



International Institute for
Applied Systems Analysis
www.iiasa.ac.at

Industrial Policies and Strategies, 3: Hungary

Csikos-Nagy, B.

**IIASA Collaborative Paper
December 1980**



Csikos-Nagy, B. (1980) Industrial Policies and Strategies, 3: Hungary. IIASA Collaborative Paper. IIASA, Laxenburg, Austria, CP-80-039 Copyright © December 1980 by the author(s). <http://pure.iiasa.ac.at/1471/> All rights reserved. Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage. All copies must bear this notice and the full citation on the first page. For other purposes, to republish, to post on servers or to redistribute to lists, permission must be sought by contacting repository@iiasa.ac.at

NOT FOR QUOTATION
WITHOUT PERMISSION
OF THE AUTHOR

INDUSTRIAL POLICIES AND STRATEGIES, 3:
Hungary

Béla Csikós-Nagy

December 1980
CP-80-39

Collaborative Papers report work which has not been performed solely at the International Institute for Applied Systems Analysis and which has received only limited review. Views or opinions expressed herein do not necessarily represent those of the Institute, its National Member Organizations, or other organizations supporting the work.

INTERNATIONAL INSTITUTE FOR APPLIED SYSTEMS ANALYSIS
A-2361 Laxenburg, Austria

PREFACE

In the coming years the world will be undergoing a major structural transformation as the size, composition, and geographic distribution of industry changes under the influence of:

- o increases in factor prizes: energy, labor;
- o depletion of resources: minerals, cheap liquid fuels;
- o changes in technology: microelectronics, biotechnology;
- o industrialization of the LDCs.

The already-industrialized nations, whose industrial structure was shaped by relatively inexpensive energy and easy access to resources, will find certain sectors losing competitiveness to newly-industrialized nations with access to similar technologies, and cheaper labor. The newly-industrializing nations will strive to increase their portion of the global industrial pie, while the industrialized nations will compete with each other to preserve their shares. At the same time, population increase and economic development will place new demands both for employment and for goods on the industrial system.

At the national level, this transformation will affect economic growth, employment, regional development, balance of payments, R&D, and many other sensitive constituents of national well-being. For the small economies that have a relatively large foreign trade sector, the transformation can be traumatic. Even the large, autarkic economies will face substantial challenges.

IIASA is now beginning an exploration of the role that it might play in analyzing and improving understanding of the global and national issues arising from this transformation of the international industrial structure. One part of the exploration has

been the commissioning of a series of papers by outside specialists.

A central question for all nations in the face of the industrial transformation is: what strategy should be followed to maximize the prospects of national well-being, given the anticipated changes? The third paper in the series addresses this question for a small socialist nation with an open economy, linked both to the CMEA and the convertible currency markets. Its author, Prof. Bela Csikos-Nagy, is a leading Hungarian economist. He was among the experts who developed one of the most far reaching economic reforms ever in a socialist country - that of 1968 in Hungary. At present he is the President of the National Office for Prices and Materials and a lecturer at the Karl Marx-University of Economics in Budapest.

Roger E. Levien
Director

CONTENTS

Page

Introduction	1
Structural Transformations	2
Industrial Strategies	2
Socialist Industrialization	2
Economic Development	3
Changes in National Strategies	3
The 1977 Resolution	5
The Role of Prices	5
The 1980 Industrial Price System	6
Competitive Pricing	7
Three-Markets Context	8
Industrial Development and Economic Growth	9
Appendix	11

INTRODUCTION

A short summary of Hungarian economic development in the last 30 years is given as an introduction to the discussion of current problems. Deputy Minister Professor Béla Csikós-Nagy discusses the different phases of post war development: the extensive industrialization between 1950-1967, the so called "golden age of the Hungarian economy" resulting from the economic reform of 1968, and the sudden shock caused by the energy crisis in 1973. As a consequence of the oil price explosion, Hungary lost around 10% of her national income overnight. After the initial -unsuccessful- reactions, economic growth had to be cut back drastically in order to restore the balance of foreign trade. This policy now seems to have paid off. The question remains, however, whether after having reached equilibrium, a new industrial strategy can be launched to speed up growth while maintaining a balanced economy.

The perspective presented is largely from the point of view of the development of the price system in Hungary, and the increasingly key role of prices in industrial strategy is pointed out.

Structural Transformations

The development of productive forces is proceeding hand in hand with a process of structural transformation. Marx considered the change in the proportions of Class I (i.e. means of production) and Class II (i.e. consumer goods) the most important. This proportion determines the distribution of consumer goods among different purposes and the distribution of the production factors between capital goods and consumption products.

There is a difference in the economic content of harmonized development in the framework of the means of production and of consumption goods. Interrelations of the means of production are controlled -using the term of Oscar Lange - by the technical laws of balance sheets. Society's productive organization is an integral entity. The same goods are the product of a certain working process while they are means of the next working process. The value of goods expresses that the working processes separated in time and space are the aggregate of subsequent phases of the general working process.

The proportion of capital and consumption goods is controlled by Government decisions about the allocation of the national income between accumulation and consumption. General equilibrium presupposes that demand and supply in capital and consumption goods are balanced both individually and in their interdependences.

Industrial Strategies

No doubt, the determination of industrial strategy is the most decisive issue in the course of general social economic development. By examining this problem concerning Hungary the traditional theory of socialist industrialization may be the starting point. One can read in the Political Economics of Socialism the following: "Industrialization began in capitalist countries historically with the development of the light industry and only after a long period was the heavy industry developed. Socialist industrialization started with the development of the heavy industry, which brings about essential savings in time and, based on up-to-date techniques, renders the reorganization of the whole national economy within the shortest possible period". (Politicheskaya Ekonomiya, ed. 3 Moscow, 1958).

Socialist Industrialization

The traditional theory of socialist industrialization is the generalization of the tendencies that characterized the industrialization of the Soviet Union between the two world wars and which came to the force in the first decades after the Second World War in European socialist countries too.

From the October Revolution up to the end of the Second World War the Soviet Union was the only socialist country in world economy. Thus, when introducing planning the Soviet Union had to treat her national economy as a quasi world economy,

where foreign trade relations could only have a marginal role. In this historical situation accelerated development had to decide the industrial strategy of the Soviet Union.

The success of the fulfilment of the first five year plan was explained in 1933 by the regime of strictest economization. (Problems of Leninism. Moscow 1945. The Results of the First Five-Year Plan). The report of the Secretary General illuminated in a very striking form the historical background of the industrialization program. According to this the aim was to transform the Soviet Union from a weak agrarian country depending on the whims of capitalist countries into an independent industrial power.

After the Second World War the system of socialist world economy has emerged and so has the CMEA; that is to say the economic cooperation mechanism of the European socialist countries has been established. European countries which turned from the capitalist way of development to the socialist one, carried out an ambitious industrialization program, for which the economic facilities of the Soviet Union offered the possibility. With the accelerated rate of the exploitation of her natural resources the Soviet Union could meet not only her own needs but could also supply a significant part of the energy carriers and raw materials needed by the European socialist countries. At the same time, when forming its own production structure, the Soviet Union was able to reckon with the export potentials of these countries.

Economic Development

Economic development harmonized with the traditional theory of socialist industrialization can be interpreted as the extensive stage of industrialization. The reserves of this kind of development had almost been exploited in the sixties. In the comprehensive program of socialist economic integration of the CMEA adopted in the second half of the sixties it was already indicated that industrialization must be put on a new basis. This program emphasized the harmonization of national economic policies, industrial specialization and production cooperation and, generally, a selective industrialization based on efficiency.

Changes in National Strategies

In the case of Hungary the way of extensive industrialization was characteristic of the period of 1950-1967. At that time achieving full employment was the principal aim of industrialization. But in the period of 1950-1956 the employment of housewives seeking jobs was the main line; as against this in the period 1957-1967 the task was to ensure jobs for the rural population who had become superfluous in agriculture due to the transformation into large scale farming. Parallel with this a new economic policy was inaugurated. Based on it the discriminatory treatment both of agriculture and of the infrastructure

was put an end to. Concerning the consumption market the aim of the new economic policy was to re-establish the equilibrium of supply and demand.

The shift-over to the way of intensive development presupposed a more consequent realization of efficiency. In Hungary with foreign trade sensitive economy, efficiency can be interpreted only in the form of international competitiveness. Thus it was clear that under such conditions only such an economic control system could successfully work, which ensured a flexible adjustment to the steadily varying conditions of the international division of labour. This was the real background of the Hungarian economic reform carried out in 1968. Regulation based on obligatory plan targets was abolished and control through economic instruments has been introduced.

A comprehensive analysis extended over the period 1967 to 1974 brought clearly to the surface the very positive changes created by the new economic control system. In that period economic growth sped up by 1-2% p.a. and varied between 5.5 to 7%. Labour productivity became slowly the only resource of economic growth. The deficit problem of the balance of payments in convertible currency areas, so very typical of the pre-reform period, came to an end. Development went on smoothly. We could collect foreign exchange reserves too, and this was achieved not by import restrictions, but what is more, despite the essential increase of the share of imported consumption goods in supply. This was 4-5% in the early sixties and reached almost 20% in the early seventies. Thus supply improved in spite of the fact that a dynamic rise of the living standard could be observed. That period can be really characterized as a golden age of Hungarian economy.

It was the oil price explosion on the world market at the end of 1973 that caused a break in this well-balanced development. Hungary belongs to the countries which suffered the greatest losses by the changes in relative world market prices. Overnight Hungary lost 10% of her national income which shows to what extent the terms of trade had deteriorated. The structural problem became acute and was expressed in the return of the deficit problem of international payments, but in this case in Rouble and non-Rouble areas alike.

Since then we have had to live with this problem. The first reaction -as we can see it now- was a mistake. We supposed namely, that the best way to overcome this problem was to accelerate growth, and to pursue a very dynamic industrial strategy. But this accelerated indebtedness. Only in 1978 did it become clear that a consolidation process could be achieved with an essential slowing down of the rate of growth, combined with a decrease of the level of the domestic utilization of the national income. This concept determines government planning nowadays, when the five year plan for the period 1981-1985 is being prepared. The intention is to increase the GDP with the transformation of the production structure, which will increase the export potential, the share of convertible products and, by

improving export efficiency, will mitigate the price losses we have suffered in the international division of labor. And what is more: planning should introduce -by the mid-eighties- a new path of growth on which a fairly dynamic rise of the living standard can be ensured again without jeopardizing international equilibrium.

The 1977 Resolution

Prepared by a series of discussions in 1977, a resolution was made about long-term foreign trade policy and the guiding lines of developing the production structure. This resolution is the most important document at present, when the industrial strategy has to be worked out for the next five year plan covering the period 1981-1985. According to this, the development of non-extractive industry has priority over the extractive sector in spite of the fact that the greater part of natural resources has to be imported. The standpoint in this respect is that too large a part of the available capital would be needed to accelerate exploitation, in spite of the fact that by this the share of production in the demand could be raised only insignificantly. Capital should increase the export capacity of the non-extractive sector and decrease the specific demand of energy and materials per value unit of production.

According to the resolution, the qualification of the production structure and the elaboration of industrial strategy must be based on a method which unifies technical and economic aspects, but the resolution is going out from the point that in the evaluation of long-term development technical criteria are of primary importance. There are four criteria to which the resolution attributes particular significance. They are:

- The volume of production and the magnitude of series
- A scientific and technical background
- An up-to-date marketing policy, and
- the infrastructure

The Role of Prices

In the determination and implementation of industrial strategy, the greatest problem is connected with the price function. This is a very specific problem of socialist economy because in a planning system with nationalized means of production it depends on government decisions whether the market mechanism should work and in what manner. This decision determines in this way whether the price can have an active role in the formation of industrial strategy or not. If it can, then the price has a structure orientation function, but if it cannot, then the price only adjusts itself to structure.

Up to 1956 Hungarian economic policy pursued a path with a very limited price function but after that time it has proceeded

a new line with the activation of the price function. In the very beginning after 1956, the abolishing of the obligatory delivery system of agrarian products and the introduction of the profit motive in the state-owned sectors with some element of the freedom of enterprises were characteristic of this new economic policy. This trend led in 1968 to the economic reform, which was implemented with the intention to establish a wide-scope freedom of enterprises with responsibility and risk-taking in their decisions. This trend has become stronger with the corrections in the regulation system carried out in 1980.

But in connexion with the activation of the price function in the Hungarian debates about the economic mechanism, a distinction was always made between the control of macro- and micro-structure. The view was overwhelming that enterprises could freely organize their production and marketing, but development policy must be controlled centrally, based partly on budget subsidies and partly in a way that the government determines guiding lines for the credit policy implemented by the National Bank.

When all is said and done, in connexion with industrial strategy and price function, discussions in Hungary have been focused on two issues. The first: how much the share of decentralized investments should be, compared to total productive investments. This is 50% or so. The second: what criteria should control government planning in the formation of industrial strategy. There were three factors which have contributed to the view that technical criteria should have priority over the price function. (a) Shortcomings in the price system; (b) uncertainties in price prognostication; (c) characteristics of cooperation in the CMEA.

The 1980 Industrial Price System

In the discussions preparing the resolution about industrial strategy we know more about the shortcomings of the industrial price system than about a price system which would be suitable for giving orientation in development policy. The guiding lines of perspective development of the price system were elaborated only in 1978; price re-arrangements could be introduced after that, and led in 1980 to the introduction of a new industrial price system. This can be characterized in the following way:

- The domestic evaluation of natural resources adjusts itself to the import price of the non-Rouble area;
- The domestic evaluation of industrial products adjusts itself to the export price of the non-Rouble area.

In the field of natural resources, economic calculation based on world market price means to evaluate energy carriers and raw materials according to the more expensive import relation. In the course of price increases, the world market import price means for Hungary the more expensive relation, because CMEA contractual prices follow world market price increases year by year based on five years' average prices.

In the processing industry, the adjustment of the wholesale price level to the export price level is the precondition of the point that profits or losses should reflect the actual positions of branches and enterprises in international competition. In a competitive price system understood in this way, the rank of profit margins is equal with the rank of efficiency. In this way can the industrial price system work as a rational yardstick and, as such, as an indispensable element of development policy.

The question has emerged whether instead of the export price the import price would not be a better criterion in domestic pricing. Experts who stand for this view emphasize that in many cases new branches, i.e. enterprises are created with the intention of substituting import. But we started from the point that there was an essential gap between export and import prices, and the industrial price system must, first of all, give orientation for structure policy which increases the country's export potential.

The price re-arrangement, i.e. the introduction of the new industrial price system in 1980, was actually a significant measure with the intention to improve the orientation function of the price in industrial strategy and, in this way, the resolution about improving the price system can be considered a correction of the 1977 resolution about the shaping of the production structure.

Competitive Pricing

The shift-over from cost-plus-pricing to competitive pricing has created a new situation for enterprises. In this new situation, enterprises must organize production, taking into consideration realistic market relations, starting from the point that the qualification of their activity can only be based on what they have to pay for input goods and what they can get for their products. In this environment, of course, they are strongly interested in recognizing expectable market relations, i.e. in pursuing an investment and marketing policy by which competitiveness can be maintained.

In the development of the industrial production, structure price relations at present are only interesting because they are the basis for possible price relations of the future. But in structural discussions, some experts emphasized that one cannot take price prognostication seriously. Here we are at the point where the repeated debates about economy and technic should be touched upon. Many of us pointed out that the role of prices cannot be substituted with technical criteria. It is just the price or rather cost-price relations which bring various technical parameters to a common denominator. Uncertainties in price prognostication are the risks involved in long-term decisions. We have not and cannot have correct information on what kind of capacities will penetrate world economy; what kind of new technologies will determine the conditions of production and how actually demand and supply relations will appear. Lastly, uncertainties in price prognostication can be traced back partly to the shortcomings of our knowledge about technical criteria valid for the future.

Technic and economy determine each other organically. One cannot substitute one with the other; nor can the one do without the other. Economic decisions are worthless without a realistic technical material background. But, in the same way, technical development can lead economy to a dead end if it is not harmonized with commodity relations.

In commodity economy demand is the expression form of needs and supply of production. It is a quantity of needs and supply of production controlled by the price. That is why in a commodity economy only one signal system operates as a general indicator: namely the price. And that is why, if somebody is interested in pursuing a development policy on the line of efficiency, the price function simply cannot be missed. And if the aim of structural transformation is to restore the balance of international payments and the improvement of the terms of trade then the orientation function of the price can be ensured only in a price system adjusted to the relative prices of foreign trade. This recognition has rendered the introduction of competitive pricing urgent.

Three Markets Context

Socialist countries, and thus Hungary too, organize their economies in three-market relations. These are the domestic, the CMEA and the world market. In the case of Hungary the share of the domestic market is 60% or so of the GDP, 22% falls to the CMEA and 18% to the world market. These markets have their specific requirements, which in the formation of industrial strategy must be taken into account.

The specific feature of the CMEA market is bilaterally balanced trade and multi-lateral accounting. Here export and import product-mixes are confronted in a sense in which the tendency exist to achieve commodity structures on the side of export and import, which are equal in the average capital input or in the average labor input. These are such tendencies in international cooperation, which should be reckoned with, and for which -if one country is interested in getting indispensable products from the other- she must adjust herself to the other country's requirements independently of whether this is for her the best alternative from the point of efficiency. This tendency appears on foreign trade pricing too. Generally not the prices of simple export and import commodities but export and import price levels of product-mixes are discussed. Guiding lines fixed multilaterally for foreign trade pricing confine countries in bilateral price agreements only to a certain extent. In the supervision and changes of prices countries are interested in different ways, depending on the effect of the terms of trade. On a macro-level it seems to be a secondary problem in what way the additional incomes or losses caused by the change in the terms of trade get dispersed according to products. It springs from this very point that it is price structures and not single prices that are in the focus of attention.

By the way, product-mixes as such are gaining ground in connexions established on the world market too. For Hungary for instance it is much easier to trade with provisions, raw-materials and semi-finished goods on the markets of industrially developed countries than with capital goods or consumption products. This is so not because technical parameters for labor intensive products do not come up to the mark but because the intertwinement of industrial and trade companies on the market creates a quasi discriminative situation for outsiders, and this cannot be left out of consideration when the formation of industrial strategy is at stake.

From all this we have come to the conclusion that industrial strategy is not simply a matter of price automatism. A definite structural policy of the government is needed for determining the investment structure, taking into consideration the possible lines of the international division of labor. The price should be activized where a flexible formation of the production structure is not only possible but is a precondition of maximizing advantages.

Industrial Development and Economic Growth

The issue of industrial development is organically linked with general economic growth. There is, of course, a greater possibility for carrying out structural changes when the average rate of increase of the national economy is 6-8% a year, instead of 2-3%. A speedy growth was characteristic of Hungarian economy up to recent years and the rate of growth had to be cut down on account of the change of relative world market prices.

The question which nowadays interests Hungarian economic policy most can be formulated as follows: if we succeed to re-establish equilibrium by cutting down the rate of growth, which can be achieved in 1981-82, whether a new industrial strategy can be launched based on which a speedier path of growth can be pursued while maintaining equilibrium. The solution of this is not yet in our hands.

Crude oil is only one on the list of several hundreds of different natural resources. But it is the most important. A calculation carried out in 1962 showed that energy carriers gave two thirds of the value of the total of exploited minerals in our world, and it was 40% that fell to the share of crude oil. But, if we made this calculation based on the new relative prices, the share of energy holders would surpass three fourths and crude oil would achieve 60% or so.

This picture illuminates that the adjustment to varying relative prices in the case of energy carriers is profoundly different from all other minerals, at least in two respects: If the task is replacement, the question is what possibilities are given to substitute something that is almost 80% -and in the case of crude oil is 60%- of the total. What type of industrial strategy can ensure a dynamic development if we know that it is just the widespread utilization of hydrocarbons as raw materials in various branches of the chemical industry, that

a speed up of development could be insured by?

It follows from this that the rate of economic growth must be slowed down if -for this reason or for others- we have to economize with crude oil consumption. And this is actually the effect on the Hungarian economy of the new relative oil prices. The rate of growth had to be cut down on account of difficulties in financing import and not because a larger quantity of import would not have been available. The problem is actually not the lack of export capacities but the specific requirements connected with additional energy import. To make this clear: in the CMEA, or rather in the Soviet-Hungarian trade agreement, an import quota for crude oil is fixed and is financed in the normal clearing settlement. But Hungary can have a larger quantity only based on special agreements, counterbalanced with convertible currency or products at actual world market prices. This is the point from which difficulties arise.

Therefore Hungary has come to the conclusion that economic growth had to be curbed on the middle range, at least until a new course of growth could be worked out. From analyses the picture can be seen that perhaps a 4% annual growth -instead of 6-8% characteristic of the early 1970s- can be hoped for the mid-eighties.

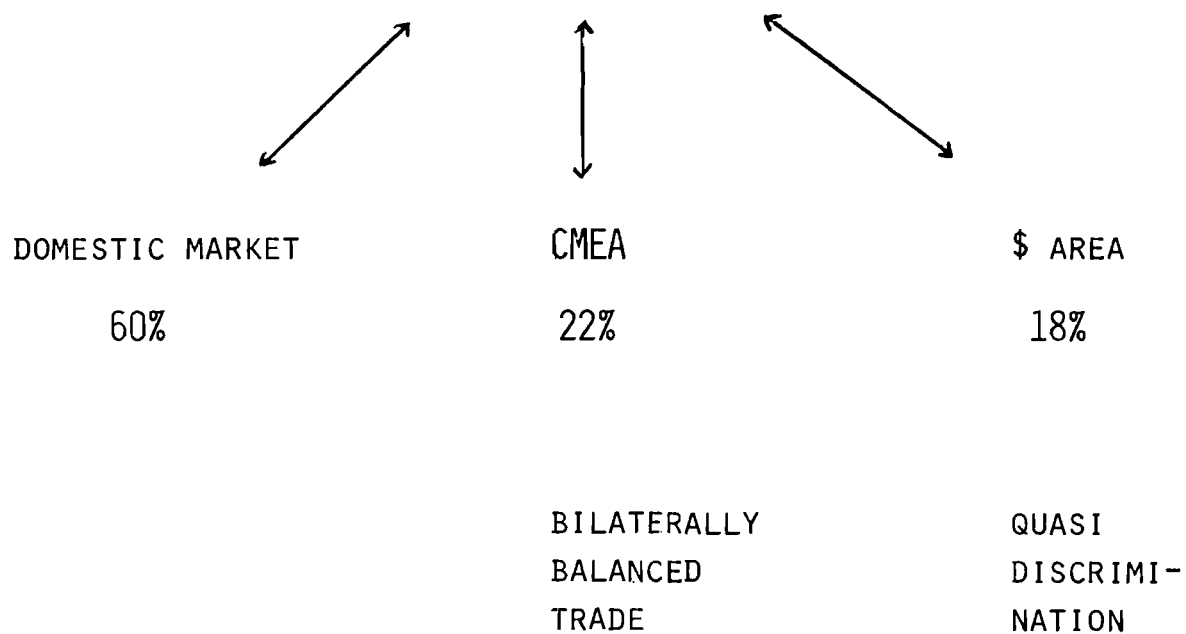
Appendix

ECONOMIC DEVELOPMENT IN SOCIALIST HUNGARY

1945 - 49	RECOVERY FROM WAR
1950 - 56 } 1957 - 67 }	EXTENSIVE INDUSTRIAL DEVELOPMENT (FULL EMPLOYMENT OF RESOURCES)
1968	NEW ECONOMIC MECHANISM
1968 - 73	"GOLDEN AGE" OF INTENSIVE DEVELOPMENT (INTERNATIONAL COMPETITIVENESS)
1973	WORLD ENERGY CRISIS
1973 - 79	ADJUSTMENT
1980	COMPETITIVE PRICING (REGAINING EQUILIBRIUM)

THE RELATIVE SHARES OF DIFFERENT MARKETS IN THE

HUNGARIAN GDP



THE DEVELOPMENT OF THE ROLE OF PRICES
IN THE HUNGARIAN ECONOMY

1950 - 56	VERY LIMITED
1957 - 67	GRADUAL INCREASE (INTRODUCTION OF PROFIT MOTIVES)
1968 - 78	WIDE-SCOPE ACTIVATION ON <u>MICRO-LEVEL</u> RECOGNITION OF THE ORIENTING ROLE OF PRICES ON THE <u>MACRO LEVEL</u> (INTRODUCTION OF THE 'COMPETITIVE PRICING' SYSTEM IN 1980)
1978 -	

RELATIVE SHARE OF ENERGY RESOURCES (OIL) IN THE TOTAL VALUE OF
WORLD USE OF MINERAL RESOURCES IN 1962

