6	73.8
				1970 = 100			
1975	117.9	73.5	138.9	66.7	107.7	117.4	117.9
1976	116.2	99.0	124.5	50.0	116.2	117.4	116.2
1977	118.6	84.3	135.2	33.3	114.1	108.7	118.2
1978	122.5	89.2	139.3	33.3	119.7	113.0	122.2
				Distribution (percentages)			
1970	100.0	17.6	51.3	1.0	24.4		
1975	100.0	10.9	60.4	0.6	22.3		
1976	100.0	15.0	55.0	0.4	24.4		
1977	100.0	12.5	58.5	0.3	23.5		
1978	100.0	12.8	57.3	0.3	23.8		

*Including the total consumption of beef, veal, pork, horse-meat, mutton, harslet and poultry meat, as well as game, goat-meat and hare.

As a concomitant phenomenon of social and economic development central commodity funds have the greatest and ever growing weight among the sources of personal meat consumption. In consequence of the decreasing number of agricultural producers, restratification of population, changing and increasing demands, the amount and share of meat and meat products coming from central commodity funds are increasing year by year. In 1970 348.000 tonnes, while in 1978 already 547.000 tonnes of meat and meat products were ensured for the population from central commodity funds. This amounted to nearly three quarters (72.3 percent) of the total 1978 meat consumption of the population. Simultaneously, the meat consumption of producers from own production diminished (from 35.6 to 24.3 percent). Despite this, the amount of meat used up by producers from own production is still considerable: it amounted to 184.000 tonnes in 1978. Producers' consumption – apart from partial or complete self-supply – eases the burdens of the meat industry and trade, on the one hand, and provides a possibility for

large-scale agricultural farms to increase exports, on the other. The amount of meat purchased on market places is relatively low within the total meat consumption of the population (26.000 tonnes in 1978), and even this small share shows a decreasing trend.

The importance of meat and meat products consumption is illustrated also by its about 30 percent share within total food consumption. (From among various groups of consumption goods the value of alcoholic drinks exceeds that of meat and meat products in Hungary.) Beside the relatively high meat consumption and the similarly significant egg consumption indicating the quality of nutrition, relatively little is consumed of milk and dairy products as well as of fish. It is to be attributed to the low consumption of these products partly substituting meat that the level of animal protein consumption is unsatisfactory in its totality mainly because of low milk and dairy products consumption – and lags behind that of countries consuming nearly the same amount of meat. (For example, the share of animal proteins within total protein consumption was 60.3 percent in Austria, 64.0 percent in the Netherlands and 65.1 percent in Denmark in 1974. At the same time, this value is considerably lower in Hungary, amounting to only 47.4 percent.)

Concerning per capita meat consumption Hungary is placed 10th among the 19 European countries examined. The structure of meat consumption is very different by countries, reflecting mainly the population's consumption habits and demands. In the major part of countries examined pork, beef, poultry was the order. In the USSR and Italy beef has the highest share in consumption, these two countries being at the same time among Hungary's most important importers of slaughter cattle and beef. Mutton consumption is considerable in Bulgaria and the United Kingdom, while per capita pork and poultry meat consumption are high in Hungary.

The differing proportions in meat production and meat consumption by countries may indirectly indicate foreign trade positions and also foreign trade orientation.

As a result of the development of animal husbandry Hungarian meat production is increasing at a rate exceeding domestic consumption. In the 1970s about 30 percent of meat production were surpluses above consumption needs and were sold abroad. Among European countries Hungary belongs – following Denmark and Holland – to meat producing countries with the best supply and most significant export funds. It is very important from the viewpoint of export that meat surpluses be developed deliberately with the thorough consideration of export possibilities; trade should be realized with products saleable on foreign markets also in the long run not with the remainder.

Volume, structure and profitability of meat export

Hungarian agriculture – as could be seen already from the foregoing – produces meat in amounts exceeding domestic needs. As a result, meat of significant volume and value is exported.

Meat is exported partly as livestock and partly in the form of raw meat and meat products processed at different levels. In the structure of export some improvement could

Table 11

Per capita yearly average consumption of animal products in some European countries in the average of 1972–1974

Country	Total meat consumption (kg)	of which:				Egg	Fish	Milk and dairy products (without butter)
		Beef	Pork	Mutton and goat meat	Poultry meat			
		percentage				kilogrammes		
1	2	3	4	5	6	7	8	9
Belgium–Luxemburg	88.3	35.1	48.1	1.2	10.5	12	11	198
France	87.8	36.0	35.3	4.1	15.7	13	17	230
FRG	80.7	31.1	55.5	0.5	10.9	17	6	207
Czechoslovakia	78.2	32.6	51.8	0.6	11.6	14	5	200*
GDR	77.5	24.1	62.6	1.2	9.3	14	12	108*
Switzerland	77.4	37.5	49.6	1.6	8.9	11	5	
Austria	74.7	33.3	53.0	0.4	12.0	13	4	199
United Kingdom	71.9	33.7	36.0	13.4	16.6	13	13	216*
Netherlands	67.2	33.8	50.3	0.4	12.1	11	9	248
Hungary	64.4	14.4	56.1	0.6	23.3	15	3	116
Denmark	61.1	28.2	59.6	0.5	10.5	11	25	267*
Italy	60.7	44.6	24.2	2.0	23.6	11	9	144
Sweden	55.1	33.2	54.4	1.1	7.8	12	16	–
Spain	55.0	23.6	33.8	8.9	30.7	14	32	108
USSR	52.7	46.5	33.6	7.2	10.2	11	22	–
Bulgaria	52.3	22.6	37.9	17.8	21.0	8	6	161*
Romania	50.9	20.0	51.9	8.1	19.4	9	5	116*
Poland	49.5	21.0	67.7	1.6	8.9	11	12	267*
Yugoslavia	37.1	28.3	44.2	6.2	21.0	7	3	103*

*For Czechoslovakia, Bulgaria and Poland 1970 data, for the GDR 1968 data, for the United Kingdom, Denmark and Yugoslavia the average of 1970–1971, for Romania the average of 1964–1966 were taken into consideration.

be observed in recent years, namely, the proportion of livestock decreased from 43.6 percent in 1970 to 30.9 percent by 1978, while that of processed meat products increased. However, the proportion of highly processed products is low even at present, despite an increase in volume, amounting altogether to 12–14 percent. A large part of exported meat was raw meat, 44 percent in 1970 and 55 percent in 1978.

The structure of export according to the currency of settlement considerably changed. Namely, as against earlier years an ever increasing part of meat export is sold for convertible currencies. Thus for example, one of the most important export goods, i.e.

Table 12
Meat surpluses and deficits, in the average of the 1972–1974*
(percentages)

Country	Meat, total	Beef	Pork	Mutton and goat meat	Poultry meat
			Percentage of production surplus		
Denmark	70.8	55.7	76.0	–50.0	64.2
Netherlands	39.1	5.0	45.0	66.7	66.1
Hungary	30.5	51.2	11.6	66.7	32.9
Bulgaria	20.0	54.8	24.4	19.8	19.1
GDR	11.9	13.4	15.4	–28.6	–7.5
Romania	11.0	11.3	–36.1	–28.1	2.9
Belgium	9.3	–14.4	25.8	–266.7	17.0
Czechoslovakia	9.2	7.9	13.6	0.0	–7.1
Yugoslavia	4.1	16.0	–5.8	4.2	–4.0
			Percentage of production deficit		
France	–3.3	–5.3	–4.7	–38.5	15.0
Austria	–8.6	–7.3	–6.7	0.0	–23.3
Italy	–23.6	–41.9	–17.6	–33.3	–6.7
Spain	–24.4	–23.8	–9.4	–16.7	–65.7
FRG	–28.9	–28.1	–18.8	100.0	–64.4
United Kingdom	–41.0	–41.5	–46.3	–28.6	0.8

*Difference between production and consumption in percentage of production.
Source: Provisional food balance sheets 1972–1974 average. FAO, Rome, 1977.

slaughter cattle and veal are exported completely, while beef largely for convertible currency. From the export of slaughtered poultry, also of considerable volume and value, both currency areas still had about the same share in 1970, while in the last 3 years already a larger part was settled in convertible currency. Similar trends can be observed also with the export of slaughter pig and pork. In the export of meat products the trade with the rouble area is the most significant, except for tinned ham. (The growth of trade against convertible currency also comprises a growing trade settled in convertible currency among socialist countries.)

The decisive part of meat export is realized by two industries, the meat and poultry industries. A considerable part of their sales receipts (20–25 percent in the meat industry and more than 60 percent in the poultry industry) derive from export. The decisive part of their exports consists of livestock, raw meat, slaughtered poultry and meat products. The value of the exports of both industries amounts to 58–62 percent of the total export sales receipts of the food industry. The major part of their export (about 85–89 percent) is settled in convertible currency. The export of these two industries amounts to about 69–77 percent of the total export of the food industry against convertible currency.

Table 13
Distribution of most important Hungarian export products according to currency of settlement

Product	1976		1977		1978	
	percentage of turnover settled in					
	rouble	non-rouble	rouble	non-rouble	rouble	non-rouble
	currency					
Slaughter cattle	–	100.0	–	100.0	–	100.0
Slaughter pig	41.0	59.0	16.9	83.1	0.9	99.1
Beef	8.1	91.9	5.1	94.9	14.8	85.2
Pork	34.4	65.6	25.5	74.5	21.9	78.1
Slaughtered poultry	19.8	80.2	17.0	83.0	32.0	68.0
Salami	44.6	55.4	57.4	42.6	52.1	47.9
Dry sausage	64.4	35.6	57.8	42.2	65.4	34.6
Tinned ham	11.7	88.3	6.1	93.9	3.5	96.5

Table 14
Relative proportions of the export sales receipts of the meat- and poultry industries
(percentage)

Denomination	Meat industry		Poultry and egg processing industry		Total	
	1970	1978	1970	1978	1970	1978
Share of export sales receipts in total sales receipts	20.0	25.3	63.8	60.5	29.6	38.6
From exports:						
for roubles	8.5	9.0	31.3	15.2	15.0	11.3
for convertible currency	91.5	91.0	68.7	84.8	85.0	88.7
Share in the food industry's						
total exports	44.1	35.8	17.5	21.7	61.6	57.5
export for roubles	11.6	12.3	17.1	12.6	28.7	24.9
exports for convertible currency	59.4	44.1	17.6	24.9	77.0	69.0

Exports of the meat and poultry industries represent a considerable share not only in those of the food industry, but even in those of the entire Hungarian national economy – mainly in those settled in convertible currency. Thus for example, in 1975 18.0 percent and in 1978 17.1 percent of the total national exports settled in convertible currency resulted from exports of these two industries. Export sales receipts in convertible currency of the meat industry increased between 1970 and 1978 to more than two and half fold (from 119 to 312 million dollars), while these of the poultry industry to nearly six-fold (from 33 to 178 million dollars). They have a much smaller share in exports to the rouble area. In 1975 merely 2.9, while in 1978 2.1 percent of rouble sales receipts of the national economy resulted from the joint exports of these two industries.

Beside slaughter animals bony raw meat is the most valuable export article of the meat industry. The export of bony raw meat amounting to yearly 14–23 percent of the total output more than doubled between 1970 and 1978. In the first half of the 1970s the major part of bony raw meat export was beef, but in the last two years the export of pork has become nearly double of that of beef. Namely, beef export has not basically changed since 1970 partly because of stagnation in cattle slaughters and partly as a consequence of import restricting Common Market measures in 1974. The export of 1978 exceeded that of 1970 by hardly 3 percent. As against this, pork export considerably increased – as a result of a dynamic growth of production – and amounted by 1978 already to five-fold of that of 1970.

The export of slaughtered poultry exceeds in value even that of bony raw meat. Its export increased from year to year gradually, it altogether more than doubled between 1970 and 1978 (to 214 percent).

In the export of products processed at a higher level one of the most valuable products is salami whose export did not considerably change between 1970 and 1976. A major increase took place in 1977 and 1978 after the putting into operation of the new Salami Works in Szeged. As against salami the export of the so-called dry sausage (product of Gyula and Békéscsaba) decreased. With the putting into operation of the Gyula Meat-Processing Plant its export is likely to increase – similarly to that of salami. The export of canned ham has considerably increased in recent years – mainly to the dollar area – as a consequence of expanded export capacity. The volume and value of its export already exceeded those of salami in 1978. Export in 1978 amounted to 236.1 percent of that in 1970.

In the exports of the meat industry to the dollar-area favourable changes have taken place in recent years: the share of meat products processed at higher level increased, namely, from 13.7 percent in 1970 to 16.5 percent by 1978 (computed in terms of bony meat). However, livestock represents the largest share in the exports of the meat industry even at present (63.0 percent in 1970 and 48.4 percent in 1978), though their proportion is decreasing as compared to previous years.

The structure of Hungarian export is not very advantageous from the viewpoint of profitability. Namely, export prices of livestock and raw meat are subject to strong cyclical fluctuations. Thus, for example, the export prices of slaughter cattle and beef

Table 15
Export of important types of meat and meat products

Product	1970	1975	1976	1977	1978
	1000 tonnes				
Bony raw meat, total	43.4	107.6	66.2	127.7	96.6
of which:					
Beef and veal	27.3	56.9	36.5	38.8	28.0
Pork	9.2	38.5	16.1	72.9	48.9
Slaughtered poultry, total	56.6	103.9	102.9	118.2	120.9
Dry sausage	2.5	2.4	2.2	1.9	2.4
Salami	5.1	5.8	6.2	8.4	8.1
Canned ham	3.6	5.9	6.0	8.2	8.5
	1970 = 100				
Bony raw meat, total	100.0	247.9	152.5	294.2	222.6
of which:					
Beef and veal	100.0	208.4	133.7	142.1	102.6
Pork	100.0	418.5	175.0	792.4	531.5
Slaughtered poultry, total	100.0	183.6	181.8	208.8	213.6
Dry sausage	100.0	96.0	88.0	76.0	96.0
Salami	100.0	113.7	121.6	164.7	158.8
Canned ham	100.0	163.9	166.7	227.8	236.1

were nearly the double of 1970 in 1973. However, in consequence of the well-known discriminatory measures of the Common Market the export of slaughter cattle and beef has considerably decreased from the second half of 1974 on. Export prices of slaughter pig and pork have significantly increased in recent years and the indicator forint input per dollar is more favourable than the average.

As compared to the frequently changing export prices of livestock and raw meat, prices of meat products are stable and usually increasing. Their indicators concerning forint input per unit of foreign exchange are also more and more favourable from year to year.

Development of the indicators of forint input per dollar unambiguously shows – except for some cases – that profitability increases with raising the level of processing. The indicators are most favourable with meat products and even those of raw meat are more favourable than of live animals.

Apart from the overall setback of world market prices, the unfavourable profitability of slaughter cattle was brought about also by the considerable increase in domestic

Table 16

Structure of the export of the meat industry for convertible currency and indicators of forint input per dollar of major products

(percentage)

Group of products	In the year of			
	1972	1976	1977	1978
1	2	3	4	5
Structure of sales receipts				
Livestock, total	63.6	48.9	42.1	47.3
of which:				
slaughter cattle	49.8	40.7	27.0	27.5
Raw meat, total	22.9	24.0	39.1	29.6
of which:				
beef	11.4	15.0	16.0	13.5
Meat products, total	9.0	19.8	14.8	16.4
of which:				
salami	3.8	7.9	5.0	6.1
canned ham	3.4	7.3	6.3	7.2
Other products	4.5	7.3	4.0	6.7
Together	100.0	100.0	100.0	100.0
Indicator of forint input per dollar in percentage of the average of the meat industry				
Average of the meat industry	100.0	100.0	100.0	100.0
Slaughter cattle	76.9	113.9	113.2	111.1
Slaughter pig	127.8	78.6	92.7	99.8
Beef	72.4	116.9	117.5	106.8
Split half-pig	123.8	73.3	85.7	87.5
Dry sausage	114.0	77.4	85.0	81.8
Salami	91.2	55.0	62.4	59.0
Canned ham	146.6	88.2	93.3	95.6

inputs. The export price of slaughter cattle was 64 percent higher in 1978 than in 1970, while prime costs arising in the industry were 83 percent higher.

The overwhelming part of export sales receipts of the poultry industry derives from slaughtered poultry. The structure of slaughtered poultry export is not very favourable

from the viewpoint of profitability. Namely, the largest and ever increasing part of it is slaughtered chicken subject to the keenest competition on the world market, its share in exports to the dollar area increased from 50.7 percent in 1970 to 61.7 per cent by 1978. (If computed on the basis of volume its share is even higher.) At the same time, the share of slaughtered goose and duck realizable at more favourable prices decreased.

The average indicator of the domestic cost of earning foreign exchange with slaughtered poultry considerably improved in the years 1976–1977 against the early 1970s, then deteriorated in 1978. Deterioration of the indicator was significant also with chicken meaning the largest volume, and was brought about by a world-wide production increase and an ever sharpening competition developing in consequence.

Products of the meat and poultry industry ensure a considerable amount of convertible currency for the national economy. Foreign market demands have to be considered in both animal husbandry and food processing with a view to increasing exports so that beside higher receipts in foreign exchange also profitability should improve by means of diminishing specific input and increasing the share of more profitable products in the structure of export.

BOOK REVIEWS

WIESEL, I.–WILCSEK, J.: *A monetáris rendszer fejlődése és a konvertibilitás* (The development of the monetary system and convertibility.) Budapest, 1978. Kossuth Könyvkiadó. 278 p.

The first chapter of the book – whose preface was written by the then Hungarian Minister of Finance (presently Deputy Prime Minister) – deals with the crises of the international monetary system and the convertibility of currency. The authors, treating the circulation of currencies within bilateral and multilateral accounting systems, point out that a currency becomes transferable if the exchange rates are regulated by multilateral agreements, conditions of exchange exist within a multilaterally regulated circle and the bilateral quota system is released to some extent. Convertibility is limited in the statutes of the IMF too – it does not cover capital transactions – and the IMF does not require its members to introduce convertibility (the Latin-American countries for instance have made no promises to this effect).

Experience of economic history shows – the authors stress – that the international crises did affect even those countries which followed a policy of foreign exchange control, only later and somewhat differently. All this undermines the notion that foreign exchange control is necessary because of its defensive functions.

The second main part deals with the further development of monetary relations and the convertibility of currencies within the CMEA in historical context. In the 1950s the autarkic tendencies within the CMEA were hindering the realization even of mutual advantages; international trade was dominated by transactions in kind.

As the planned allocation of the available products precedes the monetary operations, the latter are not even relatively independent in this sense, the authors call for multilateral and monetary operations, but they do not analyze the causes and interests that have led to a strengthening of the bilateral exchange of goods in kind in the CMEA trade in the last years.

The authors rightly underline the limited monetary functions of the collective currency and the consequences of the lack of convertible currency that result in a relative shortage of capital within the CMEA. Experience shows that the member-countries tend to recall their capital from the International Investment Bank in goods and they try to obtain additional commodities through the credit system.

The authors define the convertibility of currency within a socialist planned economy as a principially limited convertibility on Central Bank level. They fail to distinguish between what is *realizable* on the given level of economic development and in the given institutional framework and what is theoretically *desirable.* What can the following sentence mean: "The convertibility of currency will be realized in accordance with the national economic plans – and not spontaneously – and goes together with plan coordination"? Under the present, mainly directive, systems the transferable rouble is also convertible in this sense and those who say – in opposition to the authors – that the transferable rouble has all the criteria of being called money and thus it is truly transferable would be right.

At the same time the authors – in my opinion rightly – underline (p. 177) that "convertibility cannot come into being without the relative freedom of foreign trade, and any significant

limitation of this freedom brings about the suspension or end of convertibility", or, on page 192: "If the goods are centrally allocated in kind, including the system of detailed quotas fixed in terms of value then it is hard to make sense of the concept of convertibility. The system of economic control should not hinder the spending of money."

The authors are in favour of introducing a system whereby the common currency could be converted into the currencies of third countries, all the more so because they think that convertibility of the national currencies is only possible within the framework of the CMEA, together with the other member-states. As the system of economic control develops in the CMEA countries it will be possible to turn the transferable rouble into a convertible currency. It seems that in this part of the book (p. 119–123) – in contrast to the competency of *Parts I and III* – the authors' analysis is full of trivial generalizations – such that the distribution of fasks between the economic units and central institutions is "further developed" or the international economic relations "have a growing significance" etc. The differences that are vitally important in practice get blurred and this seemingly justifies a positive judgement of the perspectives for the convertibility of the transferable rouble.

The functioning of the exchange rate of currency on the one hand requires that the rate of exchange be derived from the actual prices and, on the other hand that it be used as a direct element of price calculations in the economy as a whole. These two criteria, however, are not automatically present in any of the CMEA-countries, thus it is impossible to identify the comparative advantages within the CMEA. The authors rightly stress that the limits to convertibility between the foreign trade and non-trade debit and credit items and efforts at the overvaluation of the home currency (a means of which is underestimation of differences in supply that are not reflected in the consumer prices of the CMEA countries) restrain tourism and the international exchange of services.

Part III deals with the development of the Hungarian monetary system in the context of making the forint convertible. Convertibility – according to the authors – is not an end but a means, and at the same time helps orientation in the development of the monetary system. They underline that the convertibility of an individual country's currency is not closely related to its level of development; there are a number of underdeveloped countries with convertible currency, so Hungary's medium level of economic development cannot hinder the introduction of convertibility. They rightly point out that the introduction of convertibility would not increase, but even reduce the uncertainty in the planning of foreign trade – an uncertainty that is there only it does not show until afterwards when reports are compiled – and they sum up the advantages of the uniform exchange rate system.

Examining the relations between the Hungarian system of economic control and prices, the authors point out that in the late 70s the state of the price and monetary system in itself called for an overall reform, it was needed not only for creating the conditions of convertibility.

Postponement of the rise in the consumer's price has led to a number of contradictions and without reforming both the consumer and the producer price-systems there is no single exchange rate.

Abolition of the limitations on foreign trade is necessary to guarantee continuous supply in the home market, and it also comes from the ideas of the economic reform. As the development of the price and monetary systems aims at stimulating structural changes both in production and consumption, the monetary sphere has a growing influence on planning, reducing the scope for "strained plans.

Analyzing the links between monetary policy and monetary system the authors point out that in case the system of convertibility is adopted, economic stability requires limitation of the quantity of money in circulation which would be taken into account in the process of planning. In line with the price reform the system of collection of budget revenues should be modified, too, leaving out the elements of net income which are cost factors and as such have an inflationary effect (charge on assets engaged, production tax, commercial tax, wage tax). The authors take a

strong stand in favour of an active revaluating exchange rate policy as far as the forint and the transferable rouble are concerned. Last but not least they underline the significance of creating the *system of conditions* necessary for convertibility.

The authors do not take it for granted that all the readers are experts in the topic so they write in an easily comprehensible way, making a clear distinction between causes, means and results. They also make it clear what the various solutions need as background and what the advantages and disadvantages of the different solutions are. This does not mean that the authors – unlike so many others – avoid taking sides. The book is to show why the introduction of convertible currency would lead to increasing efficiency in the East European economies and to a more effective role in the international division of labour and how it is possible to create its conditions. It is, however, surprising how relatively little emphasis was laid on the institutional side of international monetary cooperation, the need for participating in international monetary organizations. Without these, however, it is hardly probable that a country having newly introduced convertibility is able to solve its balance-of-payments problems without suspending the system itself.

Instead of proving what they state, the authors too often use "in our opinion" type of declarations which do not help reinforce their argument even if the reader agrees with the authors' opinion.

In the same time they give a manysided and correct picture of the different interdependences of this seemingly clearly monetary problem. Although the book lacks a comprehensive analysis of the various questions treated, it gives a good outline of the problems. The main advantage of the book is that it deals with almost all the questions related to the introduction of the convertible forint with great competency. Thus it serves its main goal: the spreading of economic knowledge and the shaping of public opinion, particularly with the consistency of the answers given.

L. CSABA

SCHÜLLER, A.–WAGNER, U. (Hgb-s): *Außenwirtschaftspolitik und Stabilisierung von Wirtschaftssystemen.* Stuttgart–New York, 1980. Gustav Fischer Verlag. VIII + 379 S. (Schriften zum Vergleich von Wirtschaftsordnungen, Heft 28).

Das aus drei Hauptteilen bestehende Buch untersucht ein äußerst aktuelles Thema, denn die Wirtschaftsbeziehungen zwischen Staaten unterschiedlicher Gesellschaftsordnung haben sich in dem letzten Jahrzehnt nicht nur erweitert, sondern – vor allem in den sozialistischen Wirtschaften – eine qualitativ neue Stellung in der Wirtschaftspolitik eingenommen. Dazu kommen noch die in letzter Zeit aufgetretenen Probleme, die sich aus der Veränderung der weltwirtschaftlichen Umgebung ergeben, und sowohl den Westen, als auch den Osten treffen. Berechtigt ist also die Frage nach der Stabilisierung der Wirtschaftssysteme: inwieweit können die Ost-West-Wirtschaftsbeziehungen zur Aufrechterhaltung einer stabilen Grundlage in beiden Systemen beitragen, und inwieweit leiten sie Impulse weiter, die nur teils unmittelbar diesen Beziehungen entspringen, aber die Stabilität der Partner auf beiden (oder einer) Seiten beeinträchtigen?

Der erste Hauptteil behandelt in sechs Kapiteln verschiedene theoretische Aspekte der Ordnungs- und Entwicklungsfragen außenwirtschaftlicher Stabilisierungspolitik (Beiträge von A. *Schüller,* H.-H. *Derix,* G. *Gutmann,* R. *Peterhoff,* J. *Röpke* und P. *Hertner*). Im zweiten Hauptteil findet der Leser insgesamt acht Studien, die sich mit praktischen Problemen der Ost-West-Wirtschaftsbeziehungen befassen. Vier von ihnen haben währungspolitische Fragen zum Thema (E. *Sell*–H. J. *Thieme,* H. F. *Buck,* H. *Hamel,* H.-J. *Hof*), zwei beschreiben aktuelle Bereiche der Handelspolitik (W. *Klein* und H. *Gröner*), während sich die letzten beiden den Strukturfragen von zwei ausgewählten Branchen widmen (L. *Schmidt* und U. *Fehl*–P. *Oberender*). Zwar gehören die Untersuchung der intersystemaren Unternehmenskooperationen (K. E. *Schenk*–A. *Wass von Czege*), sowie die Behandlung der Joint Ventures (K. P. *Kruber*) dem dritten Hauptteil an,

stehen sie nicht nur ihrem Thema, sondern auch der Behandlungs- und Anschauungsart nach, dem zweiten, praktischen Hauptteil nahe. Die Herausgeber haben aber diese Arbeiten mit drei weiteren (U. *Wagner*, K. von *Delhaes* und A. *Schüller*) im zusammenfassenden letzten Teil aufgenommen, der die Frage der Systemstabilisierung durch intersystemare Wirtschaftsbeziehungen zu beantworten versucht.

Die zweifellos interessanten und die persönliche Ansicht der Verfasser wiedergebenden Studien würden eine eingehende Analyse verdienen. Bedauerlicherweise steht dieser Absicht der engbegrentzte Raum der Zeitschrift entgegen, so daß man sich mit der Hervorhebung einiger wichtiger Aussagen und Hypothesen begnügen mußte.

Der Sammelband weist eine eindeutige Zweiseitigkeit auf: die theoretischen Arbeiten gehen davon aus, daß die Ost-West-Wirtschaftsbeziehungen für den Westen vor allem destabilisierende Effekte vermitteln, während sich der Osten aus diesen Beziehungen profitiert; die praktischen Studien betonen die beiderseitige Nützlichkeit und die objektiven Gegebenheiten der Zusammenarbeit. Aus diesem Unterschied folgen dann notwendigerweise unterschiedliche Konsequenzen, Vorschläge für die Zukunft der Ost-West-Wirtschaftsbeziehungen. Nach allgemeiner (und historischer) Erfahrung hat die Wirklichkeit, der objektive (faktische) Prozeß sämtliche Theorien modifiziert, und nicht umgekehrt, sich falschen Theorien angepaßt. Dies muß stark betont werden, wenn man Schlußfolgerungen liest, die ganz in der Linie der gegenwärtig im Vordergrung getretenen amerikanischen Strategie von Brzezinski und Huntington liegen: „Nimmt man die Summe aller ordungs- und wirtschaftspolitischen Gesichtspunkte eines GATT-Beitritts von Staatshandelsländern, so müßte es im Interesse einer jeden marktwirtschaftlich geordneten Volkswirtschaft liegen, eine solche Öffnung des GATT abzulehnen" (Gröner, S. 247.), oder noch mehr das folgende Zitat: „Denjenigen Regierungen westlicher Marktwirtschaften, die für die negativen externen Effekte des Wirtschaftsverkehrs mit dem Osten – vor allem für die Unfreiheit der dort lebenden Menschen – nicht verantwortlich sein wollen, ist deshalb zu empfehlen, diesen Wirtschaftsverkehr gesetzlich zu verbieten". (Wagner, S. 317).

Abgesehen von den politischen Elementen, muß man hier drei Fragen stellen: inwieweit läßt sich ein solches Programm verwirklichen; wenn man es zur Geltung helfen kann, was für Konsequenzen hat es für die Marktwirtschaften, und welche für die sozialistischen Länder? Nüchtern und realistisch denkende Mitarbeiter des Bandes unterstreichen, daß die willkürliche Aufhebung der Ost-West-Wirtschaftsbeziehungen ein Wunschtraum ist, für den nur wenige (wenn überhaupt) Regierungen zu gewinnen wären. Westliche Wirtschaften, Unternehmen – mit nicht weniger staatlicher Unterstützung – konkurrieren miteinander auf dem sozialistischen Markt, und sie tun es wahrscheinlich nicht aus karitativen Gründen, sondern deshalb, weil sie sich dabei Gewinne erhoffen.

In vielen Arbeiten wird große Bedeutung der Bewahrung, bzw. Wiederherstellung „echter" privatmarktwirtschaftlicher Bedingungen zugeschrieben. Die Autoren befürchten die Ansteckung der westlichen Wirtschaften durch „planwirtschaftliche Bazillen", die sich durch den vermehrten Kontakt zwischen Ost und West in die westlichen Wirtschaften einschleichen. Die Zunahme staatlicher Eingriffe, die fortschreitende Konzentration und die verschärften Strukturprobleme seien nach dieser Ansicht eine direkte Folge der Ost-West-Wirtschaftsbeziehungen.

Diese Elemente führen dann zur Destabilisierung des kapitalistischen Systems. Die erwähnte Schilderung ist aber sehr weit von der Wirklichkeit entfernt. Natürlich kann man verstehen, daß sich viele Wissenschaftler darüber Gedanken machen, wie die privatwirtschaftliche Tätigkeit im Westen verstärkt werden kann, um der weltwirtschaftlichen Herausforderung Widerstand zu leisten und die marktwirtschaftlichen Prinzipien behalten zu können. Sie sollten aber darüber im klaren sein, daß es sich hier nicht um einen neuen Prozeß handelt, sondern daß staatliche Eingriffe, Konzentrationstendenzen und Strukturprobleme seit längerer Zeit Mitfahrer des Kapitalismus sind. Eigenarten der kapitalistischen Entwicklung dem Ost-West-Handel zu Last zu hängen ist auch deshalb unrichtig, weil sie dem Aufkommen neuer weltwirtschaftlicher Probleme und der Ausdehnung der internationalen Arbeitsteilung auf Wirtschaften niedriegen (unterschiedlichen) Entwick-

lungsstandes zuzuschreiben sind. Zuletzt sei noch darauf hingewiesen, daß das gegenwärtige Niveau der Ost-West-Wirtschaftsbeziehungen – im Verhältnis zur Wirtschaftskraft des Westens – recht bescheiden ist, so daß man von ihm kaum eine bedeutende Einflußnahme oder gar nicht „Störeffekte" auf die marktwirtschaftlich eingerichtete Ordnung ausgehen können (vgl. unter anderem Schüller, S. 363 und 364.).

Es mag natürlich nicht jeder Grundlage entbehren, daß die Erneuerung des kapitalistischen Systems, die erfolgreiche Anpassung an die neuen Verhältnisse wieder einmal privatwirtschaftliche Initiativen braucht, und die marktwirtschaftlichen Prozesse wieder einmal stärker zur Geltung kommen. Diese Bestrebungen – wenn sie einmal gerechtfertigt sind – versprechen nur dann Erfolg, wenn sie die objektiven Gegebenheiten der Weltwirtschaft berücksichtigen. (Unter ihnen spielte der Ost-West-Handel bisher nur eine relativ bescheidene Rolle.)

Im Gegensatz zu den theoretischen Aussagen stehen die Ergebnisse praktischer Untersuchungen. Vor allem die Chemiestudie weist eindeutig darauf hin, daß sich die Strukturkrise bei weitem nicht auf die Ost-West-Kompensationsgeschäfte zurückführen läßt (die östlichen Rücklieferungen kommen erst jetzt zum Zuge). Sie ist mit Anpassungsproblemen eines in der Vergangenheit überdurchschnittlich gewachsenen Sektors zu erklären, der seine privilegierte Stellung auch dadurch zu bewahren versucht, daß er strukturverkrustende Entwicklungspolitik betreibt, und nach dem Gesetz des „kleineren Widerstandes" langfristig kontraproduktive Kompensationsgeschäfte abschließt. „Die Klagen aus der chemischen Industrie scheinen somit eher eine Widerspiegelung der ohnehin vorhandenen Strukturkrise zu sein, als daß sie objektiv durch die Kompensationsgeschäfte selbst begründet wären". (U. Fehl–P. Oberender, S. 300.).

An einer anderen Stelle formuliert L. Schmidt die Notwendigkeit staatlicher Interventionen (multinationaler Absprachen) um Spannungen in der internationalen Schiffahrtspolitik zu beheben. Wie verhält sich aber diese Forderung zu den nur in der Theorie existierenden privatwirtschaftlichen Grundsteinen? Oder ist es vielleicht so, daß komparative Vorteile der sozialistischen (und Entwicklungs-) Länder „Marktstörer" und sogar „Systemstörer" sind, gegen die die „echte" Marktwirtschaft staatliche Unterstützung zu Hilfe ruft? In einer interdependenten Welt, wie die unsere, kann man ohne internationale Absprachen in vielen Bereichen nicht mehr auskommen. Abkapselung, krampfhafter Schutz der kurzfristigen Eigeninteressen (und gar nicht der „Systeminteressen"!) bringen mehr Schaden als Nutzen, nicht nur für das agierende Unternehmen oder den agierenden Staat, sondern auch für andere, die sich an der internationalen Arbeitsteilung beteiligen.

In diesem Sinne kann man den Vorschlägen, bzw. Folgerungen einiger Autoren nicht zustimmen, die aus den Ost-West-Wirtschaftbeziehungen zunehmende wirtschaftliche (und politische) Gefahren für die RGW-Länder vermuten. Einerseits kommen sie dadurch im Widerspruch zu ihrer anderen These, nach der die intersystemaren Wirtschaftsbeziehungen die sozialistischen Systeme stabilisieren. Andererseits helfen sie – vielleicht unbewußt, wodurch jedoch der schädliche Einfluß nicht geringer ist – Vertreter konservativer und (endlich) überholter Anschauungen. Die Aufrechterhaltung der Parallelproduktion in den einzelnen sozialistischen Ländern mindert die Leistungsfähigkeit der sozialistischen Volkswirtschaften, verhindert die Ausnutzung komparativer Vorteile, und führt dadurch zum schwächeren Wirtschaftspotential und engeren wirtschaftlichen Bewegungsraum (und gar nicht zur größeren politischen Selbstständigkeit – siehe vor allem A. Schüller, S. 22). Die These, „den administrativ-sozialistischen Ländern wird es . . . nie gelingen, im internationalen Handel und insbesondere bei unter Qualitätswettbewerb stehenden Gütern entscheidende Erfolge zu erringen" (Wagner, S. 316) könnte wohl aus dem Mund eines Dependenztheoretikers stammen. Die Dependenztheorie, die von marktwirtschaftlich denkenden Experten nie geteilt wurde, und die eben die Ereignisse der 70er Jahre zu widerlegen scheinen, betont die Notwendigkeit der wirtschaftlichen Autarkie, denn der internationale Handel bringt eindeutige Nachteile für die Beteiligten an ihm. Zwei Jahrzehnte lang klagten dieselben westlichen Experten über Autarkiebestrebungen, fehlende weltwirtschaftliche Arbeitsteilung der sozialistischen Ländern. Sind es jetzt diejenigen, die ihre Meinung – nicht zuletzt aus

politischer Motivation – ändern und das Entgegengesetzte proklamieren wollen?

Zum Glück enthält der Band auch Beiträge, die immer wieder auf Hindernisse der Wirtschaftsbeziehungen auf beiden Seiten hinweisen (vor allem Schenk-Wass von Czege in der Technologie- und Absatzpolitik westlicher Länder). Die lehrreichsten Beiträge sind die, welche sich mit verschiedenen Teilbereichen der realwirtschaftlichen Tätigkeit befassen: so zum Beispiel die Studien über die Währungsfragen (Zweitwährung, Beitrittsmöglichkeiten zum IWF, Beteiligung der sozialistischen Länder am Eurogeldmarkt), Kooperationsterfahrungen, usw. Diese vermitteln dem Leser ein ausgewogeneres Bild, in dem sie weder Spannungen und Probleme verschweigen, noch Fortschritte und gegenseitige Vorteile abschätzen.

Die abschließenden Bemerkungen beruhen leider mehr auf den nicht nachgewiesenen (und auch nicht nachweisbaren) theoretischen Ansatzpunkten, und weniger auf den praktischen Erfahrungen. Sie verstärken den Eindruck, als ob die Ost-West-Wirtschaftsbeziehungen das sozialistische System eindeutig stabilisierten, während die Marktwirtschaft nur an destabilisierenden Einflüssen leidete. Nicht nur praktische Erfahrungen sprechen gegen diese einseitige Darstellung, sondern auch Größenordnungsunterschiede, Unterschiede im Entwicklungsstand und Wirtschaftspotential.

Internationaler Handel und Wirtschaftsbeziehungen unter souveränen Staaten bringen unwiderlegbare Vorteile, aber auch gewisse Einschränkungen mit sich. Diese Regel gilt nicht nur für intersystemare Wirtschaftsbeziehungen, sondern ganz allgemein, auch für Beziehungen innerhalb eines Wirtschaftssystems. Die Ausweitung der internationalen Wirtschaftsbeziehungen auf allen Ebenen, die zunehmende Interdependenz ist in der heutigen Welt eine objektive Notwendigkeit: ohne gewisse Spannungen in Kauf zu nehmen, könnten sich die einzelnen Wirtschaften nicht entsprechend entwickeln. Abkapselung, Zurückziehen, Beseitigung der bestehenden Kontakte würde schon in wirtschaftlicher Hinsicht vielmehr destabilisierend wirken, als nicht immer angenehme Begleiterscheinungen der Ausweitung der Beziehungen. Von einer destabilisierenden Wirkung auf die internationalen politischen Verhältnisse ganz zu schweigen.

A. INOTAI

ALTMANN, F.-L.–CLEMENT, H.: *Die Kompensation als Instrument im Ost-West-Handel. Gutachten im Auftrag des Bundesministers für Wirtschaft.* (Gegenwartsfragen der Ost-Wirtschaft, Band 10) München–Wien, 1979. Günter Olzog Verlag. XI+276 S.

Die im Auftrag des Bundesministers für Wirtschaft angestellte Studie behandelt die Kompensationsgeschäfte, die in den letzten Jahren in den Ost-West-Wirtschaftsbeziehungen an Bedeutung gewonnen und recht unterschiedliche Beurteilung der Fachleute und der Wirtschaft im allgemeinen hervorgerufen haben. Gleich am Anfang stellen Verfasser fest, daß die Kompensationslieferungen bei weitem nicht nur für die Ost-West-Wirtschaftsbeziehungen charakteristisch sind: sie sind auch in anderen Gebieten, ja sogar in der alltäglichen Praxis der „liberalen" kapitalistischen Wirtschaften aufzufinden.

Um ihrem Ziel, also der wirklichkeitsnahen Schilderung des „wahren Gesichts" (besser gesagt der „wahren Gesichter") der Kompensation zu entsprechen, bedienten sich die Verfasser einer ziemlich breit gestreuten Umfrage. Der Anteil der eingegangenen Antworten an der Gesamtzahl der verschickten Fragebögen erwies sich – wie erwartet – relativ gering, insbesondere was die Antworten aus den sozialistischen Ländern betrifft. Trotzdem war es möglich gewisse Schlußfolgerungen zu formulieren, auch wenn manche vielleicht durch die bescheidene Anzahl der Antworten nicht genügend unterstützt sind. Es ist zu begrüßen, daß sich das Osteuropa Institut nicht durch präfabrizierte Gedanken für allgemeingültig gehaltene Vorstellungen leiten und verleiten ließ: es hat sämtliche Behauptungen, Ideen oder Vermutungen im Lichte des bearbeiteten Materials wieder einmal sorgfältig geprüft, und Verfasser schreckten vor der Verneinung vieler bisherigen „Wahrheiten" nicht zurück.

Das erste Kapitel des in zehn Abschnitten gegliederten Buches stellt die allgemeine Problematik der Kompensation dar und definiert den Gegenstand der Untersuchung, sowie beschreibt die angewandten Methoden (vor allem die Struktur der Umfrage).

Das zweite Kapitel befaßt sich mit der Bedeutung und den Formen der Verbundgeschäfte. Die Untersuchung hat bekräftigt, daß die Intensität der Verbundgeschäfte in der zweiten Hälfte der

70er Jahre zugenommen hatte, wobei sich die Neigung der einzelnen sozialistischen Länder zur Abschließung solcher Geschäfte recht unterschiedlich gestaltete. Zwar erhöhte sich der Kompensationsanteil durchgehend (das heißt für einen höheren Wertanteil der westlichen Lieferungen wurde statt Geld sozialistische Ware angeboten), sind die in der Fachpresse erschienenen Angaben allzu hoch. Sie enthalten nämlich entweder den geforderten Kompensationsanteil, den die westlichen Unternehmen im allgemeinen kräftig zurückschrauben konnten, oder vergleichen den Wert der Kompensationslieferung mit den Aus- und Einfuhrwerten eines Jahres. Diese Lieferungen verteilen sich jedoch auf viele Jahre, so daß der Anteil der Kompensationslieferungen am Gesamtexport der sozialistischen Länder in die Bundesrepublik Deutschland – nach den einzelnen Ländern – zwischen 1,5 (Ungarn) und 12 Prozent (UdSSR, vor allem das große Erdgasgeschäft) sein mag. Höher ist dieser Wert bei den Handelshäusern, die vor allem branchenfremde Waren von den westlichen Unternehmen abnehmen, die die letzteren als Gegenwert für ihre Lieferungen bezogen haben.

Im dritten Kapitel gehen Verfasser auf die Gestaltung und Abwicklung der Verbundgeschäfte ein. Die Umfrage hat die Erwartung bekräftigt, daß die Forderung nach Kompensationslieferungen vor allem in den sozialistischen Ländern gestellt wird, aber nicht von den sozialistischen Unternehmen, sondern von den Außenhandelsorganisationen. Gleichzeitig stellte sich heraus, daß auch westliche Unternehmen manchmal Kompensationsgeschäfte initiieren. Die Untersuchung ermöglicht eine nuanciertere Beurteilung der in Kompensation angebotenen Waren. Einerseits sind diese Lieferungen hinsichtlich Qualität, Absatzfähigkeit, Brauchbarkeit länderweise unterschiedlich: die besten Waren stammen aus den industrialisierteren RGW-Ländern, also aus der DDR, der ČSSR und Ungarn. Andererseits sind die Kompensationslieferungen in einem weit geringeren Anteil als früher vermutet (und auch verkündet) „branchenfremd": 28 Prozent der befragten westdeutschen Unternehmen schaltet die Kompensationswaren vollkommen, weitere 32 Prozent teilweise in den eigenen Produktionsprozeß ein. Höher als dieser Durchschnitt fällt der Anteil der Eigenverwendung für die Klein- und Mittelbetriebe aus, eine Tatsache, die den geläufigen Vorstellungen widerspricht. Während die westdeutschen Lieferungen überwiegend aus Maschinen und Investitionsgütern bestehen (90%), enthalten die sozialistischen Gegenlieferungen in etwa 60 Prozent Investitionsgüter (bei den von Klein- und Mittelbetrieben übernommenen Waren ist jedoch dieser Anteil 80%), allerdings nicht Machinen, sondern Eisen- und Stahlerzeugnisse und Metallwaren: hinter der „Grobstruktur" kann man also einen spezifischen und für den Ost-West-Handel von Fertigwaren allgemein charakteristischen Strukturunterschied entdecken. Jedenfalls beweist die Untersuchung, daß Kompensationsgeschäfte keineswegs einen „Tausch von Maschinen gegen Tomaten" darstellen. Anders strukturiert sind die Kompensationswaren, die die Handelshäuser vertreiben: hier besteht etwa die Hälfte der sozialistischen Exportgüter aus Verbrauchsgütern und Agrarprodukten, während die Investitionsgüter nur mit 15 Prozent vertreten sind.

Die nachfolgenden zwei Abschnitte behandeln die Verbundgeschäfte aus sozialistischer und aus westlicher Sicht. Im Mangel an sozialistischen Daten beruht die ganze Untersuchung auf westdeutschen Angaben. Westdeutsche Unternehmen, Handelshäuser, Industrieverbände und Kammern meinen, daß die sozialistischen Hauptmotive der Kompensationsgeschäfte die Zahlungsbilanzprobleme, die unzureichend ausgebaute eigene Vertriebsorganisation und in gewissem Maße der höhere Grad der Planbarkeit seien. In den sowjetischen Kompensationsvorstellungen komme vor allem nicht der Zahlungsbilanzsituation, sondern dem massiven Kapitalimportbedarf die zentrale Rolle zu.

Die RGW-Länder erwarten von den Kompensationsgeschäften die beschleunigte Entwicklung der Volkswirtschaften, den erhöhten Technologieimport, neue Importmöglichkeiten, die im Plan nicht enthalten sind, bessere Warenqualität, breiteres Angebot, neue Märkte im Westen, die Lösung von Marketingproblemen und das Umgehen protektionistischer Maßnahmen. Verfasser unterstreichen, daß diese Erwartungen, auch wenn sie nicht ganz von der Hand zu weisen sind, übertrieben und häufig mit zusätzlichen längerfristig auftretenden Schwierigkeiten verbunden sind (z.B. verspätete Anpassung an die Weltwirt-

schaft, Erstarrung der Produktionsstruktur, Verzicht auf eigene Bestrebungen und auf einen Teil des erzielbaren Gewinns, usw.).

Aus westlicher Sicht werden die Verbundgeschäfte recht unterschiedlich beurteilt. Die Meinungen reichen von den „unvermeidbar schlechten Praktiken" bis zur „effizienten Form der Ost-West-Zusammenarbeit". Man kann davon ausgehen, daß die westlichen Unternehmen, die auf Gewinn eingestellt sind, schlechte, also verlustreiche Geschäfte nicht schließen. Natürlich beeinflußt die Konjunkturlage ihr Verhalten: bei gedämpfter oder schlechter Konjunktur betrachten sie auch den kleineren Nutzen vorteilhaft. Die wichtigsten Beweggründe dafür, daß westdeutsche Unternehmen auf Kompensationsgeschäfte mit RGW-Ländern eingehen, liegen in der Eroberung des RGW-Marktes, in der besseren Ausnutzung der Produktionskapazitäten, in der rascheren Amortisation der Entwicklungskosten, in der Sicherung günstiger Rohstoffquellen und in der Kreditsicherung.

In den folgenden zwei Abschnitten setzen Verfasser den begonnenen Ost-West-Vergleich fort: diesmal untersuchen sie die system- und entwicklungsbedingten Merkmale der Kompensationen. In den sozialistischen Ländern sprechen die langfristige Planbarkeit, der immer noch enge Bilateralismus in Handels-, vor allem aber in Währungsfragen, der Finanzierungsbedarf der zentral vorgeschriebenen Großprojekte, die immer wieder auftretende Notwendigkeit nicht-geplanter Westimporte für den systembedingten Charakter dieser Geschäfte. Entwicklungsgebundene Merkmale sind der höhere Importkapital-Bedarf der sozialistischen Volkswirtschaften in ihrem heutigen Entwicklungsstadium, das erhöhte Interesse am westlichen Know-how, vermehrte Westesporte (Absatzorganisation) und bessere Warenqualität.

Verfasser untersuchen eingehend die tatsächlichen oder vermuteten Auswirkungen der Kompensationsgeschäfte auf das westliche Wirtschaftssystem. Gegenüber der häufig gehörten Klage, Kompensationslieferungen bedrohen die Marktprozesse im Westen, konnte die Umfrage kein konkretes Beispiel für Marktstörung finden. Doch sollte man auf zwei mögliche Störeffekte aufmerksam sein: Einerseits können die westlichen Partner der sozialistischen Unternehmen nicht immer nach der höheren Qualität oder dem günstigeren Preis, sondern nach der Bereitschaft, Kompensationslieferungen in Kauf zu nehmen, ausgewählt. Andererseits ist der Störeffekt der sozialistischen Lieferungen, falls sie zu gedrückten Preisen erfolgen, nicht auszuschließen. Die oft vorgetragene Klage, Verbundgeschäfte beseitigen Arbeitsplätze, kann nicht unterstützt werden. Die internationale Arbeitsteilung schafft und beseitigt Arbeitsplätze gleichzeitig, und bildet ein wichtiges Motiv des fortwährenden Strukturwandels. Da die meisten Kompensationen aus vorgenommenen Westlieferungen und nachrückenden sozialistischen Gegenlieferungen bestehen, wobei ein Teil der letzteren erst in den kommenden Jahren fällig ist, weiterhin die sozialistischen Kompensationsexporte nur einen Teil der Bezüge aus dem Westen auf Kompensationsgrundlage betragen, kann man eher einen netto arbeitsplatzschaffenden Effekt für wahrscheinlicher halten, als das Gegenteil. Es mag sein, daß der arbeitsplatzvernichtende Effekt in den kommenden Jahren zunimmt, man darf aber nicht vergessen, daß ihm eben in der zweiten Hälfte der 70er Jahre ein arbeitsplatzschaffender Effekt vorangegangen war.

Die Umfrage konnte auch einen beschleunigten Konzentrationsprozeß als Ergebnis der Verbundgeschäfte nich nachweisen. Ebenso unbestätigt blieb die Befürchtung, die Kompensationsbeziehungen beschränken die handelspolitische Bewegungsfreiheit der westlichen Wirtschaften.

Nach diesen umfangreichen Untersuchungen fragen sich Verfasser, wie die Zukunft der Ost-West-Verbundgeschäfte zu beurteilen ist. Die wichtigsten Feststellungen – die in abgekürzter Form auch im *Kapitel 10* wiedergegeben werden – sind im *achten Kapitel* enthalten. Mit Recht stellen Verfasser fest, daß die Kompensationsgeschäfte auch in der Zukunft eine bestimmte Rolle spielen werden (und nicht nur im Ost-West-Geschäft). Die Intensität dieser Beziehungen, vor allem die Neigung westlicher Firmen, solche Geschäfte zu schließen, hängt aber nicht unwesentlich von der konjunkturellen Lage im Westen ab. Die Besserung der Konjunktur könnte das westliche Interesse an Verbundgeschäften reduzieren. Es ist bemerkenswert, daß vor allem Großunternehmen zwischen Häufigkeit der Verbundgeschäfte und Konjunkturlage keinen engen Zusammenhang sehen. Sie argumentieren, daß die sozialistischen Länder ihre

Zahlungsbilanz kurzfristig nicht ins Gleichgewicht bringen können, und deshalb jede Exportmöglichkeit in der Zukunft ergreifen müssen. Die Sowjetunion soll dabei gesondert betrachtet werden, da in diesem Falle Großkompensationsprojekte im Rohstoffsektor weiterhin eine beiderseitig günstige Entwicklungsmöglichkeit darstellen.

Aufgrund der gefundenen Beweise und der gezogenen Schlußfolgerungen formulieren Verfasser handelspolitische Maßnahmen für die Bundesregierung. Einerseits weisen sie die Forderung zurück, man sollte die Kompensationsgeschäfte auf Regierungsebene, bzw. auf EG-Ebene drosseln. Dabei weisen sie auf technisch-statistische Probleme, juristische „Löcher", sozialistische Gegenschritte, hohe administrative Kosten und Wettbewerbsnachteile der westdeutschen Wirtschaft gegenüber ihren Konkurrenten auf dem sozialistischen Markt hin. Andererseits halten sie auch kompensationsfördernde Maßnahmen für ungelegen. Statt direkter Eingriffe schlagen Verfasser vor, Alternativbereiche zu den Verbundgeschäften zu fördern, und dabei die Kompensationsneigung in andere, entwicklungs- und handelspolitisch gesehen positivere Kanäle umzuleiten. Darunter spezifizieren sie eine aktivere Kreditpolitik, wenn das Hauptmotiv der Kompensation der Kapitalimport ist; der möglichst vollständige Abbau der bestehenden Importbeschränkungen (Strukturverbesserung); engere Zusammenarbeit mit sozialistischen Unternehmen in der Verpackung, im Marketing und in der Absatzförderung sozialistischer Exportwaren. Es geht also um die kräftigere Förderung der sozialistischen Exportanstrengungen. Natürlich ist der Erfolg der letzteren vor allem von der Umstrukturierung der Produktion in den RGW-Ländern selbst abhängig.

Das Buch von *Altmann* und *Clement*, das im Anhang Auszüge aus der sozialistischen Fachliteratur über Kompensationsgeschäfte bringt und eine wertvolle Zusammenstellung der zwischen 1970 und 1977/78 bekanntgewordenen Kompensationsgeschäfte enthält, stellt ein geglücktes Verbinden von praktischen Erfahrungen und theoretischen Vorstellungen dar. Sein Verdienst ist zweifaches: auf der einen Seite sammelte es zum ersten Mal zahlreiche wichtige Angaben über Verbundgeschäfte und verband sie in einen theoretischen Rahmen, auf der anderen bestätigt, korrigiert oder widerlegt es geläufige Vorstellungen, Urteile und Vorurteile über Verbundgeschäfte, und trägt damit zur Klärung dieser nicht unwichtigen Zusammenarbeitsform zwischen Ost und West bei.

A. INOTAI

ŻURAWICKI, L.: *Multinational enterprises in the West and East.* Alphen aan den Rijn, 1979. Sijthoff & Noordhoff. 2007 p.

Multinational enterprises are subjects of growing international interest because of the role they play in international economic relations and in the international expansion of production. There are several different theories concerning what impells these enterprises to go abroad and what the criteria are on the basis of which an enterprise can be called multinational.

In the first three chapters of his book the author (lecturer in Economics in the Department of Economic Relations at the Institute of Economics, University of Warsaw) deals with the role of companies that are multinationals in the traditional sense, with their most common definitions and the best-known theories treating them.

The US Federal Trade Comission for instance classifies as multinational those enterprises which 1. realize a total turnover of at least 100 million dollars, 2. have subsidiaries in at least six countries, 3. have invested at least twenty percent of their capital abroad.

Other definitions too, hold the ownership of productive facilities abroad to be the main criterion. The author's view, however, is different. He maintains that with the present extent of monopolization in capitalist countries it is an objective necessity for an enterprise to expand and become multinational. The major criterion of being multinational is whether the given enterprise has a global strategy.

Considering the multinationals' role in international trade and in the specialization of production the author calls for the modification of the existing ideas about the international division of labour and of foreign trade theories. Production factors, – as a result of the activity of the multinationals –, show, namely, substantial mobility, while other important factors, like

technology, have remained primarily the property of the enterprise. Production considerations are not the main factors determining the place where these enterprises invest abroad.

The author gives a conventional analysis of the relations between the multinational enterprises and the various states and also of the question of sovereignty. He points out that this relation changes with the strength of the negotiating parties and also depends on the options open to them. He considers international control over the multinationals necessary but – in view of the failure of attempts made to date – he gives no recommandations as to the concrete form this is to take.

A much less known aspect of the topic treated is the "multinationals of the East", i.e. the activity of the socialist common enterprises. In contrast to the "real" multinationals, whose international character is a function of the geographic expansion and quantitative growth of their sales, the socialist common enterprises are either mergers of already existing national firms or brand new international enterprises. The need for joint control and organization of research and development activities and the need to combine the independently developed know-how and technology of the member countries are the most important factors in their establishment.

Socialist common enterprises came into being relatively short time ago. Their number is limited and, except for the Polish-Hungarian Haldex, none of them are more than six years old. The operating socialist common enterprises have been almost all established in the non-consumer goods sectors, i.e. where the market mechanisms are less effective.

There are several obstacles in the way of establishing more common enterprises. The most important hindering factors are the ambiguity of the accounting prices (an ambiguity that comes from the differences in labour costs from country to country, in the availability of capital or, what is even more problematic, in the price of technology) as well as lack of agreement on the role of profit. The author proposes that the so-called "minimum-price" be introduced into the accounting of socialist common enterprises and that the selling prices be calculated on the basis of cost, on the same level in all the socialist countries. The profitability of these enterprises is not necessarily the main indicator of their effectiveness. The present practice of "equal shares in stock and equal distribution of profits" – which is just a method of clearing accounts more easily – should be substituted by a practice, whereby the share in stock gives the right to an analogous share in profits.

In the future establishment of socialist common enterprises two contradictory considerations should be taken into account. On the one hand these enterprises can accelerate the integration of CMEA countries, on the other hand, however, the effective functioning of these enterprises can be hindered by differences in the level of development and in the economic mechanisms of these countries. Two approaches to the problem have gained currency: 1. the formation of socialist common enterprises is premature until rationalization of the domestic price structure in individual CMEA countries takes place and their bilateral trade becomes truly multilateral; 2. socialist common enterprises may speed up equalization of the level of development of individual member-states and help harmonize the economic systems. The author is in favour of the latter approach because he feels that the common enterprises can help realize the trade and economic cooperation plans between the East and West.

As to the "real" multinationals, they already play a large role in East-West trade. In the case of some products (services) their business transactions account for as much as seventy-five per cent of the total turnover. The socialist common enterprises tend to profit from cooperation with the multinationals for more than one reason: 1. the multinationals offer the most modern products and technology; 2. the multinationals' large and diversified output capacities enable them to sign large and sophisticated contracts adjusted to the partners' demands; 3. as a result of their long experience in international business the multinational enterprises are prone to be more flexible in their trade with the socialist countries; 4. the planning and management techniques in the large corporations have – in the author's opinion – something in common with the control methods used in the socialist countries. This facilitates the

negotiation and realization of long-term contracts.

The multinationals' activity in the East-West trade is not limited to simple export transactions. They are likely to be interested in various kinds of compensatory and barter transactions which sometimes means accepting goods that the socialist countries themselves are not able to find a market for.

The various industrial cooperations with multinational enterprises promote the socialist export to Western countries as well as help realize development projects in the given country.

Although East-West trade in licences represents less than ten percent of the world total, since the early 1970s the acquisition of licences by the CMEA-countries has been growing three to four times faster than their foreign trade as a whole. The technology market for the socialist countries is much dominated by the multinational enterprises – but unlike it is commonly supposed – it is not a one-way market, for every four licences they buy the socialist countries sell one. The multinational enterprises sometimes raise objections, complaining of the unrestricted flow of industrial technology within the CMEA countries as a result of which the multinationals lose income. It also happens, however, that a number of socialist countries each buy the same licence from a Western company and each pay the full price for it. The author proposes a closer coordination of the CMEA countries with respect to the acquisition of Western licences and a joint aquisition of licences in certain cases. He also suggests that the socialist common enterprises could play a more active role in such transactions.

In the last chapter the author gives a summary of the possibilities of East-West-South cooperation. He maintains that along with the multinationals the socialist common enterprises should also take an active part in these, even competing with them.

The appendixes of the book are case studies of an Anglo–Polish shipbuilding agreement and of an industrial cooperation between the American International Harvester and the Polish BUMAR.

É. KERPEL

LASZLO, E. et al.: *The obstacles to the new international economic order.* New York–Oxford etc., 1980. Pergamon Press. 144 p

LASZLO, E.–KURTZMAN, J. (eds): *Eastern Europe and the new international economic order.* New York–Oxford etc., 1980. Pergamon Press. 107 p

It can hardly be disputed that the new international economic order is among the most important international economic and political issues of our days. The two books constitute an organic part of the large-scale research project initiated by UNITAR (United Nations Institute for Training and Research) and CESTEEM (the Centro de Estudios Economicos y Sociales del Tercer Mundo, Mexico – Centre for Economic and Social Studies of the Third World) in 1976–77 with a view to giving a factual and scholarly analysis of the objectives, obstacles and opportunities, as well as of the various strategies of the new international economic order, and the results of which have been published in 17 volumes.

One of the reasons for the NIEO is indicated by the authors of the first volume in that the development of the system of world economic has not kept pace with the realities of world politics establishing themselves following disintegration of the colonial system and decolonisation. After achievement of political equality and independence the developing countries found themselves facing enormous problems often intertwined with global economic processes. Concerns focussed on establishing a new economic order press for a more intensive cooperation between the industrial countries and the developing ones, on the basis the basis of equity and justice. This cooperation demands sacrifices from the rich countries. In the long run, however, not merely one-sided sacrifices are involved, but adjustment of economic relationships to the new political conditions, and required forms of adjustment. The nature and size of the tasks involved in the development of the NIEO may represent in themselves a considerable obstacle.

The first volume divides the obstacles confronting the NIEO into six important categories: obstacles connected with politics and administra-

tion; with international trade; with international finances; with raw material and energy production and distribution; with technology transfer; and those of social nature.

Among the political obstacles the mistaken opinion is remarkable that the NIEO jeopordises the free market system by its intention to impose direct state control on a number of sectors of international trade and finances that are, at present, within a sphere of action of private companies. According to another widely spread erroneous view the NIEO is a correction to serve the interest of the developing countries, and not a cooperative process functioning upon mutuality, and containing also mutual concessions.

The greatest political obstacle to the NIEO is the arms race affecting nearly all countries of the world. The resource-wasting nature of the arms race is well illustrated by the sum of annually $ 450 thousand million spent on military purposes. This amount corresponds to two-thirds of the combined GNP of the countries inhabited by the poorer part of the world population. Since the Second World War, the direct costs of the arms race exceeded $6 thousand million at 1975 prices which amounts to the total world GNP of 1975. As opposed to this, an amount corresponding only to 60 percent of the military expenses is spent on health protection all the world over. A quarter of the scientists of the world are engaged in research concerned with war. The needs of armies and war industries considerably accelerate exhaustion of the non-reproducible raw materials and primary energies of the Earth.

The increase of military expenses is not suited for stimulating growth either from the social or from the economic aspect. The military budget siphons off resources from health, educational, welfare and social development. Besides, the increase of armaments increases total demand without augmenting, at the same time, the amount of goods sold on the home market or of those exported. It is, therefore, a source of growing inflation as well as of internal and external imbalances. If between 1970 and 1975 half of the military expenses of the world had been invested into the civil sector, by the end of the period, world production would have been bigger according to estimates, by $ 200 thousand million, which corresponds to the yearly GNP of the South-Asian and Central African region with a population of over 1 thousand million. The arms race does not efficiently help to mitigate unemployment, either. According to US government estimations, $ 1 thousand million of military expense creates 76 thousand new jobs, while the same amount creates 100 thousand in the civil sector. If the same $ 1 thousand million were spent on private consumption, e.g. through tax reductions, 112 thousand new jobs could be created. The change in the role of the war industry in research and development is indicated by the fact that military research is at a growing distance from the requirements of the civil sector and is centred on areas that have nothing to do with the most important world problems, while siphoning off the finances necessary for their solution.

It is remarkable, as regards the global problems affecting the developing countries that half of the amounts spent on military purposes in the world would be enough to finance the malaria fighting programme of the United Nations World Health Organization, which would improve the health conditions of over 1 thousand million people in 66 developing countries.

A serious obstacle to the NIEO is the lack of a comprehensive institutional framework, or, the inadequate functioning of the large number of international organizations participating at the negotiations, as well as the controversies and uncertainties about international norms (whether the international economy should be regulated by free market mechanisms or planned ones), and about legal frameworks.

The chapter analysing the obstacles facing international trade points out that in the 1960s and 1970s developing countries were important sources of the growth of world trade. The best part of the exports of the third world being made up of raw materials (with the exception of a few newly industrialized developing countries), it is important to make efforts to conclude such integrated agreements as would regulate production and consumption of basic raw materials exported by developing countries with a view to avoiding shortages as well as overproduction, while stable and profitable prices would be provided for. It is estimated that financing the buffer stocks of the integrated raw material programme including 18 products would run to $ 6 thousand million, an

amount which exceeds the financial abilities of the developing countries. Events of the last five years have shown that, in spite of the efforts made, no economically efficient and viable institution exists that would finance trade agreements and measures concerned with raw materials.

The economic growth and exports of the developing countries are unfavourably affected not only by the fluctuating prices of the raw material markets, but also by the competition by cheap synthetics. For example, of the 12 million tons of rubber produced in 1977 only 30 percent were natural rubber, and the larger part consisted of synthetic products.

The strengthening protectionistic trends in the developed industrial countries hinder implementation of the proposals made with a view to establishing the NIEO. The favours granted within the general system of preferences of the UNCTAD to promote the consumer goods exports of developing countries are restricted by the developed industrial countries; the number of "sensitive" or "semi-sensitive" products is growing on the imports of which the industrial countries set quotas or maximum quantities. If OECD countries cancelled all restrictions imposed on commodity imports from the developing countries, it is estimated that the developing countries could earn by 1985 $ 24 thousand million additional income beyond the estimated growth in the values of turnover. Instead, a new kind of protectionism has appeared recently, embodied in "negotiated restrictions", self-imposed restrictions, market division agreements, and in the "organization" of free trade.

The chapter concerned with the obstacles facing international finances analyses the effect of the disintegrating international financial system and of world-wide inflation on the developing countries. The authors make the statement that the International Monetary Fund is less and less able to fulfil its original functions and is suited for financing the debts of developing countries but to a diminishing extent. In 1970 the stock of foreign debts of developing countries amounted only to $ 54.3 thousand million, and in 1978 already to $ 200 thousand million. In this an important role was played by the rise in prices of mineral oil, and in reaction to it, by the rise in prices of investment goods coming from the developed countries.

The present amount of the official resource transfer of OECD countries is too little to cover the external financing demands of the developing world. And the share of official aids in the GNP of developed countries belonging to DAC (Development Assistance Committee) is decreasing: the 0.31 percent of 1977 is far behind the 0.7 percent target set by the U.N.O. In spite of repeated efforts on part of various international forums, official aids are still granted under terms of bilateral agreements, instead of using multilateral forms. Over half ($ 13.9 thousand million) of the money flowing into the developing countries ($ 41.9 thousand million net flow in 1977) is private capital. Private capital, and within it particularly direct foreign capital investment prefers developing countries closely related to industrial countries, with relatively higher per head income, and with a potential for manufacturing and for the extractive industry. Thus, between 1966 and 1977 40 percent of private foreign investments concentrated on Latin America and 25 percent on East Asia.

A new development of recent years has been the increasing role of the OPEC in aiding the developing countries. According to estimates in 1977 OPEC spent $ 7 thousand million on aid, which amounts to about 3 percent of the combined GNP of the member-countries. Yet the geographical division of the aids is rather uneven: almost 90 percent is concentrated on the Arab countries of Africa and on non-Arab countries with a considerable number of islamic population.

The chapter on the production and distribution of primary commodities and energy treats in detail the problems of food programmes, and of the reasonable exploitation of the sea bed, as well as the difficulties regarding the use of energy.

The last chapter concerned with social obstacles gives an overview of the problems and tasks related to the income distribution of the developing countries, the increase of population, food supply, and the backwardness of the health service and of the educational system.

In the *second volume* presenting the opinion of the socialist countries the study by B. S.

Fomin (Moscow) points out that the CMEA countries support the efforts of the developing countries at establishing the NIEO. It calls attention to the fact, however, that the front lines do not run between the rich countries – comprising also the socialist ones and thus blurring the real frontiers – and the poorness, meaning the developing world. Socialist countries are not responsible for the present situation of the developing countries: the problems of the developing world are to be traced back to the exploitation policy of the earlier colonial powers. Beyond moral considerations, however, as regards their economic development level and social order, the CMEA countries are not in a position to place surpluses at the disposal of the developing countries. This is, however, no obstacle to the socialist countries' participation in the fight for the NIEO. In their opinion the mechanisms of redistribution of incomes deriving from international trade, of the introduction of price indexing and of technological transfer cannot rely upon a more extensive use of market instruments. According to the study, the introduction of the NIEO would be best promoted through the development of the forces of production of the developing countries and the elimination of their archaic economic, social and political structures. The achievement of these objectives is inconceivable without an active participation of the state and without bringing about a strong state sector representing the interests of the large majority of the people. In accordance with this, socialist countries make efforts at establishing long-term cooperation with the developing countries, which would include long-term agreements on trade and payments, participation in the development of the forces of production of the developing countries, with particular regard to the state sector, the technical-technological assistance, etc.

The study by J. *Kleer** and L. *Zacher* (Warsaw) analyses the technology-transfer from CMEA countries to the developing ones. The authors make it clear that technological imports of the developing countries may be successful only if they are realised within the framework of longterm development programmes. The technology supplied by the socialist countries is advantageous for the developing countries in that it prefers mostly labour-intensive solutions. The greatest obstacle to the technological exports of CMEA countries to the developing countries is their low foreign trading potential relative to their economic potential, which is a legacy of the economic policy pursuing import substitution. What is more, the share of developing countries in the foreign trade of the CMEA countries does not rise above 10 percent. Notwithstanding the small share in the foreign trade volume, the advantageous fact remains that within the exports of CMEA members to the developing countries technology-intensive products have a share of over 50 percent. Beyond intensification of commercial relationships, acceleration of the technology transfer demands a rise in the amounts of aids given by the CMEA countries, improvement of the system of accounting between the two groups of countries, and establishment of an adequate institutional system.

The further three case studies of the volume offer through analyses of the relations of Yugoslavia, Romania and Hungary with the developing countries as well as to the NIEO.

M. LOSONCZ

*By mistake, his name is written in the book as J. Klerr (Ed. note)

DENOON, D. B. H. (ed.): *The new international economic order – a U.S. response.* London and Basingstoke, 1979. The Macmillan Press Ltd. 346 p.

The volume of essays and studies was prepared on behalf of the U.N.A. – E.P.C. (United Nations' Association-Economic Policy Council), an organization dealing with the analysis of economic relations between North and South.

From among problems raised in the NIEO the above volume deals – by decision of the E.P.C. – only with three major topics, namely, with trade, commodity agreements as well as with questions of capital flows.

In the first chapter – practically an introductory one – presenting the historical background of the NIEO *Denoon* states: the belief in and agreement with the programme of the New Inter-

national Economic Order on the part of the Third World countries result, on the one hand, from their increasingly exasperating situation in the world economy, and can be explained, on the other hand, by the almost realistic concept that a permanent rise in oil prices would bring about fundamental changes in the distribution of total incomes realized in the world economy in favour of developing countries. Though the first assumption of the concept connected with the shift in distribution of total incomes has become a reality, the second one has not, since the rising oil prices affected the non oil-exporter developing countries at least as unfavourably as the developed capitalist countries. Furthermore, the 1975–76 recession, the slackening of investment and production refuted all concepts connected with the stagnation at a high level of basic material prices and their steady, gradual increase, respectively.

Recognizing the above as well as the slackening unity of the "Seventy-seven" it has become clear for developed capitalist economies that the programme of the New International Economic Order is by far not such a dreadful menace as it was thought originally.

Following this recognition the primary task of American politicians was to elaborate such a long-term strategy – "respecting" the claims of NIEO – by which decisions corresponding, of course, first of all to US interests can be achieved.

The first one of the studies written on the subject of trade deals with the factors influencing contemporary international commercial policy. In the opinion of the authors – R. E. *Baldwin*, J. H. *Mutti*, J. D *Richardson* – a system mutually advantageous for both developed and developing countries, that would ensure continual economic growth, furthermore, that would maintain and develop an economic structure corresponding to their development level may be realized only with mutual concessions.

Liberalization of commercial relations between North and South based on the principle of reciprocity would allow the Third W orld countries to enter markets of developed economies with such products in which they have comparative advantages. In such a way they could further strengthen also their own economies. Simultaneously, markets of developing countries would be opened for investment goods and products of developed capitalist countries requiring special knowledge and most advanced technology. Of course, in this case industrial nations are ready to make concessions to labourintensive articles of developing countries. However, they are not inclined to give any one-sided concession.

The next study dealing with commercial problems examines alternatives of possible commercial policy strategies referring to the mitigation of commercial tariff and non-tariff barriers, first of all from the viewpoint of preparation for the Tokyo Round. For the method of their investigations the authors – A. V. *Deardorff*, R. M. *Stern* and M. N. *Greene* – chose the disaggregated equilibrium model of production and trade. The analysis is aimed at measuring the effect of certain tariff reductions of varying extent and of the mitigation of trade barriers of non-tariff character on output, employment, prices and rates of exchange.

In their model the authors worked with the following four variants:

– an overall 50 percent reduction of tariffs,

– reduction on three occassions, corresponding each time to the rate of the original tariff,

– elimination of tariffs under 5 percent, a 80 percent decrease of those over 40 percent, a 50 percent reduction of tariffs between 5 and 40 percent,

– tariff-rates = 3 percent plus 40 percent of original tariffs.

Considering the relatively low tariffs of the U.S.A. – compared to other countries – the second and fourth tariff reduction variants are most favourable for it, since these result in greater tariff reductions in case of countries with higher tariffs.

Owing to the above, the decrease in American consumer prices will be very moderate, furthermore, losses of sectors not involved in trade as well as of industries producing for the domestic market – attributable to tariff reduction – will be lower than in case of other tariff reduction variants.

Examining the situation of industries producing for export the authors state that though formulae two and four moderate the contribution of domestic consumers to the expansion of the in-

dustries mentioned, yet a more considerable tariff reduction by other examined countries induces the above expansion.

Finally, summing up, the authors state that whichever formula will be introduced, its effect will be minimum in each case. As a consequence, the main goal of their study is not to choose an optimum strategy, but to identify those industries that will be affected most negatively by the choice of any of the variants.

The last study dealing with commercial problems analyzes programmes aimed at the moderation of unemployment that might be caused by tariff reductions and at assisting the unemployed. It draws attention to mistakes in the present practice and looks for more favourable solutions.

Examining the three assistance programmes started between 1962 and 1975 G. R. *Neumann* states that a real development – in subsequent periods – can be observed in only one field, namely, in the increase in absolute terms of the number of unemployed people participating in the programmes. All the three assistance programmes try to remedy almost exclusively concerns coming to the fore in the short run, i.e. to maintain income levels. No attention is paid to problems arising in the long run, such as finding a new job, decreasing earnings and extending training or retraining.

The system of wages complementation raised as a partial solution in the study would ease practical problems in finding a new job, on the one hand, and eliminate the phenomenon of a general fall in income following a new employment, on the other. Namely, workers taking a new job would be given an about 20 percent wages complement according to the above concept. It would be given by the state indirectly, through employers. Simultaneously, taxes of employers on business profits would be reduced in proportion to the number of newly employed and to wages complements paid.

In the second part of the study Neumann tries to estimate costs of certain assistance programme alternatives falling to the state budget, making use of *Deardorff*'s, *Stern*'s and *Green*'s computations.

The first study of the second chapter dealing with commodity agreements analyzes the present and future position of the United States – as one of the most important exporters of cereals – on the world market of cereals.

In a short introduction W. W. *Cochrane* characterizes the market of cereals in the 1970s. Analyzing characteristics of the growing output of and trade in the group of products, he states that in the coming years – just as in the past – the growing of cereals and the yearly amount of crop will permanently fluctuate in the short run. That will unavoidably result in fierce and unforeseenable fluctuations in world market prices.

With regard to future prospects of the market the United States has to take all opportunities to bring an international organization into being which would be aimed at the stabilization of world market prices of cereals.* In case the above concept could not be realized the USA has to follow an independent export policy. Furthermore, if necessary, price support and production control may be also applied for protection of domestic producers and markets.

In the next study G. W. *Smith* deals with the position of the USA within the International Tin Agreement. The discussion of this topic can be explained by the joining of the USA in 1976 (after a twenty years' absence). On the part of the United States this joining may be regarded only as a political gesture, since profits or losses resulting from membership may have only a negligible effect on the economy of the country – because of the substitutability of tin.

The last study in the chapter dealing with commodity agreements examines price and investment trends of aluminium and bauxite and analyzes the effect of these factors on the American economy.

D. W. *Woods*'s analyzes concerning price increases resulted in unambiguously favourable expectable outcome for the USA. According to the train of thought of the author, though the IBA has some chance in principle to follow a uniform and efficient price policy and act in this way as a real commodity cartel, the concept connected with the utilization of the joint monopolistic situation of the member to the agreement is rath-

*After the study had been prepared negotiations on bringing about an international system of cereals reserves failed.

er a potential possibility than a reality based on the present situation. The main reason should be sought after in the deviating political interests of member-countries.

When examining the expected development of investment Woods states that concerning the future the United States outlines to possess the most favourable location factors in connection with aluminium smelters and alumina factories.

Finally, the expected effect of price and investment trends related to the American aluminium industry is quantified, then it is explained as a final conclusion that on the world market of alumina and aluminium no relevant changes may be expected that would justify an alteration in US policies in this field. The United States has to concentrate its policy also further on keeping and strengthening the counterpole role of Australia and Brazil, being the two most important producers.

The last subject of the volume of studies is dealing with questions of capital flows. The first study of the chapter examines the loan raising practice of non-oil-producer developing countries as well as the development of their balances of payments.

The authors of the study – M. *Long* and F. *Veneroso* – concentrated their analyses on looking behind official statistics on the indebtedness and balance-of-payments situation of non-oil producer countries, taking several factors and viewpoints into consideration and on utilizing different computation variants in order to estimate the debtor position and expected prospects of the above countries.

The last study of the volume, a work by C. *Michalopoulos* deals with institutional aspects of problems resulting from the debtor position of developing countries.

The accelerated worsening of the debtor position of developing countries – following the 1973 oil crisis – induced the author to examine how much the existing international organizations and political tools, are suitable and appropriate to solve difficulties that are to arise with growing frequency in the future in connection with the paying off of credits.

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