

The Hungarian Economic Reform, 1968-82 *

I. The Antecedents of the Economic Reform¹

Along with other Eastern European countries, after the Second World War Hungary adopted, with few modifications, the system of centralized planning practiced in the Soviet Union.² Planning was largely carried out in physical terms, with prices having mainly an accounting function. Decisions on investment and on foreign trade were made centrally and central plans served as a basis for the directives communicated by the supervising ministries to individual firms. The directives concerned, among others, output targets, material allocation, wages, and employment. Within the constraints imposed by the allocation of inputs, managers aimed at fulfilling the production plan that was the principal success criterion and the condition for obtaining bonuses.

In permitting the large-scale mobilization of resources, the system of centralized 'physical planning' was conducive to economic expansion in Hungary during the early postwar period, when a limited number of objectives were pursued. With the multiplicity of objectives and the growing complexity of manufacturing industry, however, the disadvantages of this system of planning assumed importance.

To begin with, in pursuing production targets, managers paid little attention to costs and often tried to increase output through shifts in product composition towards material-intensive commodities, disguised price increases, and quality deterioration. At the same time, users had

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¹ The reader is referred to BALASSA 1970, 1973 and 1978 for source material utilized in Section I to IV.

² For a detailed description, see BALASSA 1959.

practically no choice among suppliers and had to accept commodities that did not correspond to their needs.

The introduction of prices as a supplementary success criterion and condition for bonuses did not lessen these adverse effects to an appreciable extent. The basic features of centralized physical planning remained unchanged and, in the absence of scarcity prices reflecting resource scarcities, profits could not provide appropriate signals for the firm. Prices did not include an allowance for the use of capital and land; they did not equate domestic demand and supply; and they were divorced from world market price relations. Exporters received, and importers paid, the prices set domestically; the difference between domestic and world market prices was paid into, and financed from, an equalisation fund in the government budget.

Nor did the lack of scarcity prices permit the economic evaluation of investment projects and the appropriate choice of exports and imports. Correspondingly, additional increments in domestic consumption required increased efforts in the form of resources used for new investments and the rate of economic growth declined. According to official figures, the rate of growth of the net material product was 7.9% in 1958-60, 5.6% in 1960-63, and 4.3% in 1963-66. In the period taken as a whole, the volume of investment increased by 7.7% a year while total consumption (public and private) rose by 4.6%, and the net material product by 6.2%.³

A proposal for a comprehensive reform was first made by a committee appointed by the government and headed by Professor Stephen Varga in 1957. The recommendations of the committee were not implemented, however, and in the following decade only partial measures were taken that did not affect the basic character of the decision-making process.⁴

At the same time, the need for a comprehensive, rather than a piecemeal, reform came to be increasingly understood. The increased sophistication of the Hungarian economy and its extensive reliance on foreign trade, by reason of the small size of the domestic market and the limited availability of natural resources, favored the decentralization of

³ Unless otherwise noted, all data relating to the Hungarian economy originate from the *Statistical Yearbook* and the *Foreign Trade Statistical Yearbook*, both published by the Hungarian Statistical Office. The former publication is available in Hungarian and English; the latter in Hungarian only.

⁴ As noted below, agriculture provides an exception to this statement — an excellent discussion of the reform proposals and the surrounding controversy is provided by BEREND, 1981.

decision-making. At the same time, decentralization could not provide appropriate results in the absence of profit incentives based on scarcity prices.

A comprehensive economic reform (the new economic mechanism) was introduced on January 1, 1968. The reform aimed at replacing plan directives by market relations among firms; limiting the scope of central price determination; linking the domestic prices of exports and imports to prices in the world market; and decentralizing a major part of investment decisions. At the time of the introduction of the reform, a variety of 'brakes' were applied for the ostensible purpose of easing the transition from the old mechanism to the new, although in some respects they reflected compromises between the supporters of the two. The following section briefly describes the principal features of the reform at the time of its introduction, further indicating some of the changes effected in the first years of its application.

II. The Introduction of the New Economic Mechanism

The reform in agriculture antedates the general economic reform in Hungary. Starting in the late fifties, obligatory plan targets and compulsory deliveries were abolished and the prices of agricultural products raised, with a number of products being sold in farm markets at freely determined prices. These reforms were supplemented by additional actions in 1968. To begin with, the rural co-operatives were provided with the legal and financial basis necessary for their operations. Also, limitations on livestock kept on household plots owned by co-operative, state farm, industrial and other workers were eliminated and a generally supportive attitude was taken in regard to cultivation on these plots. Finally, the establishment of ancillary activities, including construction and local manufacturing, by the agricultural co-operatives was encouraged.

Changes in the role of industrial firms under the new economic mechanism were stated concisely in the resolution of the Central Committee of the Hungarian Socialist Workers' Party of May 7, 1966, which is the basic document of the introduction of the economic reform:

The development of an active role for the market requires that the laborious and bureaucratic system of the centralized allocation of materials and products ... should give place to commercial relations, i.e.

— producers should be able to decide, within their range of activities, what and how much they produce and offer for sale, as well as in what quantity and from whom they purchase the necessary inputs...

— producers and users should be free to establish commercial or co-operative relationships — sellers and buyers should be free to agree on the conditions of sale and, within the limits of governmental price determination, also on the prices;

— the buyers should be free to choose, within the limits dictated by the national interest, between domestic goods and imports, and the sellers between selling on domestic or on export markets.

The replacement of administrative directives by market relations was to be supplemented by according greater freedom to the firm to carry out new investments and to hire labor. At the same time, profits were to become the measure of the firm's success, as well as the source of incentive payments and of funds for new investment.

There is evidence that managers responded to changes in the incentive system. According to a sample survey conducted soon after the introduction of the reform, production as a target lost its pre-eminence and increases in profits became the single major objective. Some of the other objectives also bear on profits while repeated references to the satisfaction of user needs may reflect the importance of catering to demand by consumers and firms under the new mechanism. Increases in profits also appeared as the principal objective in the short-term and medium-term plans prepared by firms.

The emphasis on profits contrasts with the objective of raising the per capita incomes of workers in the Yugoslav system of labor-managed firms. In fact, the Hungarian authorities decided against the introduction of workers' management that appeared to have adverse effects in Yugoslavia by limiting the growth of employment and of output in individual firms.

Nevertheless, the high rate of taxation of increments in average wages⁵ interfered with profit maximization by favoring expansion through increases in employment as against upgrading the labor force or rewarding wage-earners for productivity improvements, both of which raised average wages. These regulations were partially modified in subsequent years, when the wages fund became the principal criterion for taxation in some industries.

⁵ A system bearing a resemblance to the T.I.P. proposals by American economists.

Changes in the system of incentives in 1968 were accompanied by the liberalization of prices. The major principles of the price reform were again indicated in the May 7, 1966 Party resolution. Having noted that prices should reflect the joint influences of the cost of production, valuation by the market, and state preferences, the resolution stated:

Valuation by the market will have to find expression in prices so that, on the one hand, the resulting differences in profitability should influence the structure of production (supply) and, on the other, these prices should help to reach market equilibrium through their effects on increasing or reducing the quantity demanded. For this purpose, it should be made possible in the new price system to determine market prices over a wide area through the agreement of buyers and sellers.

Following the introduction of the reform, central price determination was abolished for 12% of agricultural goods, 28% of domestically-produced materials and semi-finished products, 78% of industrial end-products, and 23% of consumer goods and services. In turn, prices were fixed centrally, or were subject to an upper limit, for 70% of the products in the first two categories, 20% in the third, and 50% in the fourth. In the remainder of cases, prices were left free to fluctuate within predetermined limits.

Changes in producer prices brought these nearer to a system of scarcity prices. However, centrally fixed prices were equated to average rather than marginal costs. This procedure gave rise to distortions, especially for materials and for semi-manufactures, where a weighted average of domestic and import prices was taken, since domestic costs and the cost of importing from Western and from socialist countries often differed to a considerable extent. As a rule, prices were lowest on material imports from socialist countries, but the quantities available from these sources were limited under long-term trade agreements.

In 1969 and 1970, the scope of price fixing was further reduced for materials and for semi-manufactures, and it was practically eliminated for all finished products. But the Materials and Price Board retained its veto power over price increases on commodities accounting for about 5-10% of industrial production, and the rise of prices was restrained by limitations on the rate of profit in cases where price determination required the agreement of the buyer and the seller. Also, differences between producer and consumer prices were maintained by the use of turnover taxes, albeit to a lesser degree than beforehand.

The central allocation of materials was also dismantled in 1968, although initially certain materials, semi-manufactures, and foodstuffs

remained subject to quotas in one form or another. The scope of quota allocation was reduced in the following year when value of the products subject to some kind of quota limitation accounted for less than 5% of total sales. Apart from meat, cereals, and fodder that were centrally allocated, there were in 1969 purchase quotas for 13 products, import quotas for 17 products (the two groups in part overlapped), and sales quotas for 8 products. Moreover, commercial monopolies handled the purchase or sale of 20 products.

Further liberalization occurred in 1970. The central allocation of cereals and fodder was discontinued; the number of products to which purchase quotas applied was reduced to 4 (iron ore, copper and copper products, newsprint, and autobuses), and only 5 products (electric energy, passenger automobiles, coking coal, fertilizers, and fodder) were subject to import quotas. The scope of quota allocation was again reduced and, with the exception of meat and scrap metal, commercial monopolies abolished in the following years.

The May 7, 1966 Party resolution also noted the need to improve efficiency in foreign trade:

The new economic mechanism should establish a close relationship between internal and external markets. It should increase the impact of influences originating in foreign markets on domestic production, sale and consumption, as well as on the structure of exports and imports. It should reduce the excessive protection to domestic production, thereby eliminating the complacency to which it gave rise.

The price reform should bring about the correspondence of domestic prices with prices in foreign trade transactions. For this purpose a conversion ratio should be determined on the base of the average domestic cost of foreign exchange, independently of the gold content of the forint.

Firms producing for export at a cost higher than the conversion ratio, subsequently renamed 'commercial exchange rate', were given export subsidies. In 1968, about two thirds of exporting firms received subsidies averaging 29% in ruble trade and 33% in dollar trade. The subsidies were given on a firm-by-firm basis, thereby contributing to the maintenance of production for exports in higher-cost firms while firms that received only the conversion ratio had little incentive to expand exports. In turn, imports were subject to tariffs, import quotas applied to certain products, and import licenses were required for others. Tariffs were reduced in subsequent years and the scope of import quotas also diminished.

Linking the domestic prices of exports and imports to foreign prices through the conversion ratio represented an important advance

in the rationalization of the price structure in Hungary. Nevertheless, with the use of export subsidies and import protection, there were continuing differences between the domestic and foreign prices of exports and imports. Furthermore, on the average, incentives to import substitution exceeded incentives to export.

Public authorities retained decision-making power over infrastructural and social investments and over manufacturing investments that increased capacity by over 25%, necessitated substantial imports, or involved the establishment of new factories. Also, in cases where investment decisions were made by the firms themselves, they often had to supplement their financial resources by credits or by government funds. Bank credits played a particularly important role in agriculture.

The efficient allocation of resources in a decentralized framework is predicated on the existence of domestic and/or foreign competition. According to a sample survey carried out soon after the introduction of the reform, 40% of the firms did not confront competition from domestic firms, 48% had some competition, and only 12% met strong competition. Also, 46% of the respondents did not experience any import competition, 37% felt the existence of some competition from imports, and 17% had much foreign competition.

While there was often import competition in cases when domestic competition was absent, and vice versa, the results point to the limitations of competition in Hungary. In its small domestic market, this was brought about by the consolidation of firms in the early sixties. As a result, the degree of industrial concentration was substantially higher in Hungary than in the countries of Western Europe. For example, there was only a single firm each engaged in processing poultry as well as in manufacturing sugar, chocolate products, beer, cigarettes, vegetable oils, milk products, glass, and paper.

The limited extent of competition led to diametrically opposed recommendations. There were those who proposed giving a greater role to the supervisory ministries. These proposals were in turn criticized on the grounds that they would represent a move towards re-centralization that would conflict with the objectives of the new economic mechanism. Rather, it was suggested that there was a need to promote competition. For this purpose, some observers recommended breaking up all large trusts and firms while others proposed that this be limited to horizontal trusts and firms where no efficiency loss was involved. Again others emphasized the need for increased foreign competition through the liberalization of imports arguing that, in a number of industrial branches, Hungary's small domestic market does not afford sufficient domestic competition.

III. Economic Performance under the Reform

Data for the period 1967-73 point to the success of the new economic mechanism in Hungary. The deceleration of economic growth was reversed, with the net material product increasing at an average annual rate of 6.2% between 1967 and 1973. Also, with improvements in the efficiency of investment, the rate of growth of consumption (5.7%) was only slightly less than that of the net material product.

Even greater improvements are shown if adjustment is made for changes in both capital and labor inputs. Thus, according to an unpublished study undertaken by Márton Tardos at the Hungarian Institute for Market Research, the growth rate of total factor productivity in Hungary more than doubled between 1962-67 and 1967-72. Also, national income figures indicate reductions in inventory ratios as firms economized with the holdings of stocks. These results reflect cost reductions on the firm level that were made in response to profit incentives. There is further evidence — albeit fragmentary and impressionistic — that firms came to react more rapidly to domestic and foreign demand and made increased efforts to improve technology following the reform.

Manufacturing industry led the expansion, with growth rates averaging 7% a year during the entire period. Favorable developments were shown also in agriculture, where the growth rate of gross output nearly doubled, approaching 3% between 1967 and 1973. With population rising only 0.3% a year, food production per head grew at nearly the same rate.

An important factor contributing to the growth of the Hungarian economy was the expansion of the volume of exports at a rate nearly double that of the net material product between 1967 and 1973. The value of exports to developed and developing market economies, including Yugoslavia, increased more than the average, raising their share in the total to 44% by 1973. Hungary's export performance in market economies was much superior to that of other socialist countries, the only exception being Romania whose oil exports increased during this period. Thus, as reported in United Nations trade statistics, the dollar value of these exports rose at an average annual rate of 24% between 1968 and 1973 in Hungary as against rates of growth between 14 and 18% in the other socialist countries and 28% in Romania.

IV. Tendencies Towards Recentralization

In the early seventies, a certain degree of recentralization occurred and measures were taken that reduced the incentive effects of prices and profits. The November 1972 Party resolution called for limiting the extent of profit sharing by managers for the sake of avoiding large income inequalities. Also, certain limitations were imposed on the movement of labor; investments by industrial firms came to be increasingly influenced by state preferences; and there were more frequent interventions on the part of the supervising ministries. More importantly, policy responses to external shocks, in the form of the inflationary 1972-73 world boom, the 1974-75 world recession, and the deterioration of the terms of trade after 1973, led to reduced use of market mechanisms and to increased central directions and interventions. This occurred as the policy makers attempted to isolate the Hungarian economy from the impact of outside events.

Market economies also experienced sizeable external shocks during the 1973-75 period. Outward-oriented economies responded to these shocks by temporarily adopting deflationary policies in order to limit the deterioration of their balance of payments. As a result, average GNP growth rates declined to a considerable extent in Greece (1.2% in 1973-75), Japan (1.1%), and Taiwan (1.5%), although rapid increases in exports permitted economic growth to resume sooner in Korea, with average increases in GNP of 8.8% between 1973 and 1975.

By contrast, inward-oriented market economies, such as Brazil and Turkey, relied largely on foreign loans to avoid reductions in growth rates (Balassa, 1981). In Hungary, too, the decision was made to maintain past rates of economic growth. Growth rates of the net material product averaged 6.0% between 1973 and 1975, with slightly lower increases in domestic consumption (5.8%) and the rapid rise of net investment (34.2% in 1974 and 11.5% in 1975). Correspondingly, the export surplus of 1973 gave rise to a deficit, particularly in convertible currency trade.⁶ This, in turn, necessitated foreign borrowing, with Hungary's indebtedness in convertible currencies more than doubling between 1973 and 1975 according to unofficial estimates (Table 1).

⁶ Trade with developed and developing countries, including Yugoslavia, as well as trade in convertible currencies with socialist countries, which latter amounted to above 15 percent of the total in recent years.

TABLE 1
NET MATERIAL PRODUCT AND FOREIGN TRADE IN CONVERTIBLE CURRENCIES IN HUNGARY

	(1) Net Material Product	(2) Aggregate Demand Expenditure	(3) Consumption	(4) Net Investment	(5) Import Volume	(6) Export Volume	(7) Trade Balance	(8) Net Foreign Debt
	(in convertible currencies)							
	Average Annual Rate of Growth in Volume Terms							
	\$ million							
1971	5.9	11.3	5.4	30.4	15.8	- 0.6	- 243	900
1972	6.2	- 3.7	3.1	-21.4	- 5.9	12.5	- 53	900
1973	7.0	2.0	3.7	- 3.8	2.5	17.9	+ 114	900
1974	5.9	12.7	6.9	34.2	17.6	3.1	- 582	1500
1975	6.1	6.4	4.7	11.5	- 5.8	3.3	- 531	2000
1976	3.0	1.2	2.1	- 1.4	11.8	12.8	- 347	2800
1977	8.0	6.2	4.6	11.0	10.1	10.4	- 567	3400
1978	4.2	10.0	4.9	23.8	15.9	1.6	-1110	4600
1979	1.9	- 5.5	2.9	-24.9	- 9.6	15.6	- 280	5000
1980	-0.8	- 1.9	1.4	-12.3	- 2.6	2.1	- 15	5400
1970-1973	6.4	3.0	4.1	- 0.5	3.8	9.7	- 61	900
1973-1975	6.0	3.1	5.8	22.3	5.3	3.2	- 557	1750
1975-1978	5.0	5.7	3.9	10.7	12.6	8.2	- 675	3600
1978-1980	0.5	3.6	2.1	-22.7	- 6.6	8.6	142	5200
1973-1980	5.2	4.0	3.9	4.4	4.8	6.9	- 490	3530

Notes: a excludes first year of period b end of year data.

Sources: (1) to (7) Hungarian statistical sources cited in footnote 1 of p. 3.

(8) PAUL MÁRER, "The Mechanism and Performance of Hungary's Foreign Trade", in *Hungary: A Decade of Economic Reform* (P. G. Hare, H. K. Radice, and N. Swain, eds.), London, Allen & Unwin, 1980, p. 180 and, for 1979 and 1980, Hungarian National Bank, *Informations Memorandum*, April 1, 1980 and *Economic Bulletin*, January 1981.

About two-thirds of the increased deficit in convertible currency trade reflected the deterioration of the terms of trade while the remainder represented an acceleration in the growth of the volume of imports and a decline in the rate of export expansion. Imports increased to provide for the growth of domestic consumption, the stockpiling of raw materials, and the rapidly rising investments that partly required foreign machinery. In turn, the adverse effects of foreign demand conditions on exports were aggravated by the buoyancy of the domestic market, the unfavorable product composition of Hungarian exports, and reductions in export incentives.

Export incentives were reduced through the withdrawal of subsidies to firms that made profits in exporting and the imposition of additional taxes on what were considered 'excess profits' while compensation was provided to firms that incurred losses in exporting. In turn, import subsidies were used to limit increases in the prices of imported products. This was the case in particular for petroleum; the domestic price of which was only one-third of the world market price in 1974. Yet, even though the Soviet Union, Hungary's main supplier, increased prices only with a time lag, the marginal cost of petroleum for Hungary is the world market price.

The described developments reflected the intention of the Hungarian authorities to minimize the effects of foreign inflation on domestic prices. Distinction needs to be made, however, between stability in the overall price level and in relative prices. While the former objective can be pursued by revaluing the currency, in Hungary reliance was largely based on export taxes and on import subsidies, thereby introducing firm-by-firm and product-by-product differences. These differences meant that the structure of domestic producer prices became increasingly isolated from world market prices. Also, for the sake of limiting increases in consumer prices, the rise in domestic producer prices was not fully transmitted to the consumption sphere, thereby exacerbating distortions between producer and consumer prices. Correspondingly, the usefulness of domestic prices as signals for decisions by consumers and by producers was reduced.

In the presence of distortions between world market and domestic producer prices, as well as between domestic producer and consumer prices, consumers had little incentive to adjust their consumption pattern to changes in world market prices. This was the case especially in energy, the consumer price of which was substantially lower than the producer price that itself was a fraction of the world market price. Nor

was inducement provided to producers to save energy, so that an energy intensive pattern of production was maintained in agriculture as well as manufacturing. More generally, the use of import subsidies increased demand for imported inputs on the part of the firms. Also, notwithstanding the introduction of taxes on excess profits, import-intensive exports were encouraged since these taxes left domestic relative prices unchanged.

At the same time, the welter of taxes and subsidies on exports and on imported inputs, designed to offset changes in world market prices, discouraged adjustments in the export structure in response to changing foreign price relations. Moreover, measures taken in a particular area gave rise to measures in other areas in order to compensate for the effects of the former.

Thus, production taxes, levied on a firm-by-firm basis, came into increased use. Furthermore, the extent of central directions on the firms' product composition, and interventions on the part of supervisory ministries in the day-to-day operation of the firms, increased. But, the firms themselves turned to the supervising ministries for financial assistance in cases when they deemed to have been adversely affected by the measures taken, and production taxes and budget support, as well as export taxes and subsidies, became the subject of bargaining.

With lesser reliance on the price system, the scope of quantitative regulations also increased. The number of products subject to purchase quotas rose from 7 in 1971 to 22 in 1976; seller-buyer relationships were centrally determined in 41 cases in 1976 compared to 9 such cases in 1971; the number of import quotas was increased from 7 to 33 during this period; and foreign exchange restrictions were applied to limit the growth of imports. These measures, taken in conjunction with reductions in export subsidies and the imposition of export taxes, raised the level of import protection relative to that of export subsidies in Hungary.

Reduced reliance on price signals was accompanied by limitations on the freedom of the firms in making investment decisions. A rising proportion of investments undertaken by firms necessitated financing from outside sources, chiefly bank credit and budget support. At the same time, obtaining bank credit and budget support increasingly required the firm to conform to the priorities set by the government. Special credits assumed considerable importance, with 18-20 credit quotas set for particular purposes and state preferences importantly affecting allocation within each quota. State preference also had an important role in the allocation of budget support, and the supervisory ministries exerted increasing influence on the choice of investments by the firms.

V. The Economic Effects of the Policies Applied

Following the application of deflationary policies as an immediate response to external shocks, outward-oriented market economies experienced rapid increases in exports and in national income. In the 1975-78 period, GNP growth rates averaged 5.5% in Greece, 5.2% in Japan, 11.7% in Korea, and 10.9% in Taiwan.

In turn, reliance on foreign borrowing permitted inward-oriented economies to maintain past economic growth rates only for a time. As the borrowed funds were used largely to increase consumption and to carry out costly investments behind high and often increasing protection, these countries did not generate the foreign exchange necessary to service foreign loans and to maintain high rates of economic growth after the mid-seventies. An extreme case is provided by Turkey that had to apply strong deflationary policies as additional borrowing became practically impossible (Balassa, 1981).

Hungary accepted a decline in the rate of growth of aggregate domestic expenditure in 1976, when consumption rose by 2.1% and net investment declined by 1.4%, compared to a 3.0% increase in the net material product. The resulting improvement in the balance of payments proved temporary, however. In 1977 and in 1978, the rate of growth of aggregate domestic expenditure again exceeded that of output, leading to an acceleration of import growth and a slowdown of export expansion in convertible currency trade. Correspondingly, the deficit in this trade rose from \$ 0.3 billion in 1976 to \$ 0.6 billion in 1977 and to \$ 1.1 billion in 1978, and Hungary's net indebtedness in convertible currencies reached \$ 5.0 billion at the end of 1979 compared to \$ 0.9 billion six years earlier.

Deflationary policies were applied anew in subsequent years, with domestic consumption rising by 2.9% in 1979 and 1.4% in 1980, after having increased by nearly 5% a year in the preceding two years. Furthermore, large increases in investment (in particular, inventory accumulation) in 1977 and 1978 gave place to substantial declines in the two years afterwards (Table 1).

As a result of these changes, Hungary's deficit in convertible currency trade declined to \$ 0.3 billion in 1979 and was practically eliminated in 1980. Nevertheless, the servicing of foreign loans contracted earlier led to a further increase in Hungary's net debt in convertible currency to \$ 5.4 billion at the end of 1980.

All in all, the data show that Hungary postponed cutbacks in consumption growth and experienced substantial fluctuations in investment activity in the period following external shocks. Furthermore, available evidence indicates the influence of the level of domestic activity on exports and points to the existence of a high short-term income elasticity of demand for imports in convertible currency trade, although the import elasticity was moderated by the imposition of foreign exchange restrictions.

Fluctuations in investment activity may be explained by the lack of use of macroeconomic policy instruments and the excessive investment demand that gave way only to quantitative measures. Excessive investment demand, in turn, reflected an accommodating stance on the part of public authorities in the event of losses by firms and in the provision of investment funds.⁷

Until 1976, the role of profitability considerations on the firms level was further reduced by reason of the fact that there was no repayment obligation for the amounts received in the form of budget support. Since that time, firms had to repay budget support with interest from their pre-tax profits.

Also, in January 1976, domestic producer prices were brought nearer to world market price relations and export incentives were increased by abolishing export taxes and raising export subsidies. Subsequently, a fund was established to provide financing for investment aimed at increasing convertible currency exports. The National Bank grants credit on a competitive basis to firms whose net foreign exchange earnings over five years at least equal the amount invested, and the exports of which are profitable at the existing commercial exchange rate.

Increased incentives to exports contributed to the growth of exports in convertible currencies. These incentives did not suffice, however, to regain earlier export growth rates. Thus, the volume of exports in convertible currencies rose only 7% a year between 1973 and 1978 as compared to an increase of 10% a year between 1968 and 1973. Also, with average annual increases of 15% in the dollar value of exports to developed and developing market economies, including Yugoslavia, Hungary fell behind the Soviet Union (21%), Romania (19%), East Germany and Poland (18%), and surpassed only Czechoslovakia (13%)

⁷ KORNAI (1979 and 1980) speaks of a "soft budget constraint", under which the firm's activities are not limited either by its financial position or by the risk of bankruptcy.

among socialist countries. Exports were given further impetus by the deflationary measures applied in 1979 when the volume of Hungary's convertible currency exports increased by 16%.

VI. The 1980-81 Reforms

While domestic producer prices were brought nearer to world market price relations in January 1976, substantial differences remained; the price of petroleum, for example, was still only 60% of the world market price. Also, notwithstanding some reductions in consumer subsidies, there continued to be large differences between the structure of producer and consumer prices. With continuing differences between domestic and world market prices, firm-by-firm production taxes and budget support were retained. The introduction of selective tax exemptions and wage preferences provided to firms that undertake an obligation to expand exports also added an element of voluntarism in the decision-making process, further reducing the role of profit incentives for the firms.

However, it became increasingly understood that the existing regulations would need to be thoroughly revamped in order to ensure that Hungary will best utilize its opportunities in exploiting its comparative advantage for economic growth. It was further recognized that this will require resuming the process of decentralization of decision-making, giving greater role to profit incentives, and rationalizing producer and consumer prices.

The October 1977 resolution of the Central Committee of the Hungarian Socialist Workers' Party re-emphasized the central role of exports in Hungarian economic growth and stated the need to let firms decide on the product composition of their exports as well as on changes in their production structure. Subsequently, the December 1978 Party resolution called for giving increased emphasis to the profit motive, reducing the scope of government preferences and central interventions, and rationalizing the price system. These guidelines underline the reform measures introduced on January 1, 1980.⁸ The

⁸ The following discussion is based largely on CSIKÓS-NAGY (1980) and HORVÁTH (1980).

lynchpin of the reforms was the introduction of 'competitive' prices in the industrial sector. The purpose was to increasingly align domestic producer prices with world market prices, thereby undoing the adverse effects of measures taken after 1973 and re-affirming the objectives enunciated at the time of the 1968 reform.

The domestic prices of raw materials, fuels, and basic intermediate products were equated to import prices paid in convertible currency trade, involving considerable increases in these prices, with subsequent changes made in responses to variations in prices paid in convertible currencies and in the exchange rate. At the same time, differences between world market prices and prices in trade with the socialist countries have been compensated by taxes and subsidies.

Industrial exporters receive the price obtained in convertible currencies times the exchange rate, plus a rebate for imputed indirect taxes at a rate of 10% of export value, except for light industrial products (originally 16%, but subsequently reduced to 13%) and for iron and steel (nil, but subsequently set at 5%). Exceptions have been made, however, in cases where the domestic cost of earning foreign exchange exceeds the exchange rate. In such instances, compensation payments are to be provided for a period of five years on a decreasing scale. Also, production taxes for individual firms have been abolished and while, in exceptional cases, firms receive budget support, this is also done on a temporary basis.

For firms that export more than 5% of their output in convertible currency trade, accounting for about two-thirds of industrial production, the allowable profit margin in setting prices for domestic sales in January 1980 was determined on the basis of the domestic cost of earning foreign exchange. These firms could subsequently increase their domestic prices to an extent greater than the rise in export prices (domestic prices have to be reduced if export prices fall), with the profitability of exports providing a further constraint in price setting. In turn, an average profit margin was applied in the case of firms exporting less than five percent of their output in convertible currency trade, with future changes in prices made dependent on changes in costs, except that firms which manufacture products similar to those produced by firms having an export share in excess of 5% are to follow the price setting procedures applied by the latter.

The use of 'competitive' prices will lead to larger inter-firm variations in profits, and hence in the remuneration of management. Also, while increases in wages continue to be limited by progressive

taxes, the new regulations provide greater inducement for increasing productivity and for limiting the size of the work force of the firm. It is also envisaged that firms which continue to make losses at world market prices will eventually disappear through mergers or bankruptcy procedures.

The use of profitability as success criterion and the condition for bonuses is not compatible with interventions in the firm's operations. As the maintenance of the existing ministerial structure would have created the danger of continued interventions, the industrial ministries have been consolidated into a single ministry, although the production of construction materials and food processing continue to come under the Ministries of Construction and Agriculture, respectively.

Firms have also been given greater freedom in their investment decisions. The large number of credit quotas have been consolidated into a few categories, permitting greater competition based on the profitability of the investment. At the same time, the availability of credit for export production has been increased, with additional facilities provided for import substitution.

Budget support to investment will be limited to cases when the firm's profitability is adversely affected by centrally imposed deviations from world market prices. However, according to the new regulations, the choice among claimants should be made on the basis of the profitability of investment in terms of undistorted prices.

As noted in Section I, the high degree of industrial concentration reduced competition in Hungary. In order to increase competition, 137 new firms have been established by breaking up horizontal trusts and large firms. These changes have occurred in coal mining and in the production of wine, sugar, confectionary, cigarettes, construction materials, shoes, and, to a lesser extent, machinery.

The organizational changes were carried out on July 1, 1980 and on January 1, 1981. The consolidation of industrial ministries took place on January 1, 1981. On the same date, some changes in the regulations affecting industrial firms also occurred, generally aimed at further simplification.

All in all, the measures introduced on and after January 1, 1980 have reversed the process of re-centralization observable since the early seventies, and have carried the decentralization of decision making beyond that existing beforehand. Decentralization has been linked to the greater role given to profitability on the firm level that will be increasingly determined by world market price relationships.

VII. Agriculture and the 'Second Economy'

The producer prices of agricultural products are set on the basis of production costs, in Hungary, with certain adjustments made in accordance with world market price relations. Agricultural prices exceed world market prices, although they are substantially lower than domestic prices in the European Common Market where much of Hungary's exports are sold.

Agriculture continues to play an important role in the Hungarian economy, accounting for 14% of the net material product and for 23% of exports, including processed food, in 1980. Gross output in agriculture grew at an average annual rate of 3.5% between 1970 and 1980, exceeding the increase shown in any other European country.

With food consumption rising at an average annual rate of 1.5% during the seventies, exportable production rose at a rate much exceeding that of gross output. In the second half of the decade, about 50% of the increment in gross output was exported, with over 25% of agricultural output and 30% of processed food destined for export towards the end of the decade (Biró *et al.* 1980, p. 210). As a result, the share of agricultural products in total exports declined only slightly, from 25% in 1970 to 23% in 1980, with processed food accounting for two-thirds of the total. More generally, a shift occurred towards the exportation of higher value products, such as livestock, meat, poultry, wine, and processed fruits and vegetables. Of further interest is the emergence of new export products, including rabbit meat and eggs for poultry raising.

Rapid increases in exports and the transformation of the export structure in part reflects the response to incentives by agricultural co-operatives that are profit-making units. Another important factor has been the development of small-scale agriculture, consisting of household plots owned by co-operative, state farm, and industrial employees, retirees, and to a lesser extent, private farms.

Apart from 1975, when a hardening of the tone on the part of Party officials led to the wholesale slaughter of pigs, small-scale agriculture has been increasingly supported by the government. Recent measures include a threefold increase in the threshold of taxable income derived from small-scale agriculture, greater investment in this sector, and the lease of land not suitable for large-scale farming by state farms and

co-operatives. Such leases would permit members of agricultural co-operatives to double the size of their household plots from the 0.6 hectares that is provided free to all members; other small-scale cultivators could increase the area they cultivate to even a greater extent (Swain, 1981, pp. 246-47).

Small-scale agriculture, characterized by intensive cultivation, provides 36% of agricultural output, compared to 30% in 1970 (Gábor and Galasi, 1981, p. 65). It accounts for over four-fifths of the production of early vegetables, two-thirds of the production of eggs, and over one-half of pigs, poultry, wine grapes, fruits, and vegetables (Pálovics, 1981, p. 428).

The new economic mechanism has also contributed to the expansion of the ancillary activities of agricultural co-operatives that were discouraged prior to the 1968 reform (V. Nagy, 1973). The volume of output of these activities rose by 115% from 1970 to 1980, when they came to account for 35% of the total output of agricultural co-operatives; in the same period, the gross agricultural output of the co-operatives increased by 59%.

A study of 86 agricultural co-operatives further indicates that ancillary activities are more profitable than agricultural activities, with the average profit margin being 11.5% in the first case and 2.4% in the second in 1979. In the same year, these co-operatives derived over 90% of their profits from ancillary activities (Vida, 1981). While the ratio is not representative of all agricultural co-operatives, since those in the sample had a higher share of ancillary activities than the average, it is noteworthy than in the 86 co-operatives output per asset value and output per worker were several times higher in ancillary activities (4.60 and 436 thousand forints) than in agricultural activities (0.55 and 157 thousand forints).

Ancillary activities provide for the needs of the co-operative itself and of other co-operatives, for which the large industrial firms are unable or unwilling to provide in sufficient quantities. They involve, in particular, the manufacture of simple agricultural implements, wood products, and construction materials, as well as local construction. Their activities further extend to agricultural processing and to the manufacture of parts and components for large industrial firms. The production of parts and components by agricultural co-operatives is a reflection of the excessive concentration of the Hungarian engineering industries, where the network of small and medium size firms producing parts and components exists only in a rudimentary form. In fact,

the share of firms with over 1000 workers in the total employment of the engineering industries was 88% in Hungary, 66% in the Soviet Union, 38% in West Germany, and 28% in the United States (Bossányi, 1979).

Industrial co-operatives play an increasing role in producing parts and components for large industrial firms in Hungary. They also manufacture a variety of products for consumption and even for export. An oft-cited example is the joint venture formed by Radelkisz of Budapest with Corning Glass of the United States for the production of blood analyzers.

In 1980, the industrial co-operatives employed 14% of the industrial labor force but had only 3% of the industrial capital stock reflecting the fact that they largely produce labor-intensive items in response to consumer and export demand. And while these co-operatives are reported to have provided 6% of gross industrial output, with the low share of material inputs they accounted for a much higher proportion of net output.

Industrial co-operatives have the advantages of flexibility in deciding on their product composition, setting prices, and undertaking investment. Similar considerations apply to construction co-operatives that accounted for 22% of the labor force in the construction industry in 1980 but had a share in fixed assets of only one-third as much. And, again, the 17% reported production share may understate their contribution to construction activity.

The so-called 'second economy' possesses even greater flexibility than the co-operatives. As defined by Gábor and Galasi (1981, pp. 17-18), it includes small-scale agricultural production, officially recognized and registered private non-agricultural activities, and not officially registered activities, generally on the part of those whose main occupation is in the large-scale socialist sector.

According to a well-known Hungarian sociologist, "the economic reason for the existence of the second economy is evident. The socially-organized production is not able to satisfy all the emerging needs in appropriate quantity and/or quality" (Ferge, 1978, p. 121). At the same time, the existence of the second economy has been accepted as "the integral part of the socialist economy" (Lukács, 1981a, p. 5).

It has been estimated that work performed on private agricultural plots is equivalent to 750-800 thousand man-years and that 250 thousand people have their main occupation in the private non-agricultural sector. Furthermore, private construction activity is said to involve the annual work time of 150-200 thousand people, and it is

responsible for the building of one-half of all dwellings (Gábor and Galasi, 1981, pp. 47-49).

Altogether 1.2 million man-years are expended in these branches of the second economy, compared to an economically active population of 5.2 million. The numbers do not include work done in the evening and on weekends as a part-time second job, although about one-third of building maintenance and two-thirds of television, automobile, and other repairs are said to be performed in the second economy.⁹ Each of these activities involves about 100 thousand people (Ibid); according to one estimate, in 1979 hourly earnings in such activities were about five times higher than in the large-scale sector (Marrese, 1981, p. 58).

It appears, then, that Hungary has established an economic system which combines the large-scale socialist sector, co-operatives, and small-scale private activities in a flexible manner. The success of this formula may explain the availability of a wide range of consumer goods and services that is unique in the CMEA area. New legal structures in effect from January 1, 1982 concerning the establishment of small and medium-size firms in the socialist sector, including subsidiary enterprises of existing firms, the creation of small co-operatives and smaller groupings in existing co-operatives, the founding of private partnerships, the leasing of equipment to private interests, and the liberalization of regulations affecting private artisans will further contribute to the expansion of the second economy.

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⁹ Nor do the figures allow for the so-called 'third economy' that includes illegal and extralegal activities, such as the use for private profit of material or work-time of socialist firms (LUKÁCS, 1981b).

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