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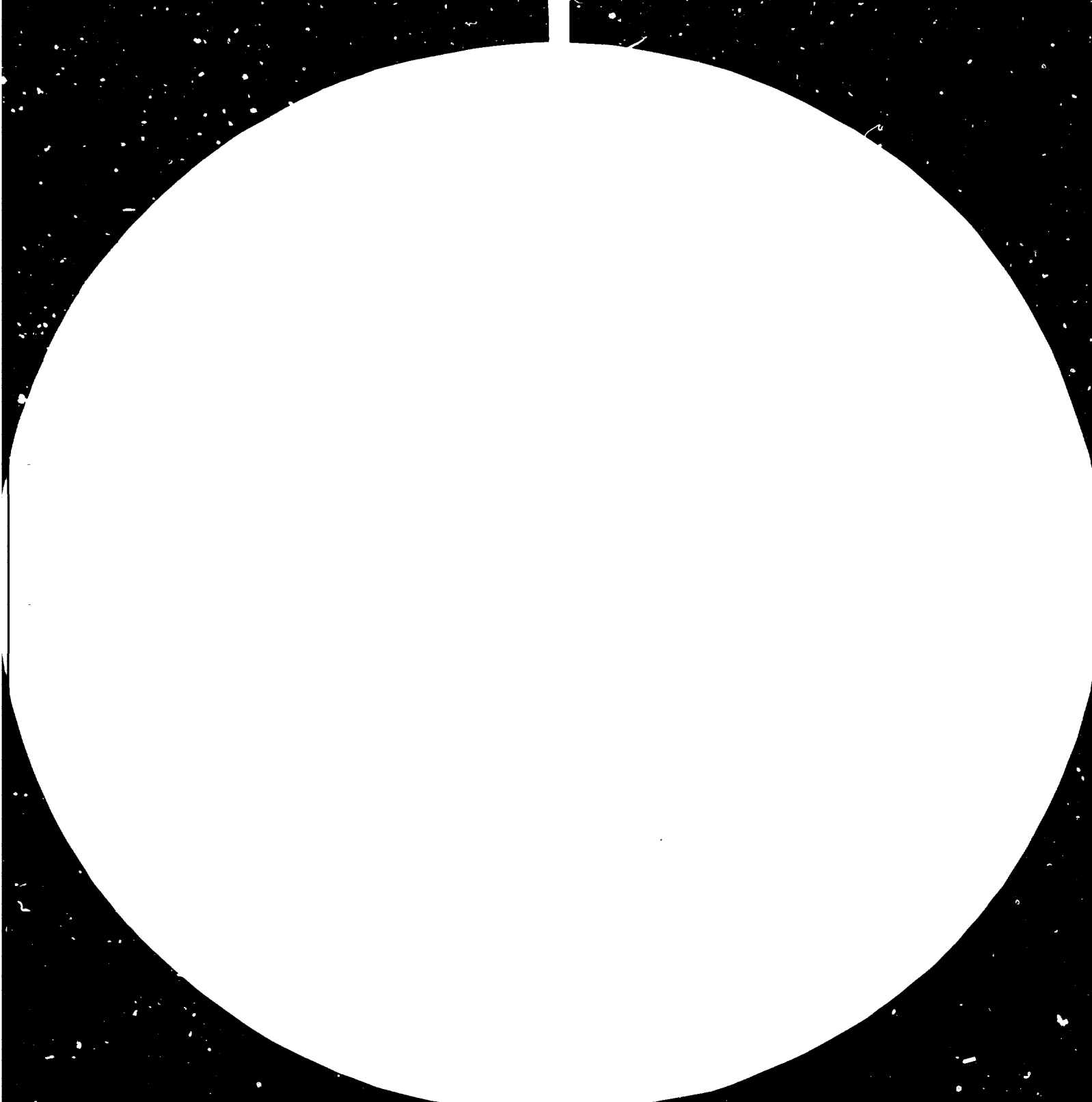
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Resolution Test Chart, NBS 1963-A, U.S. Government Printing Office, Washington, D.C.

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THE ROLE AND FUNCTION OF THE PUBLIC SECTOR  
IN INDUSTRIAL DEVELOPMENT IN THE EUROPEAN  
CENTRALLY PLANNED ECONOMIES\*

by

Zoltán ROMÁN\*\*

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The Role and Function of the Public Sector  
in Industrial Development in the European  
Centrally Planned Economies

Public enterprises exist nowadays in every country of the world - first of all as public utilities but mostly in the industrial sector. The share, the role and the functions of the public enterprises are, however, very different for a great number of economic, social, political, historical and other reasons. Here some experience of the European centrally planned economies will be reviewed, without an attempt to give a comparative assessment due to the limited space. This is expected from the expert group meeting after having discussed a number of similar papers.

I. The conceptual basis of the public industrial sector

1. Seven countries belong to the category European centrally planned economies: Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Romania and the Union of Soviet Socialist Republics. Some basic data of these countries are presented in Table 1. The seven countries show both fundamental common characteristics - as the social ownership of the overwhelming part of the means of production and the central planning of the economy - and significant differences in size, level of development, institutional set up as well as in the system of economic guidance. They have close political and economic ties /all are members of the community of the Council of Mutual Economic Aid, including also 3 non-European countries: Cuba, Mongolia, Vietnam/ but their trade and contacts with the rest of the world are significant, too.

Table 1. Some characteristics of the European centrally planned economies, 1978

Indicator	Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	USSR
Area /1000 sqkm/	111	128	108	93	313	238	22402
Population /million/	8,8	15,2	16,8	10,7	35,0	22,0	262,4
Share of employment/%/							
in agriculture	25	15	11	21	31	33	21
in industry	35	38	43	34	32	33	30
Per capita electric energy consumption /kwh/	3561	4097	5777	2813	3286	2861	4533
Relative per capita GDP <sup>xx/</sup>	86	124	129	94	94	73	100
Relative per capita foreign trade turnover <sup>x/</sup>	127	90	109	177	69	84	30

Source: CMEA Statistical Yearbook. -<sup>x/</sup> Unweighed average = 100. -  
<sup>xx/</sup> Estimates on 1973, from the Economic Bulletin for Europe, Vol. 31. No.2. p. 15.

2. The two basic common features of these countries mentioned before - the social ownership of the overwhelming part of the means of production and the central planning of the economy - are closely related but according to historical experience should not be necessarily linked in a uniform way. These two characteristics combined first appeared in the history with the Soviet Union, then after World War Two this model was taken over with some variance by a number of other European and non-European countries.



The nationalization of the industry in the Soviet Union after the victory of the October Revolution in 1917 was a single act but the development and implementation of the system of economic guidance with its focus on central planning required many years and is still subject to improvement. The nationalizations and the transformation of the economy in the other six countries of this group took place after World War Two in a number of subsequent years, in a period of economic reconstruction and struggle for political power. These measures were motivated by different economic, social and political considerations and also inspired by the Marxist theory and the example of the USSR.

The idea of the possibility of and need for uniform solutions soon has been dropped and now within the group of the centrally planned economies beside the common principles there are remarkable differences in the system of economic guidance and, consequently, in the statute and functioning of the public enterprises, too. Further on, when Yugoslavia resolutely abandoned the traditional methods of central planning based on Soviet experience and introduced a special system of self-management, produced an example that on the basis of the social ownership of the means of production other alternative models can be conceived and realized.

3. In the centrally planned economies the principles of the system of economic guidance are based on the Marxist theory, first of all on the thesis that the social ownership of the means of production is a necessary, inevitable stage of historical development and the sine qua non of the construction of a socialist economy and society. The way to this model leads in the agriculture through collectivization, in the industry and in the other sectors of the economy through nationalization. Collectivization is mostly a longer process, the nationalization of the industry, however, can and must be implemented faster. This is meant to serve a bundle of objectives, not only economic like to control the strategic sectors, the "commanding heights" of the economy, to induce additional motivation for better work but - as a condition

of implementing the complete socialist model of development - ultimate political and social goals, too.

In the light of the historical experience of many decades in the dominant theory quite a number of the elements of this socialist model of development have been discussed, some of them modified, but the need for the social ownership of the means of production never had been questioned. All efforts were /and still are/ focused on the problems how to shape the system of economic guidance to make it as efficient as possible. In this respect significant changes happened, reforms had been introduced, and as a consequence of specific national factors more diversity recognized. In some of these countries more importance will be attributed to the supplementary functions of the co-operatives and the private handicraft but in the industry in each country the state-owned sector dominates.

Private ownership of means of production /except small-scale facilities/ from a social point of view can not be advocated, justified and will not be accepted in these countries. From the point of view of the economy it would be refused as an obstacle to properly manage economic activities and to implement the targets of the central plans. This does not mean the ignorance of the limits of planning, the problems in the functioning of these economies - perfect economic systems without losses failures can be found only in textbooks - but improvements are aimed at on the basis of the dominantly state-owned industry.

4. Enterprise targets and endeavours manifest themselves in macroeconomic processes. Consciously or not, enterprises work for or against social and macroeconomic objectives; anyway, what matters is what kind of macroeconomic and social processes are resulting from their activities. Economic growth, employment, foreign trade equilibrium, moderate inflation are macroeconomic objectives likely to get into conflict with each other, and the goals and endeavours of

the enterprises in some cases contribute, in other cases counteract to these objectives. In different economic systems the goals of the social partners, of the different interest groups, of the enterprises and their various groupings can and will be integrated and implemented by different ways and means, with more or less conflicts and success. Seemingly, the harmony between enterprise and public goals can be established in the simplest way in the case of public enterprises. When the objectives of the economic policy can be quantified by a system of indicators, the tasks of each enterprise in the implementation of these objectives can be derived and fixed, attributing also the resources that can be used by them then their contribution to these objectives can be exactly measured stimulated and controlled. In shaping the model of a socialist economy such considerations served as starting points.

Under conditions of private ownership production is organized exclusively in independent enterprises. It was an important historical experience that production of commodities and efficient management necessitate also under conditions of social ownership of the means of production to organize and manage the production in economic units. After a short historical period of transition this was realized in the Soviet Union soon and they introduced the so called hozrashchot /independent accounting/ system, where the enterprises are responsible legal persons liable to give account of their activity in a statement of balance, and they must cover their expenses from their receipts so as to gain profit as well.

Profitability has played an important role in the hozrashchot system in the centrally planned economies from the beginning. However, the major performance criterion has been the fulfillment of a set of obligatory indicators of the plan with special regard to the increase of the volume of output and labour productivity. From the sixties the necessity of more initiative and for that also more autonomy of the enterprises was recognised. Subsequently it became clear,

that /i/ the tasks of the enterprises in many details cannot be centrally determined in a consistent way; /ii/ the signaling and orienting role of the commodity and market relations. prices and profits should be increased and /iii/ latest research revealed that also the power of the specific organizational goals must be taken in due consideration. As consequence in all centrally planned economies the categories money, prices, profits has been accentuated and the number of compulsory plan indicators reduced - but not in the same way and extent. The European centrally planned economies show now marked differences as to whether their enterprises get obligatory indicators derived from the central plan, how many and of what type, furthermore, as to the actual role of directives, market relations and forces, prices and profits. Dealing with these differences frequently the direct and indirect systems of economic guidance will be distinguished while others rather think in terms of a continuum with a number of variants between the two extreme poles. Since we are interested here not so much in models than in actual experience, in this paper the second approach will be preferred.

## II. The industry and its public sector; industrial goals and policies.

5. The share of agricultural earners in 1950 was 27 percentage in the GDR. 39 in Czechoslovakia, 48 in the USSR, 52-54 in Hungary and Poland, 74-80 in Romania and Bulgaria. In the post-war period all these countries followed the policy of rapid industrialization. Their agricultural employment shares in the next three decades sharply declined into the range of 11 /GDR/ to 33 /Romania/ per cent /see Table 1/, industrial employment increased significantly and amounts to 30-43 per cent of total employment. /When evaluating these figures the low share of employment in the

tertiary sector - from 12 /Romania/ to 23 /USSR/ per cent - should be kept in mind./ The share of industry in the national income originated /Net Material Product, with narrower scope than GDP, excluding services which are not related to the production and distribution of goods/varies between 47 /Hungary/ and 65 /GDR/ per cent. These figures though very much dependent on relative prices clearly indicate the significance of the industry in these countries.

From total industrial output nearly 100 per cent will be produced by the socialist, 87-97 per cent by the state-owned sector /see Table 2/. The socialist sector includes in the statistics of these countries /i/ the state-owned enterprises, /ii/ the co-operatives, and /iii/ the auxiliary activities of the population, actually with some exceptions earners /or pensioners/ of the former two categories. The share of the co-operatives' output varies between 2,4 and 11,1 per cent, the rest /private handicraft/ as registered does not exceed 2,7 per cent. The auxiliary activities mentioned above in the industry are not significant but important in the agriculture and house construction.

Table 2. The share of the socialist and state-owned sector in the European centrally planned economies, 1978

%

Indicator	Bulgaria	Checho-slovakia	GDR	Hungary	Poland	Romania	USSR
The share of the socialist sector							
- in national income /Net Material Product/	99,9	99,5	96,2	98,1	83,4	39,7	100,0
- in industrial output	99,8	100,0	97,3	99,4	98,2	99,8	100,0
- in agricultural output	99,8	97,0	95,7	96,2	22,7	87,9	100,0
The share in the industrial output of the							
- state-owned enterprises	95,8	97,6	92,5	92,9	86,7	96,1	97,6
- co-operatives	4,2	2,4	4,8	6,5	11,1	3,7	2,4

Source: CMEA Statistical Yearbook.

6. In all European centrally planned economies both the manufacturing and the total industry consist predominantly of state-owned enterprises, nevertheless a few remarks are to be added to this statement and to the quoted figures as its basis.

First, labour productivity is usually higher in the state-owned enterprises, than in other industrial plants. Looking at the employment figures, the Hungarian data indicate a lower share of the public sector /see Table 3/.

Table 3. The share of the social sectors in the Hungarian industry by different indicators, 1978

Indicator	State-owned enterprises	Co-operatives	Socialist sector	Private handicraft	Total industry %
Gross value of output	92,8	6,6	99,4	0,6	100,0
Net value of output	89,0	9,7	98,7	1,3	100,0
Employment	83,9	13,6	97,5	2,5	100,0

Source: Hungarian Statistical Yearbook.

Secondly, in the aggregate figures on the distribution of industrial output quoted above as a rule only data of economic units classified into the industry are included. Agricultural co-operatives perform industrial activities, too, primarily but not exclusively food processing. The share of their output is different by countries, in Hungary it is increasing and now amounts approximately to 5 per cent of the output of the socialist industry.

Thirdly, the shares of the state-owned enterprises and the co-operatives are not the same by branches. We can assume that in this respect the differences by branches /but not the actual proportions/ in the Hungarian industry are more or less typical: there are no co-operatives at all in mining, electricity; their contribution is negligible in the production of basic materials but substantial in a number of other - mostly consumer goods - branches like e.g. /in brackets their percentage share in employment/ in fabricated metal products /17/, processing of plastics /34/, furniture /35/, leather and footwear /35/, clothing /46/.

This means that (although not to the same extent and not of strategic importance), the question in which branches could and should the activities of the non state-owned enterprises be promoted is valid and worth of consideration also in the centrally planned economies. In Hungary in general those branches/activities will be classified into this category where economies of scale factors do not exclude or endanger the prospects of small-sized units and emphasized need is felt for greater flexibility.

7. Economic growth in the European centrally planned economies in the post-war period until the mid-seventies exceeded the growth both of the developed market economies and the developing countries. In the last three decades /1951-1979/ national income resp. NMP increased in the European CPEs by 7,8, in the developed market economies by 3,2, in the developing economies by 4,2 per cent p.a. /Per capita figures show of course lower rates in particular for the developing countries/ This higher overall growth rate of the CPEs originated primarily from the rapid industrial growth which was characteristic for the last two decades, too /see Table 4/. Some signs of slowing down appeared in most of these countries already in the sixties but this became manifest and general in the late 70s. In the years 1976-1979 industrial growth dropped /in average for these countries/ to 5,3, overall growth to 4,4 per cent p.a. In these years industrial growth rates though still significant were in all these countries below the earlier figures /see Table 5/.



Table 4. Comparative growth rates p.a. 1961-1979.

	European CPEs	Developed market economies	Developing economies
National income /NMP/-GDP	<u>NMP</u>	<u>GDP</u>	
1961-65	6,0	5,5	4,5
1966-70	7,4	4,6	5,7
1971-75	6,4	2,3	5,4
1976-79	4,4	4,0	5,3
1961-79	6,2	4,1	5,2
National income /NMP/-GDP per capita, 1961-79	5,2	3,1	2,6
Industrial output, 1961-79	7,9	4,7	6,8

Source: UN Monthly Bulletin of Statistics.

Table 5. Percentage growth rates p.a. of industrial output, 1961-1979<sup>x/</sup>

Country	1961-1965	1966-1970	1971-1975	1976-1979	1961-1979	1971-1979
Bulgaria	11,7	10,9	9,1	6,6	9,7	8,0
Czechoslovakia	5,2	6,7	6,7	4,9	6,0	5,9
GDR	5,8	6,5	6,5	5,1	6,0	5,8
Hungary	7,5	6,2	6,4	4,7	6,3	5,7
Poland	8,4	8,3	10,4	5,7	8,3	8,3
Romania	13,8	11,9	12,9	10,3	12,3	11,8
USSR	8,6	8,5	7,4	4,7	7,4	6,2

x/ Based on gross value of output index numbers.

Source: CMEA Statistical Yearbook.

This slowing down will be attributed in these countries first of all to the exhaustion of the extensive sources /factors/ of growth. In the fifties and sixties a substantial part of the increase in the industrial output originated from the rapid growth of industrial employment, this stopped in the seventies. All people seeking jobs in these countries are employed already, in addition the increase of the population in working age is not significant, and the share of employment in the tertiary sector is growing. Also the potential productivity gain stemming from the structural change between industry and agriculture became very modest. The capital/output ratio is growing while the share of investment funds cannot be increased any more. Per unit material and energy consumption is relatively high which in a period of increasing relative prices and scarcity could be a constraint to growth.

In addition, East-West trade increased significantly from the late sixties and this helped the modernization of the production capacities in the CPEs, but this led at the same time to indebtedness and made them more sensitive to business cycles in the West, to the changes and problems in the world economy - stagflation, recession, disturbances in the international monetary system, rapid increases of the oil and raw material prices, transformation of the international division of labour, pressure for the New Economic Order. To overcome the problems caused by the coincidence of these internal and external factors requires seemingly a number of years and, therefore, compared to previous periods in the next five year plans for 1981-85 moderate growth targets are fixed in these countries.

8. Beside the similar characteristics in the present situation of the European CPEs they show important differences as well, first of all concerning the actual balance /imbalance/ of their foreign trade and its relative significance for the total economy. Ranking these countries by their shares of foreign trade /per capita or related to GDP/, Hungary's share/at the top is/5-6 times higher than that of the USSR; this is reflected, of course, also in their goals of economic and industrial policy.

All these countries consider industry as the most dynamic sector of the economy and are aiming at possibly high growth rates of industrial output. Besides growth, however, equilibrium is also dealt with now as prime requirement, in particular the balance of foreign trade payments. This balance usually can be ensured more easily within the CMEA-trade and with more difficulties in the trade with the market economies. Therefore, competitiveness and promotion of exports /and in addition the rational use of imports/ become primary objectives. Further on, more attention will be paid now than previously to integrate and harmonize industrial policy with the development of the agriculture and the tertiary sector and with other social objectives.

Since the extensive sources of growth more or less expired, all countries focus on intensification in the use of resources, on the increase in productivity and efficiency, improvement of quality, faster progress in technology, management and organization. Beyond that, the need for structural adjustment /deeper specialization and greater flexibility/ will be emphasized, less in the USSR but definitely in all other /small or medium-sized/ countries. Being aware of the increasing interdependences in the world economy, international co-operation - CMEA integration and collaboration with the developed market economies and the developing countries - are dealt with in every CPEs as a

basic condition of further progress, a condition indispensable and to be realized with mutual benefit.

The major targets set for the state-owned enterprises, for the public industrial sector will be derived from these objectives. Industrial organization, planning, the whole system of economic guidance should be improved to serve better these objectives, to give a more adequate framework to stimulate, control and achieve them.

### III. The system of planning

9. In all centrally planned economies the major objectives to be pursued by economic policy, the fundamental rates of growth and proportions of the economy, the most important characteristics of the social and economic development, the basic means and measures to be used for achieving these targets are laid down in the national economic plans. The national economic plans for different time horizons form a consistent system, the long range, medium term and annual plans should be in harmony with each other. Previously the annual plans were the basis of the planified guidance of the economy, now this role is given progressively to the subsequent series of medium-term, as a rule five-year plans.

The medium-term plans formulate the economic policy for the coming years, fix targets on the growth of the economy, the increase and use of national income, the guidelines for science and technical development policy, the development of the main sectors and the salient changes in their production pattern, the main directions of the international economic relations and foreign trade, as well as the basic proportions of the allocation of resources including investments and employment. The medium term plans also include the major investment projects to be implemented in the period and the guidelines for and measures of economic policy concerning finance, incomes, prices, social policy, etc.

The medium-term plans should be based on long-term plans; an increasing need is felt for this. In many cases the five-year periods are too short to cover the planned processes, and often decisions must be taken on problems which have a bearing on a perspective of 10-20 years. The drafts of the long-term plans usually will be broken down into five-years periods. The five-year plans are the basis of the annual plans, with flexibility if required.

10. Plans for different periods are the tangible outcomes of planning. This activity includes a number of specific tasks /and results into intermediery "products"/, like

- analyses of the past growth and the present situation and environment of the economy,
- forecasts /prognoses/ of the objective processes, requirements, internal and external conditions of the development of the economy,
- alternatives about different growth paces and patterns of the economy, based on a set of hypotheses, development concepts and projects, and finally,
- drafting the comprehensive final plan.

The major guidelines for planning are growth, equilibrium and efficiency and their requirements are to be met simultaneously. Efficiency will be analysed through calculations on labour productivity, capital/output ratio, per unit use of energy and materials and by aggregate indicators. Equilibrium will be checked - the different parts and targets of the plan harmonized - by the help of balances. The different types of balances used in macroeconomic planning in the CPEs as

the synthetic balances /those of social products, national income, manpower, etc/,

the product balances,

the input-output balances,  
the financial balances /those of incomes and expenditures of the population, international payments, credits, state budget, etc./

will be drafted in an iterative process in successive variants based on close working linkages and a permanent exchange of information between the planners.

Either started with planning growth rates or with planning structural changes directly the major objectives are in both cases to meet the needs of the public, the consumers and the producers, with maximum efficiency in the use of resources. Analyses and forecasts on the factors influencing the needs of the consumers, of the public as well as of the producers /in intermediate goods and investments/ are the starting points: incomes, tastes, interdependences, technical relationships and technological progress resulting in new products, new materials, new equipments.

Possibilities of higher efficiency are looked for by technological progress, improved management and organization as well as by structural changes: alternative ways of meeting the needs, primarily via substitution and foreign trade. Since the share of foreign trade in all CMEA-countries increased significantly in the last decades, the international division of labour, specialization and cooperation became of outstanding importance for all of them. Therefore, in the CMEA-community there are permanent mutual consultations and coordination as planning goes on; the forecasts about the changes in the world economy and in foreign trade, in products, markets, prices, the analysis of comparative advantages are in integral part of planning.

11. The centrally planned economies see the best way to implement their national economic plans by breaking down,

prescribing and assessing the aggregate figures of the plan to ministries and enterprises with a combination of a system of other instruments, material and moral incentives. These instruments and incentives should stimulate the ministries, other agencies and the enterprises to a creative cooperation in drafting their plans, in the allocation of the planned tasks and to efforts to fulfill the indicators of their plans, which should result in the implementation of the macroeconomic targets.

In all CPEs public enterprises prepare annual and medium-term plans partly since this is required by the proper management of the enterprise, partly as a necessary link in the system of economic guidance based on central planning. As a rule for the enterprises annual plans have more significance: traditionally these are the basis of the evaluation of their performance. The significance of the medium term /usually five-year/ plans will be increased now in order to promote more interests in and thinking with a longer time horizon.

Since the indicators of the enterprises' plans will be aggregated /and some of them imposed in advance as cornerstones/ a clearly defined methodology lays down the forms /the chapters, indicators/ and other requirements how the plans must be drafted.

Except Hungary /this case will be explained later on/ the plans of the enterprises will be approved by the supervisory ministry and the basic figures of the plan must correspond to the imposed targets /directives/ given in advance /deviations will be accepted only in a positive direction, that means with greater obligations than requested/.

The number and the list of the obligatory indicators /directives/ is different by countries and changing over time. While with a greater number of directives the link between the enterprise, the sectoral and the overall national plans seemingly can be strengthened, this narrows the freedom of the enterprises /both in planning and action/ and the

possible indirect influences on the enterprise's behavior and decisions, and the difficulties to ensure the consistency of the targets imposed by each enterprise is increasing. For these reasons in most CPEs the number of the directive indicators have been reduced, in particular as far as output targets by products are concerned. At the same time greater importance will be attached to the planning at the enterprises /especially for the medium-term/ as a channel of information flow for the macroeconomic planning.

12. Usually the annual plans of the enterprises consists of the following chapters:

- production and realization,
- manpower, wages, productivity,
- capacity utilization and investment,
- energy and material supply, inventories,
- technological progress, organizational development,
- costs, profit and finance.

Production and realization are planned by major products /mostly in physical units/ as well as aggregated in value terms /gross value of output/, taking into consideration the obligatory targets received from the supervisory ministry /or other agency/. On the other hand these figures must be based also on market research, short and longer term delivery contracts, on the possibilities permitted by the production factors /and their efficient uses/, and on financial considerations.

Manpower planning first entails the calculations of the average number of employees needed, respectively their efficient use, by occupations; drafting manpower balances in order to check the requirements for recruiting and training and the need for dismissing employees, and finally the planning of wages, personnel and social policy. Planned



manpower requirements are to be closely linked with the foreseen technological, managerial and organizational improvements, wages with costs and profitability. On the number of employees and the amount of wages /often linked with labour productivity increase/ enterprises as a rule have obligatory upper limits which cannot be exceeded.

Production targets will be confronted with available capacities by means of detailed calculations and analysis to reveal imbalances. In case full utilization of capacities /at least in the first shift, in other cases both in the first and second shifts, or continuously/ cannot be expected, the possibility of raising production targets will be checked. Lack of capacities should be covered by reduction of idle periods, additional shifts, by investments /usually foreseen already in the perspective plan and to be approved also by the supervisory ministry/ or by use of cooperation, subcontracting. As a result changes in the stock of fixed assets and their aggregate utilization will be planned, too.

Energy and material requirements are planned by all sorts of basic and auxiliary materials and intermediary products based on norms of uses per unit of output /by products, or related to aggregate indicators/, and taking into consideration the imposed upper limits. Also planned inventories will be calculated by help of norms, and the purchases needed by help of balance equations. Due consideration is given to changes in product mix as indicated in the production plan, as well as to impacts of technological progress /substitutions, savings of energy and materials, etc./

The plan of technological progress, managerial and organizational improvements sets targets for the development of product designs, for the introduction of new products, technologies, for the improvements in management, work and production organization. This chapter of the plan includes

not only figures characterizing the foreseen developments but also the measures /with concrete dates and addresses/ needed for the implementation of these targets. Technological progress and other improvements modify per unit norms, production possibilities, costs and profit; all these impacts should be taken into account in the respective other chapters of the plan.

Summarizing costs of labour, capital, energy, materials and some additional components, total costs might be calculated and compared to sales value derived from the plan of production and realization. The resulting profit and profitability figures are seen as of great importance in assessing the enterprises' future activity and these figures are the starting points for drafting the other parts of the financial plan.

All these parts of the annual plan of the enterprise are closely interrelated; they are elaborated as a rule simultaneously by an iterative process. Auxiliary calculations /e.g. on material, capacity, manpower requirements/ are increasingly performed by use of computers. Mathematical programming methods /usually assuming linearity/ will be also often used.

13. The annual and medium-term /five-year/ plans as a rule have the same patterns with the difference that the latter are often not elaborated in so many details. This harmony is needed above all for the aggregation/ disaggregation of the data of the plans for various time horizons. There is a continual effort to improve the methods and techniques of planning with regard to the new experience and the changing requirements. Mostly detailed instructions are given to the enterprises. As an example, the recent Soviet methodology can be mentioned. According to the "Standard methodology of planning for enterprises and

productive associations" issued by the State Planning Commission of the USSR /Moscow, 1979/ both the annual and the five-year plans should be drafted in similar form, in 12 chapters, as follows:

- production and realization,
- technological and organizational improvements,
- efficiency indicators,
- norms and normatives,
- investments,
- material supply,
- labour,
- costs, profit and profitability,
- economic stimulation,
- finances,
- social development of the collective,
- environment protection and the economic use of the natural resources.

The state-owned enterprises /and their larger units: the productive associations/ have to fill in in the Soviet Union altogether 56 tables covering all production, economic and social aspects of their activities.

Compared to the traditional methodology of the 50s and 60s recently a number of changes have been introduced here, like the completely new last two chapters, in measuring efficiency instead of value of gross output indicators the use of net /value added/ indicators, improvements in the planning of measures aiming at technological progress, better management and organization, etc.

The CPEs exchange their experience in the development of the methods of planning both on national, sectoral and enterprise level but there is not any endeavour for uniform methodology. Of course, the agreements on standardization

of indicators and classifications initiated by the statistical offices have to be taken into account also by the planners.

Needless to say, great attention will be paid in all CPEs not only to the forms but maybe even more to the substance of the relationships of the macroeconomic and enterprise plans. How can the interests and interactions of the planners of different levels best be harmonized, the informations properly exchanged and utilized, plans with ambitious but not unrealistic goals, with nearly optimal solutions submitted and approved, discipline and flexibility in implementation equally ensured - these are the major issues studied. A recurrent problem originates from the fact that the directives of the ministries to the enterprises are usually results of negotiations where they argue mostly for more ambitious targets, the state-owned enterprises for indicators whose implementation implies less risk and requires moderate efforts. New problems emerge in particular in the small CPEs with a high share of foreign trade from the low predictability of the changes in the world economy and their impacts on their own economy. All these require constant efforts to improve the system of planning <sup>and</sup> guidance of the public sector and the economy and lead to new measures, changes and reforms in all CPEs. Here briefly the Hungarian experience will be reviewed.

14. Per capita foreign trade turnover in Hungary ranks among the highest even among the small countries, due to conscious efforts to integrate into the international division of labour. In foreign trade beside the socialist countries also market economies have a substantial share here /this amounts now nearly to 50 per cent/. These international relationships helped to strengthen socialization, utilize economies of scale but transformed the economy very sensitive to foreign trade. By the more intensive relations with the developed countries also the weaknesses of the industry and the economy

- concerning technology, management, competitiveness, efficiency - appeared and were felt more evidently and pressing. In addition to the critical analysis of the functioning and the guidance of the economy these signals helped to identify the need for the reform of 1968 prepared by intensive work of several years. The reform in Hungary has brought important changes in the system of economic guidance: keeping the dominance of central planning it has increased the autonomy of the enterprises and the role of prices and markets considerably.

In Hungary the central agencies are entrusted with certain compulsory duties derived from the national economic plan, enterprises, however, prepare their plans without obligatory directives. Incentives and financial regulators as well as a constant flow of information should induce them to draft and fulfill their plans in harmony with the targets of the national economic plan. The plans of the state-owned enterprise will be approved by its director, usually after having consultations with the ministry and other authorities but without their direct interventions. According to the Act VI/1977 of the Parliament, the state-owned enterprise in Hungary is obliged to elaborate plans in harmony with the objectives laid down in the national economic plans and with the interests of the community of the enterprise but these plans have not the role of direct control: they are treated as an instrument of co-ordination and internal management. For the enterprises profit and profitability are the main performance criteria assuming that in line with macroeconomic planning the enterprises' environment and the financial system /regulation/ could be so shaped that the profit motivation will drive the enterprises towards the national economic objectives.

Hungarian public enterprises draft both their annual and medium-term plans approximately in the same form as outlined above but less detailed and with more freedom for action. The targets of their annual plans will be aggregated and analysed as a source of information about the expectations and intentions of the enterprises - without evaluating them one by one. More attention follows the elaboration of the medium-term plans: in the subsequent stages of the planning process the exchange of information between the planners at the macroeconomic and at the enterprise level will be systematically organized, forecasts from different sources and approaches, drafts with various alternatives discussed. The enterprises draft their plans, their strategy and medium-term development primarily for themselves nevertheless the access of their ministry to these documents is not without influence on their formulation. The fact, however, that performance evaluation will be based not only and not dominantly on the reports about the fulfilment of the planned targets but on other criteria, helps to harmonize these often conflicting considerations.

Most Hungarian managers are convinced by their now 13 years experience since the introduction of the reform that enterprises with a high degree of autonomy cannot do without medium-term and strategic planning. Recognizing that their strategy should be extended beyond the five-years time horizon quite a number of the largest enterprises initiated to elaborate long-term plans, too. When now the State Planning Office started a new cycle of long-term planning, these enterprises were asked to go on with this exercise and some others were also stimulated to do so - these plans are considered as an important source of information about the outlook of the enterprises. At the same time with lengthening of the time horizon an increasing need is felt for flexibility and for more explicit treatment of the different uncertainties. The practice of rolling planning is spreading.

#### IV. Organizational forms; interlinkages

15. In order to understand why and how the statutes and the organizational forms of the public enterprises in the CPEs differ and change over time, one must start from the requirements and efforts to control and supervise these usually numerous enterprises with minimum bureaucracy and maximum efficiency. All public enterprises in the CPEs - this is the common characteristic - are responsible legal persons liable to give account on their activities in a statement of balance but their rights, obligations and other responsibilities can be and are defined variously, always in accordance with the actual system of economic guidance. The modifications, improvements in this system mostly imply changes in the statute and often also in the organizational forms of the enterprises. Dealing with the system of planning, this key element of the guidance of these economies, Part III. demonstrated some major trends and variants of these changes.

Looking again at the common characteristics: between public enterprises functioning in the same system of economic guidance the most variances in statute, rights, obligations and responsibilities originate from the difference in subordination. The public enterprise can be subordinated to an administrative or to an economic unit. These are two main types of the administrative units supervising public enterprises:

/i/ ministry /or other state agency with similar duties/  
and

/ii/ local/regional authority,

respectively their special department, section, directorate. The economic unit with the right and duty to control certain number of enterprises might have various names:

national enterprise, combine, concern, trust, association. These economic units are legal persons with complete accounting and balance-sheet but in addition they are charged also with control functions over other enterprises. Usually enterprises subordinated to administrative units have more autonomy than enterprises controlled by /larger/ economic units.

Disregarding here such mixed forms as e.g. enterprises subject to administrative units /directorates/ with some elements of business accounting, further on the hierarchical levels within the plants and within the administrative units, the major forms how production in public enterprises can be organized and managed are as follows:

/i/ enterprise with a single plant, subordinated to an administrative unit;

/ii/ enterprise with a single plant, subordinated to a /larger/ economic unit /which is controlled, of course, by an administrative unit/;

/iii/ factory as part of a multi-plant enterprise, subordinated to an administrative unit;

/iv/ factory as part of a multi-plant enterprise, subordinated to /larger/ economic unit.

Between the factory and the administrative unit exercising the supreme control and supervision,  
in case /i/ there is a direct contact,  
in case /ii/ there is one intermediate link,  
in case /iii/ there are two intermediate links,  
in case /iv/ there are three intermediate links.

From the point of view of the administrative unit direct contact offers more insight and possibility for intervention but in case of a considerable number of



enterprises this will overburden its staff. One or more intermediate links restricts the autonomy of the primary production units but is favourable for the internal economic co-ordination, in respect of economies of scale, entry into the market etc.

16. In case of public enterprises the organizational forms in the sense dealt with above can be easily changed. The institutions in charge of such decisions in the CPEs are aware of the heavy responsibility they bear both for the long-term consequences and the transitional hitches of the initiated transformations. Taking decisions on organizational patterns a great number of concomitants, impacts and side-effects are to be taken into consideration as to how they affect the goals of economic policy, the targets of the national plan in the given /or planned/ concrete system of economic guidance. In the application of the general guidelines differences in products, markets, technology and organization must be also thoroughly assessed and the intended structures accordingly differentiated.

In the last two decades in most CPEs the trend prevails to establish large economic units with control functions. Here is not possibility to outline the developments and the differences by countries, only some figures and example should demonstrate them.

In the USSR according to the Statistical Yearbook from the 43954 public industrial enterprises 7366 belong to associations /date on 1979/. The 3947 associations have altogether 17516 production units, beside the 7366 enterprises with "independent accounting" and balance-sheet 10150 units with restricted autonomy. The largest enterprises are attached to the associations which represent nearly 50 per cent of the total industry both in output and employment. There are two types of associations. In the so

called production associations the production and economic activities dominate, they embrace both enterprises with and units without "independent accounting". The so called industrial associations embrace only enterprises and in addition organizations /institutes, bureaus etc./ engaged in R & D activities, in their case the control functions dominate with special regard to integrate R&D and production.

In the federal system of the Soviet Union there are  
federal /all-Union/,  
~~federal-republican~~ and  
republican

ministries. /The federal-republican ministries are subordinated to the Council of Ministers of the republic but are controlled also by the corresponding federal ministry./ The situation of the enterprise or association superintended by a federal ministry /in case of a large steel mill or car factory/ or by a ~~federal-republican~~ ministry /e.g. in the textile or food industries/ is not the same. From the total industrial output of 1979 53 per cent originated from enterprises and associations attached to federal ministries, 47 per cent from those attached to other types of authorities.

In the GDR the establishment of associations and combines started already in the 60s and now these two organizational forms dominate. The combine is as a rule a more or less closed complex of related enterprises. The associations might have also some control functions over enterprises not directly subordinated them. As a third form, the Leitbetrieb /leading enterprise/ renders assistance to a given group of enterprises with looser legal bindings. In Bulgaria associations have been organized in 1971, in Czechoslovakia the concern form comes to the fore, in Poland and in Romania a few different types. The "large economic units" with different names and statutes are gaining ground in all CPEs /except Hungary, this case will be dealt with separately/ and this involves on the one side vis-à-vis the former independent enterprises some centralization, on the

other side vis-à-vis the ministries some decentralization.

17. The major characteristics of the present industrial organization in Hungary reflect the preference for large enterprises. In the early 60s a wave of mergers reduced the number of enterprises considerably /by the end of 1960: 1338, by the end of 1965: 840/. This trend prevailed until 1980. The typical Hungarian public industrial enterprise is now the multi-plant firm /see Table 6/. Since also plant sizes - measured by employment figures - are relatively large, the enterprise concentration in particular in the sector controlled by the ministries ranks among the highest found in statistics. That means: as a matter of fact large economic units in enterprise form dominate.

Table 6. Some data on the public industrial sector in Hungary by the end of 1978.

Indicator	State-owned enterprises and plants		
	controlled by the		Total
	ministries	local councils	
Number of enterprises	542	178	700
Number of plants	3361	1773	5134
Employment /in 1000s/	1350	102	1452
Average number of employees			
- of an enterprise	2491	573	2074
- of a plant	402	58	283
Average number of plants of an enterprise	6,2	10,0	7,3

Source: Statistical Yearbook.

The term association denotes in Hungary a legal framework for voluntary co-operation of perfectly independent enterprises. This is not a wide-spread form in Hungary. Associations operate e.g. in the electronic and pharmaceutical industry. About one quarter of the 700 public industrial enterprises will be controlled by trusts. Trusts have been created in industries like coal, oil, aluminium, food processing where the need for closer coordination and control was supposed to be of primary importance. Not long ago 4 trusts had been dissolved /in the coal and three food industries/, relegating some of their tasks to administrative units; now there are 13 trusts. The resolutions of the associations will be legitimized by the concensus of the member-enterprises, the trusts are authorized also for direct interventions including financial matters. Enterprises of the trusts work formally according nearly to the same "rules of game" as the other firms but their real freedom for action is between that of an enterprise subordinated directly to a ministry and that of a factory of a multi-plant enterprise.

According to the prevailing opinion reflected also in government resolutions the present pattern of industrial enterprises in Hungary is too much centralized. This is probably advantageous for the concentration of resources, for the entry in the world market, for certain types of economies of scale, and for carrying out some major strategic changes in the pattern of production. On the other hand, in many respects this pattern does not conform with the present system of economic guidance. The dominance of multi-plant enterprises means a considerable internalization of the buyer-and-seller relations; the increase of flexibility, the curbing of the rivalry for subsidies and exemptions, the rationalization and divestment seem to be more difficult in the case of large enterprises than for small and medium sized firms. Most probably in many branches a more balanced enterprise size-pyramid would be in better conformity with the goals

of the industrial policy formulated for the coming years. However, instead of uniform and prompt changes/drawing the lesson from earlier experiences/considerate, differentiated and gradual modifications accompanied by corresponding updating of the system of management are recommended. Accordingly the government stopped the process of decentralization, beside trusts also some large multi-plant enterprises had become disintegrated, different measures were taken to promote the development of small and medium sized enterprises in the public sector.

18. The interlinkages of the public industrial enterprises are so manifold that here only their main components and characteristics can be outlined with special reference to the Hungarian scene.

The buyer-seller relationships of the enterprises do not require particular explanation, only some short remarks. These relationships will be partly, in an indirectly way coordinated by the system of central planning but increasing significance will be attached in all CPEs to the direct contacts of the enterprises. Joint ventures, long-term contractual arrangements, profit sharing devices /within limits also with foreign enterprises/ will be stimulated. The links of science, technology, production, realization, home and abroad, after-sale services should be strengthened both by closer relationships, partnership and organizational ties. The financial relations between enterprises are of less importance since the finances are in the hands of the centralized state banks.

The relationships with the government control partly had been explained already as far as planning and organizational forms of supervisory control are concerned. The rights of these supervisory bodies for direct and indirect interventions are different by countries. In Hungary according to the present regulation the ministries in their supervisory capacity

- exercise the statutory rights over the enterprises /founding, auditing, etc./,

- assess the overall activity of the enterprises,
- appoint and relieve enterprise managers and assert certain rights of the employer /evaluation of their work, decisions about their salaries and remuneration, etc./
- exceptionally and in compliance with statutory provisions, instruct the enterprises to undertake a given activity,
- supervise enterprise business activity in merito from the viewpoint of discharging basic corporate tasks.

In other CPEs the approval of the plans of the enterprises is a fundamental task of the ministries and they can give instructions with less restrictions. /The mingling of formal and informal instructions makes difficult the true assessment of the everyday practice including Hungary as well./

19. Beside the so called supervisory control dealt with above also sectoral, functional and regional control will be asserted as a rule less by direct interventions, more by regulatory enactments or by indirect instruments. The duties and responsibilities of the sectoral control cover all activities falling into the given sector, irrespective of the supervisory or representative organisation of the economic unit /state enterprise, association, cooperative, etc./ or of authorized person performing activities in the sphere of the given sector.

E.g. a ministry of engineering industries with a number of enterprises /trusts, associations or other units / under its direct control bears responsibility for the development /in particular as far as technology, specialization and cooperation are concerned/ for the total engineering industries of the country including enterprises under many other authorities.

Execution of governmental decisions is primarily the task of functional organizations with responsibilities in their area for the entire national economy. They are usually in charge of the preparation of the governmental decisions related to their function and afterwards they have to follow up, take care of and control the implementation of these decisions. In the various CPEs the structure of the functional organizations

is similar but not the same. In Hungary e.g. there are six such organizations: National Planning Office, National Board for Technological Development, National Materials and Price Office, Ministry of Finance, Ministry of Labour, Ministry of Foreign Trade.

In the CPEs the task of supervising public industrial enterprises working mostly for local demand /similarly to public utilities/ are assigned to the local authorities /councils/. In this respect, the councils possess the same rights concerning the enterprises falling under their supervision as the ministries. In addition, these councils have some control functions over all enterprises, plants active in their territory, including those under ministries. They must be consulted in case of founding or liquidating, locating or transferring enterprises or plants in the area, in case of measures affecting local employment, supply, living conditions. On the other hand, the councils have to inform /or consult/ the business organizations in the area about plans, targets, measures affecting their activities.

In the life of the public enterprises in the CPEs both the party and the trade union organizations play important role, and the management of these enterprises has close contacts also with the higher hierarchical levels of these organizations. Their coordinative and cooperative activities aim basically the harmonization of the goals and efforts of the society at large, the local community, the enterprise and its employees. Professional associations, state-sponsored institutes for research technology transfer, consultancy and training and the chambers of commerce have to be mentioned, too. With the growing share of foreign trade the mission of these chambers increases. In Hungary by January 1981 the functions of the Chamber of Commerce have been extended to an organisation for mediating between, coordinating and representing the interests of state enterprises, as well as promoting the development of their international economic relations. To these ends, according its statute the Chamber

- transmits to the economic control organisations of the state the opinions of member companies on draft decisions significantly and directly concerning enterprises, as well as the experiences and deliberations concerning effective decisions and regulations;
- transmits to member companies the observations and answers of the economic control organisations of the state as well as their requirements concerning more efficient business and management;
- promotes cooperation between member enterprises;
- through its function as promoter of international trade, contributes to improving the external economic relations of member companies;
- represents the membership's interests related to foreign trade activities both in international chambers of commerce and at foreign administrative and other bodies;
- represents Hungarian employers at the International Labour Organisation.

#### V. Performance evaluation

20. The performance of the enterprises will be evaluated by their managers, employees, owners and Boards, by their partners and competitors, by the public and by local and governmental authorities. Starting from various goals, expectations, aspirations and responsibilities the criteria and the judgement seldom will be the same. The enterprises /the managers and the other persons and bodies involved in managerial decisions/ follow their own goals and simultaneously try to meet all these expectations, with compromises, as much as possible.

The theory of organizations gives sufficient insight into these relationships which are mutatis mutandis effective also in the CPEs. Here above all two issues are of major concern:



a/ how to formulate the tasks and targets of the public enterprises in such a way that their implementation should be properly measured and evaluated, and b/ how to make managers and employees identify themselves with these tasks and targets. As regards problem b/: material and moral incentives and rewards are made dependent mainly on the implementation of the stipulated tasks and targets. This leads back to problem a/, the nucleus of performance evaluation.

If the fundamental tasks of the public enterprises are unambiguously fixed by the targets of their plan approved by a supervisory authority performance evaluation can and should be built on the report about the fulfilment of the plan. In the CPEs this is the general case and they see the main problem in finding the adequate indicators which reliably define and measure the tasks to be implemented. As explained in Part III of this paper, the enterprises have to fulfil a set of planned indicators covering all major aspects of their activities. With some simplification these indicators can be classified into three groups characterizing

- i/ output,
- ii/ efficiency,
- iii/ working conditions.

21. The output of the public industrial enterprises in the CPEs will be measured and evaluated on the basis of physical units, the gross value of output and/or value added type indicators.

Physical units are often preferred for the sake of simplicity but they give adequate measures only if

- i/ the products under review are absolutely homogeneous without any differences as regards quality or assortment, or
- ii/ these differences in quality or assortment are properly reflected by the unit of measurement.

These requirements are seldom fulfilled perfectly, even in the /maybe single/ "classical" example: electricity. Some

physical units - like calories instead of tons in the case of fuels - comprise more characteristics of the products than others, but never reflect all important parameters.

Some extension of these limits can be achieved by using conversion coefficients. In this case the standard type of the product will be the base of the calculation and the deviations of the other types differing in size, quality or other parameters will be taken into account by multiplying their original quantity with a coefficient more or less than 1.

The gross value of output - the most frequently used aggregate indicator in CPEs - includes

- the value of all finished products,
- the value of the semi-finished products sold,
- the changes in the stock of the semi-finished products and the work-in-progress, and
- the value of services sold.

Since the planned and actual volumes of the output is to be measured, gross value of output at constant prices will be calculated. This can be computed either - in case of a limited number of products - directly, multiplying quantities by "constant" prices or indirectly by the help of price deflators. In periods of rapid changes in products /product mix/ and prices the possible margin of error in these calculations is not negligible and not easy to reduce. Errors might originate from a number of sources e.g.:

- the products have their life-cycle, new products are emerging in an increasing number, their would-have-been prices for the base period can be only roughly estimated,
- in case of calculations at constant prices, usually these are average prices of groups of products, not reflecting changes in the product mix or
- in case of use of price-deflators these are based on data of a limited number of products and seldom meet the rigid requirements of the sampling methods.

The gross value of output includes both the work done, the value added by the enterprise and the value of the intermediate goods used, the purchased materials, semi-products, energy and services. From a macroeconomic point of view this implies a double-counting,

- this is why GDP, national income or other net indicators are preferred -, from the point of view of the enterprises the gross value of output depends very much beside their own work on the share of the intermediate goods used. In the CPEs in the evaluation of the performance of the enterprises net output indicators will be increasingly applied: value added and net value of output /value added minus depreciation allowances/ are considered now theoretically definitely more reliable measures of the enterprises' contribution, their calculation, however, at constant prices requires additional work. In addition, these figures are more dependent on relative prices and, therefore, changes in product mix might have great impact on the values of the aggregate indicators.

Finally, it should be mentioned, that within the global output often special emphasis is laid on the output of a given class of products or intended for a given group of buyers, then the fulfilment of these tasks will be evaluated by separate indicators. This is the case e.g. concerning basic goods for the consumers, for priority investments, for export deliveries.

22. The efficiency of the use of resources of the public industrial enterprises will be assessed in the CPEs by help of partial and aggregate indicators. Partial indicators measure the use of the different resources/inputs per unit of output, including labour, capital, energy and material. Another approach attempts to measure the different factors determining efficiency, as e.g. technological progress, improvements in management, organization. These partial indicators characterise the several components of the efficiency, but above all their final result is decisive.

indicators are  
The conclusions drawn from partial input<sup>of</sup> of limited relevance also for the substitution possibilities which in case of labour and capital is as a matter of fact a regular phenomenon.

For the aggregate measurement and evaluation of efficiency /in a broad sense/ three types of indicators are applied in the CPEs:

productivity indicators,  
complex efficiency indicators, and  
cost and profitability indicators.

By productivity as a rule labour productivity will be understood, the ratio of output and labour input. In the frequent case with gross value of output in the nominator of the ratio, this is actually a partial indicator. Being aware of this constraint, increasingly more comprehensive indicators will be recommended and applied, with net indicators in the nominator. Thus the ratio reflects the changes in the use of intermediate goods /and in case of net value of output, also the use of capital/ per unit of output as well. Labour input will be measured by the average number of employees or manhours performed, as a rule without adjustment for changes in the composition by qualification.

Multi-factor or total factor productivity index numbers are known and being used in the CPEs but only at the sectoral or more aggregate levels, mostly with the name complex efficiency indicators or index numbers. The relative weights of labour and fixed assets /capital/ will be calculated by different approaches and assumptions, according to the practical experience, however, the alternatives do not lead to significant differences in the conclusions of our analyses in case of their consequent use.

If beyond the inputs of labour and capital, further inputs are also included in our calculation we obtain production costs, another indicator which can and will be used for aggregate efficiency assessment as a basis for cost and profitability analyses.

Finally, as mentioned in Part III, there is a special chapter in the plans of the enterprises on the improvement

of working conditions and social provision, with a set of thoroughly selected indicators. The assessment of these targets is always a substantial part of the evaluation of the enterprises' performance.

23. In the practice of performance evaluation based on the planned values of these different indicators, three further questions emerge:

i/ some important tasks imposed on the public enterprise cannot be quantified nevertheless should be taken into consideration. That means, to the final judgement additional considerations seldom can be avoided.

ii/ to the proper evaluation it should be assumed that the fulfilment of the planned targets requires more or less the same efforts from the several enterprises. The validity of this assumption, however, often seems restricted: if the fulfilment of the plan will be awarded, the enterprises providing informations on their possibilities and taking part in a "bargaining" process before fixing the targets might attempt to assert their interest in "underplanning". In addition, the external conditions taken into account when the targets had been fixed, can change; if this can be proved, targets must be modified, recalculated. This again involves some uncertainties and possibilities for bargaining. These problems can be reduced by several organizational measures but cannot be eliminated completely.

iii/ the fulfilment of the several targets seldom will be the same which complicates the final judgement on the performance of the enterprise. A way out can be either to give priority to a selected single indicator or to apply an /explicit or implicit/ weighting scheme.

The priority indicator had been for a long period the gross value of output but as many experience signaled

this often degrades the efficiency requirements. Consequently, as a rule efficiency /first of all labour productivity, or profitability / indicators have been also included to the assessment. In Hungary profitability is now the main /but not exclusive/ performance criterion accompanied by great efforts to continuously improve the price system and mechanism and the economic environment of the enterprises which together should make profitability indicators reliable measures of competitiveness and performance. Beside profitability above all export performance and social indicators will be evaluated.

Explicit weighting schemes of the different indicators to be taken into account in the performance evaluation are seldom applied in the CPEs except in income regulations in particular as far as bonuses are concerned. These can be linked decomposed and differentiated to several indicators, or for some indicators only minimum requirements will be determined while for others also overfulfilment will be rewarded. Otherwise an implicit weighting is going on based on the priorities of the national plan and the industrial policy of the given period. This procedure involves subjective elements - studies are in progress on methods and techniques aiming at reducing these as much as possible.

