

## The Hungarian Reform Process: Visions, Hopes, and Reality

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# The Hungarian Reform Process: Visions, Hopes, and Reality

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## I. Introduction

THE HUNGARIAN ECONOMY has undergone major systemic changes in the last 30 years. The impact of the reform is felt by every Hungarian citizen. The influence of the Hungarian experience, however, does not stop at the borders of this small Eastern European country. At least the temptation to follow a similar road appears in other socialist countries. The leaders of the Chinese economy are studying the Hungarian situation carefully in an effort to learn from its successes and failures. In the Soviet Union and in a few smaller Eastern European countries, where a genuine reform has not yet begun, the advocates of more far-reaching

changes refer to Hungary frequently. Perhaps it is not an exaggeration to say that the Hungarian reform has some global relevance.

According to a widespread view, the Hungarian economy has become or is close to a system of "market socialism." Referring to Oscar Lange's (1936-37) famous model of socialism, Paul R. Gregory and Robert C. Stuart (1980) write: "In a general way, NEM [the New Economic Mechanism of Hungary] bears a close resemblance to the Lange model" (p. 299). I am convinced that this interpretation of the Hungarian reform is erroneous and the purpose of this paper is to support my rejection of this view. At the end of the article different "visions" of market social-

ism will be reviewed and confronted with Hungarian reality. But before this confrontation of "vision" with reality, a positive description is needed. I try to answer the following question: if it is not "market socialism," what is the true nature of the present Hungarian system? For an answer, we have to go into some detail in reviewing the Hungarian situation, so as to avoid oversimplification.

This paper addresses the general readership of this journal, not only the specialists in comparative systems and socialist economies; therefore it cannot avoid including information known to the experts. The approach is largely "institutional"; data are used for illustration. There is no attempt to support rigorously formulated hypotheses with econometric analysis. Many important questions remain unanswered; the paper stops at the present frontier of research in Hungary and elsewhere.

There are dozens of books and hundreds of journal articles about the Hungarian reform.<sup>1,2</sup> The paper is not an utterly mechanical compilation of every treatment. It recognizes and presents the principal alternatives, but, in the end, it de-

scribes and appraises the Hungarian reform in the light of my own views. It is best to say at once: This is a *subjective* description and appraisal of the Hungarian reform, its intellectual background, and its real development. Another personal remark is in order. Although my writings are not without some intellectual influence in my country I do not claim to be regarded as one of the "architects" of the reform. I was not and am not a government official or a member of any decision-making body, or a formally appointed adviser. In other words, I am accountable neither for the great results of the reform, nor for its shortcomings. At the same time, I was and still am a firm supporter and a critical observer of the reform process. It is hoped that this special position gives me a certain closeness to the events, but also some distance needed for a frank and fair appraisal.

Subjectivity is not identical with originality. The paper contains some ideas originating in my own writings but also the ideas of other economists whose contributions will be acknowledged. In some cases the originator cannot be traced, because the thought or the formulation has been generated anonymously and now belongs to the folklore of the Hungarian economics profession. In some respects this paper reflects a rather wide consensus shared by a larger group of Hungarians. That does not imply that something like a universally accepted "Hungarian view" exists. Economists in Hungary are not less divided in their opinions than their colleagues in any other country.

The review is not value-free; my own set of desiderata will become clear to the reader as he goes through the paper. Yet the article will remain in the domain of positive analysis and the discussion of a few intellectual currents; there is no attempt to present my own updated blueprint of an "ideal" socialist system.

Because this paper deals with institu-

<sup>1</sup> This paper refers to works in English or in Hungarian. The latter references are distinguished by the letter "H" in the text. The Hungarian references are not listed in the bibliography at the end of the paper because most *Journal* readers do not read Hungarian. A supplementary bibliography containing the references in Hungarian can be obtained by writing to the *Journal* or to the author.

The tables of the paper frequently refer to reports of the Central Statistical Office, published in Hungarian. To save space, the tables indicate the source only in the following general form: CSO H. The supplementary bibliography provides detailed information about the CSO sources for each table.

<sup>2</sup> A brief sample of summary reviews and appraisals of the Hungarian reform: Rezső Nyers and Márton Tardos (1978), József Bognár (1984), László Antal (1985a H), in the Hungarian literature; Richard Portes (1977), Béla Balassa (1978, 1983), Edward A. Hewett (1981), Paul Hare, Hugo Radice, and Nigel Swain (1981), Paul Marer (1986a, b), in the foreign literature. My intellectual debt to these works is gratefully acknowledged.

tional changes, it inevitably touches on problems in the domain of sociology, social psychology, political science, and political history. Nevertheless, this is the work of an economist concentrating on economic issues without aiming at a thorough analysis of their political aspects.

The Hungarian reform was not a one-stroke action, but a long process. Its intellectual history started with papers of György Péter (1954a H, b H) presenting a penetrating criticism of the old system and a draft of the reform.<sup>3</sup> The history of practical reform measures began in 1956–57 with the abolition of compulsory deliveries in agriculture, although the dominant feature of the period 1957–64 was the conservation of the old bureaucratic economic mechanism. An important milestone was reached in 1968, when a whole package of substantial changes was introduced. Further steps came later. But the reform process did not follow a one-way road even after 1968: phases of progress were followed by reversals. After the great reform wave of the late sixties the years 1972–79 represented again a period in which antireform forces could break through. A new wave of reform measures started in 1979 and has been going on since. Apart from consecutive ups and downs, proreform and counterreform tendencies have been manifest side by side all the time.

Unfortunately, limitations of space do not allow a discussion of the historical evolution of the reform. This paper focuses on phenomena that prevailed throughout the 1968–85 period and characterize the present state of affairs, with only occasional backward glances.

The Western reader will recognize

<sup>3</sup> The history of the reform, including its intellectual history is surveyed in Iván T. Berend (1983 H) and Iván Pető and Sándor Szakács (1985 H). The studies of László Szamuely (1982, 1984) and János Mátyás Kovács (1984 H) discuss mainly intellectual history.

many issues familiar to him from his experience in his own economy or, at least, in the public sector and administration of his own country. It would certainly be instructive to discuss similarities and differences between different socioeconomic systems. There is also an extended theoretical and empirical literature on certain issues, which are the Western counterparts of problems discussed in the present paper for the Hungarian case. For example, there are many valuable studies on taxation, price and wage control, regulation, privatization, and the relationship between government- and state-owned firms in nonsocialist economies. Except for a few occasional hints, such comparative study and a survey of the Western literature on the analogous issues go beyond the limitations of the present paper.

## II. *Conceptual Clarification*

There are a few general concepts that represent key building blocks in our thought, concepts that do not have an unambiguous content in the literature. We do not pretend to arrive at generally applicable exact definitions. The purpose of section II is more modest: to clarify in a rather pragmatic manner the meaning of certain concepts in the context of the present paper.

### A. *Economic Systems*

We use the term *economic system* to mean not only "grand" systems, like "capitalism" or "socialism," which could rather be regarded as system "families," but also the particular members of such a family. Contemporary Czechoslovakia, Hungary, and Yugoslavia, for instance, have different systems, although all three are socialist countries.

Instead of an abstract definition, I give a summary list of the main components of an economic system:

The organizations functioning in the economy: for example, administrative organs, nonprofit institutions, firms, households, associations;  
 The distribution of the various forms of ownership and property rights;  
 The distribution of decision-making power;  
 The information structure: types of information flowing between organizations;  
 Incentives motivating the decision makers;  
 The role of political organs and the government in economic affairs;  
 Laws and governmental resolutions, that is, the formal legal regulation of the economy's operation;  
 Informal "rules of the game": routine behavioral patterns enforcing, hindering, or complementing the formal legal regulation.

The list is not exhaustive.<sup>4</sup> The components are interdependent; they cannot be chosen arbitrarily.

In the Hungarian literature the terms *economic mechanism* or simply *institutional circumstances* are used more or less as synonyms for *economic system*.

We contrast the concept of *policy* with the concept of *system*. The former is the determination of certain variables by policy makers within the framework of a given system. In this respect we follow the usage of Hungarian discussions, which consistently apply the distinction between issues of economic policy and issues of the economic mechanism.

## B. *Bureaucratic and Market Coordination*

A system coordinates the activities and interactions of its members, that is, individuals and organizations. For the sake of

<sup>4</sup> The literature of comparative economics offers various, mostly overlapping interpretations of the notion *economic system*. See for example Egon Neuberger and William Duffy (1976) and John M. Montias (1976).

our study we distinguish two pure types of coordination.<sup>5</sup>

*Form No. 1: Bureaucratic Coordination.*<sup>6</sup> There is a *vertical* relationship between the coordinating individual or organization and the coordinated individuals or organizations. Control is exerted by a multilevel hierarchy. Administrative coercion and legal sanctions compel individuals and organizations to accept orders and prohibitions from above. The vertical relationship is lasting and institutionalized; it is mutually acknowledged both "above" and "below." The transactions are not necessarily monetized, but if they are, the subordinated individual or organization is financially dependent on the superior. The bureaucracy is active in the allocation of resources and in the redistribution of income.

*Form No. 2: Market Coordination.* There is a *horizontal* relationship between the buyer and the seller individual or organization; the two participants are equal from the legal point of view. The individuals or organizations are motivated by financial gain. In its pure form market coordination takes place at prices based on agreement between buyer and seller. The transactions are monetized.<sup>7</sup>

Some writers prefer a wider definition; the present paper, however, will apply consistently the narrow definition outlined above. We refer to market coordination only if money, prices, and profit are at work.

<sup>5</sup> For further elaboration see Kornai (1984). The influence of Max Weber [1922](1947), Karl Polányi (1944), Charles Lindblom (1977), Oliver Williamson (1975), and György Konrád and Iván Szelényi (1979) is acknowledged.

<sup>6</sup> The term *bureaucratic* is frequently used pejoratively in the Eastern European literature. The present paper does not follow this usage: according to the Weberian tradition, the term is a value-free denomination of a particular form of coordination.

<sup>7</sup> Other basic "pure" forms exist also. As important as these might be, for our topics the consideration of Forms No. 1 and No. 2 will be sufficient.

The debate over the reform of socialist systems can be translated into the language of the above classification: the participants suggest alternative combinations of the basic forms. Systemic changes in the real world can be described as new combinations of the two basic forms with shifts of relative weights and new linkages between them.

### C. Reform

Reform is a notion widely used by many parties and political movements all over the world. The present article will apply a narrow definition designed especially for our discussion. We reserve the term *reform* for the change in a socialist economic system, provided that it diminishes the role of bureaucratic coordination and increases the role of the market.

The modernization of a highly bureaucratic regulation of the economy with the aid of computers is not "reform." Nor do we give this name to efforts aimed at tighter labor discipline. Useful as these policy measures might be, they do not imply the change of the system; they do not lead to diminishing the role of bureaucracy and to increasing the role of the market.

In this sense there are only three countries where a genuine reform process is in progress: in the order of starting, these are Yugoslavia, Hungary, and China. There are signs that perhaps Poland will follow suit.

### III. The State Sector

We divide the economy into two main *social sectors*: organizations working with capital owned by the state and the rest of the economy, that is, the nonstate sector. (The adjective *social* will be used throughout to refer to the sectors distinguished by ownership.) Systemic changes associated with the state sector are discussed in section III and with the nonstate sector in section IV.

The state sector, it must be emphasized, was and still is the dominant sector of the Hungarian economy. As shown in Table 1, about two-thirds of officially recorded total national income is produced by state-owned firms.<sup>8</sup>

#### A. The Abolition of Mandatory Plans

We begin with a brief description of the *command economy* by which the state sector was administered in the prereform period.<sup>9</sup> Usual synonyms are the traditional centrally planned economy or classical socialist economy, economy of the Soviet type, or simply, the "old" economic mechanism contrasted with the reformed "new" one.

The national plan is elaborated by the Central Planning Board and approved by the highest political bodies. After that, the plan is strictly mandatory. The economy is governed by a bureaucracy, organized in a multilevel hierarchy.<sup>10</sup> The plan indicators at the top are successively disaggregated from higher to lower levels. At the bottom, the state-owned firm gets hundreds or thousands of mandatory plan indicators each year, containing four sets. First, the set of output targets, whenever possible, in physical terms or in aggregate real terms expressed in base-year fixed prices. A multiproduct firm may get as

<sup>8</sup> The size of the officially unrecorded output will be discussed later.

<sup>9</sup> More detailed description in English can be found in David Granick (1954), Kornai [1957](1959), Joseph Berliner (1957), Balassa (1959), Włodzimierz Brus [1961](1972), Alec Nove (1978, 1983), Morris Bornstein (1981), Gregory and Stuart (1981).

<sup>10</sup> Here and throughout the paper we do not discuss the role of the Party separately. The Party is not simply a political movement as in a nonsocialist country, but also an apparatus in charge of running all affairs. Although from a legalistic point of view the Party and the government are separate entities, in practice they are intertwined and they work jointly in all relevant control processes. The Party has the leading role in the joint operation. Hence the term *bureaucracy* or *bureaucratic control* in this paper refers to the role played by the Party apparatus.

TABLE 1  
SHARE OF SOCIAL SECTORS IN EMPLOYMENT AND NATIONAL INCOME  
(percentage distribution)

	Distribution of Active Income Earners				Contribution to National Income		
	1966	1975	1980	1984	1975	1980	1984
1. State sector	65.0	70.9	71.1	69.9	73.3	69.8	65.2
2. Nonstate sector							
a Cooperatives	30.7	24.9	25.5	25.9	17.8	19.8	20.6
b Household farming	—	—	—	—	4.0	3.2	2.8
c Auxiliary production of employees	—	—	—	—	3.0	3.7	5.9
d Formal private sector	4.3	4.2	3.4	4.2	1.9	3.5	5.5

Source: CSO H. Data broken down according to our classification are not available for the contribution to national income in 1966.

Note: The nonstate sectors are discussed in section IV. "National income" is a net output concept within the framework of the "Material Product System" (MPS), the accounting system used in socialist countries. Except for sectors 2b and 2c, the table does not cover the informal private sector.

many output targets as it has products or groups of products. Second, input quotas, again in physical or real value terms. This set contains the rations of the centrally allocated materials and semifinished products, indicating not only quantity and quality, but also the supplier obliged to deliver. There are also labor quotas and wage funds. Third, mandatory financial indicators concerning production costs, profits, credit ceilings. Fourth, a list of certain actions to be taken by the firm: introduction of new technologies or products, investment projects, and so on. Although all plan indicators are compulsory, certain "priority indicators" are enforced more strictly. Typically this is the case with at least one indicator of aggregate output, with some ceilings on wage expenditures, and sometimes also with a few specific export targets.

The flow of information is not unidirectional. The firms submit proposals in the course of plan elaboration and they report results during and after the plan period.

The more important flow, however, is the flow downward: commands given by the higher level to the lower level of hierarchy.

One of the most tormenting properties of the command system is rigidity. Commands once given are hard to change. Any change must go through a multistage process of approval at different sections and different levels of the hierarchy. The system of detailed plan indicators is, of course, interdependent; it is a kind of a "general equilibrium" image of future economic processes. It is required that the spillover effects of any significant change should be followed in all other segments affected and appropriate adjustment should be made. Planners understandably are not fond of such extra work. As a consequence, response to unexpected shifts in supply, demand, or technology is slow and incomplete.

Top planners seek to assure "taut planning" (Holland Hunter 1961). The plan must have a "mobilizing" effect, extract-

ing maximum output from given resources. This is one more reason for rigidities: there are no easily accessible reserves left to be used for quick adjustment. Furthermore the plan leads to defensive tactics on the part of subordinates. It is in the interest of the firm's manager to hide the genuine capabilities of the firm and to obtain a more lax plan that can be fulfilled comfortably even if supplies do not arrive on schedule. Of course the staff of the higher authorities knows the firms well. "Plan bargaining" evolves: the superior planner wants more output out of less input, the subordinate wants the opposite. In the course of realizing the plan, the manager's motivation is to achieve fulfillment, perhaps even a modest overfulfillment, but this must not be overdone. Otherwise the overfulfillment of this year will be incorporated into the mandatory target of the next year. As a consequence, a restrictive practice is common.<sup>11</sup>

Input-output combinations are distorted. The direction of distortion depends on the exact nature of the "priority" indicators. If, for example, gross output in aggregate value terms is enforced most rigorously, the manager's interest is to produce goods containing large quantities of expensive material. If the output target is given in tons or, as in textile industry, in meters, the manager is motivated to produce heavy goods or thin textile. Output plans must be fulfilled at any price, neglecting all other "nonpriority" objectives or those the authorities are less able to check, like the improvement of quality, the introduction of new products, reduction of costs, and proper maintenance of machinery and buildings.

The abstract model of the command economy operating in the state-owned

sector is a strictly vertical bureaucratic control, executed by a disciplined bureaucracy in a consistent way. Real command economies are not as "pure" as the model; some horizontal coordination exists too. This proceeds partly on a nonpecuniary basis: informal agreements of reciprocal help are made between cooperating producer and user firms, complemented by some incentives in money terms to the suppliers for the sake of more reliable deliveries (i.e. a half-tolerated, half-forbidden "market" relationship). In any case, the system in the Hungarian state sector in the early fifties was rather close to the model of a pure command system.

There were minor changes introduced in the late fifties and early sixties, for example, some limited forms of profit sharing for employees. When the dispute over reform revived in the mid-sixties, there were discussions about how far the country should go in the abolition of commands. Finally, the leadership opted for a radical solution. After careful preparation, the whole short-term command system was completely abolished in one stroke, beginning with the 1st of January, 1968. The state-owned firms were formally declared to be autonomous concerning short-term output and input plans.

Orthodox economists in Eastern Europe had been afraid that the socialist system would collapse without mandatory planning. It turned out that they were wrong. This paper will make many critical comments about the Hungarian reform, but this must not overshadow one of the most impressive and undeniable conclusions concerning the Hungarian systemic changes: the radical abolition of short-term mandatory planning is viable even without a fully developed market mechanism.

## B. *Dual Dependence*

What replaced the command system? A state-owned firm of the reformed Hun-

<sup>11</sup> The problem has been discussed in Eastern Europe since the fifties. There the phenomenon is called "base-year approach." The Western literature introduced the apt name "ratchet principle" (Berliner 1957, Michael Keren 1972, Keren, Jeffrey Miller, and James R. Thornton 1983).



garian economy operates in a condition of *dual dependence*. It depends vertically on the bureaucracy and horizontally on its suppliers and customers. A brief look at the life of a state-owned firm will illustrate how the system of dual dependence works.

*Entry.* The creation of a state-owned firm is the result of a lengthy bureaucratic process. It might be initiated by an individual or a group, but the very active support of bureaucratic organs is needed for success.

Recently the legal conditions for establishing small state-owned enterprises have been eased. Existing firms can "branch out" and create subsidiary enterprises half subordinate to and half independent of the founder. There is also some possibility of entry by nonstate producers as potential competitors of the state-owned firm, but this is subject to severe restrictions.

*Exit.* There are state-owned firms that go out of business, but their number is rather small and the exit (both final liquidation and absorption by another state-owned firm) is decided by bureaucratic procedures. "Death" is not the outcome of a natural selection process on the market. No substantial positive correlation can be found between exit and persistent loss making or insolvency.<sup>12</sup>

*Selection and appointment of top managers.* This remained the most important vertical linkage. Until some changes in the mid-eighties the leading executives of a firm were appointed by the superior authority. A successful manager will be promoted either by moving upward within

the same firm or by transfer to another firm or to some state agency. Similarly, a successful official in a ministry may be appointed to the directorship of a large firm. There is no genuine "job market" for managers; their career depends to a large extent on the opinion of the top bureaucracy. Therefore, it is understandable that one of the main objectives of managers is to please their superiors.

In 1985 new regulations were introduced. The top managers in the majority of state-owned firms are no longer appointed by the higher authority, but elected, directly or indirectly, by the employees of the firm. The administrative and political organizations have formal or informal veto powers over both the preselection of the candidates and the outcome of the election. It is too early to appraise the results of these arrangements.

*Determination of output.* The firm's autonomy has increased a great deal in this respect. Short-term annual plans are determined by the firm. The superior authority does not set aggregate output targets and that is an important change. It still puts forward, however, informal "requests" telling the firm what is "expected" from the managers. Typically, certain deliveries are urged for export or for a customer who is a protégé of the intervening official or for the elimination of certain pressing shortages. In any case, the management of the firm will usually be willing to comply.

*Determination of inputs.* The all-encompassing system of formal material rationing and allocation has been dissolved, though a few goods are still centrally allocated. There are, however, informal quotas, licenses, or other restrictions (János Gács 1982).

Horizontal linkages between state-owned firms in their capacities as sellers and buyers certainly have become stronger than they were before the reform. The linkages are mixtures of genuine market contracts following business negotiations

<sup>12</sup> This observation and a few more to which we refer in the paper are based on a large-scale project examining the balance sheets of all Hungarian state-owned firms during 1975-82. This project is directed by the author and Ágnes Matits; results are discussed in Kornai and Matits (1983 H, 1984), Matits (1984a H, b H, c H), and Éva Várhegyi (1986 H). See also Mihály Laki (1982, 1984), Galina Lamberger, György Mátólesy, Erzsébet Szalai, and Éva Voszka (1986 H), Gábor Papanek, Péter Sárkány, and Erzsébet Viszt (1986 H).

about prices, quality standards, and delivery dates, and of "gentlemen's agreements" based on reciprocal favors. But the horizontal linkages are still not insulated from the decisive influence of vertical regulation. In case of disagreement or contract violation, complaints are addressed to the bureaucracy, which is asked for judgment and intervention.

*Choice of technology.* Administrative intervention occurs, but it is not widespread. The firm's autonomy has increased substantially in this respect.

*Determination of prices.* Prior to the reform, the price of almost all goods produced by state-owned firms was set arbitrarily by administrative organs. The relative prices were grossly distorted. The rules have changed several times in the course of the reform process. Some prices are still determined administratively, although usually under some influence and in quite a few cases under the strong pressure on the part of the firms. The majority of prices ceased to be administrative, at least nominally, after 1968. Most of such prices have still not become genuinely free market prices, either. Bureaucratic price control has different ways and means to exert strong, in some cases decisive influence on price formation.

First, for many goods strict rules prescribe how to calculate the price. Regulations determine the cases in which a "cost-plus" principle must be implemented. For such calculations there are strict instructions as to how costs should be calculated and what are the permitted profit margins. In some other cases the application of the so-called competitive pricing principles is mandatory. Profit margins for goods sold on the domestic market must not exceed the profit margins achieved on export markets. Similar correspondence is prescribed between price increase for domestically sold and exported goods (critical comments can be found in Robert Hoch 1980 H, Lajos Zekó 1981 H). There are many exceptions to the de-

clared calculation principles, again determined by a long sequence of bureaucratic rules.

Second, many of the price changes nominally decided within the firm must be reported in advance by the producer to the price authority, which may or may not intervene, formally or informally.

Third, there are laws against "unfair profit" and "unfair price." These are, of course, vague concepts; much depends on interpretation and arbitrary judgment. Because firms are audited frequently, there is always the concern that their pricing practice may be condemned.

Unfortunately, there is no study available that would give a clear appraisal of how the present Hungarian relative price system compares with a rational one, reflecting relative scarcities more or less correctly. Some authors argue that prices have come much closer to rational proportions than they did before the reform, mainly because the main raw materials, energy, and many tradable goods are closer to relative prices on the world market (Béla Csikós-Nagy 1985 H). Others, the author among them, accept these results but maintain that a large degree of arbitrariness still prevails, because of the widespread and bureaucratic interventions mentioned above. In an interdependent price system each bit of arbitrariness spills over and leads to further distortions. As we shall see later, an arbitrarily differentiated system of positive and negative taxation exists, which inevitably leads to price distortions. An indirect piece of evidence supporting the views of the critics is provided by a study of László Halpern and György Molnár (1985), who calculate a "cost-plus" shadow price system based on uniform profit rates with the aid of an input-output table. The calculation (p. 824) shows a strikingly wide dispersion of the shadow-price/actual-price ratios.

The impact of prices on firms' decisions has become somewhat stronger in the wake of the reform, but it is still not deci-

sive; we will talk about that later. But even if firms eagerly watch prices, they may still give the wrong signals.

*Determination of wages and employment.* An important change: absolute ceilings on the total wage bill that had been one of the most powerful plan figures in the prereform era were completely abolished. There are still several bureaucratic instruments of interference in wage formation. The instruments have changed several times since the beginning of the reform process. To mention just a few: progressive taxation of the firm linked to average wages or to wage costs or to the increase of wages; wage policy guidelines associated with strong pressures to follow them.

As a result of the reform, mandatory employment quotas were abolished, but formal and informal restrictions on hiring labor reappeared in the seventies, as a reaction to growing labor shortages (Károly Fazekas and János Köllő 1985b H).

*Credit.* Hungary has a highly centralized monetary system. There is permanent excess demand for credit. The banking sector, except for new institutions to be discussed later, acts as a credit-rationing administrative authority and not as a genuine bank following commercial principles (György Tallós 1976 H). It is strongly connected with the planners' and the other authorities' supervision of the state-owned firms. Granting or denying credit is almost uncorrelated with the past or present profitability and credit worthiness of the firm. To some extent, the opposite relationship is true. The credit system is used frequently to bail out firms failing on the market. Perhaps a more market-oriented practice will evolve in the near future following recent changes in the financial sector. We return to this issue in section V.C.

*Taxes and subsidies.* Before the reform firms had to pay all gross profits, except for a minor profit retention, to the central

budget. The introduction of taxation, which leaves the post-tax profit with the firm, is an important change. The tax system is, however, extremely complicated. The total number of taxes and subsidies of different sorts to be paid by or to state-owned firms is between 290 and 300 (Vilmos Falubiró 1983 H). Few of them are based on rules that affect all firms uniformly. Many tax or subsidy regulations appear to be general, but a closer look shows that they are calibrated to affect only a small targeted group, in many instances only a few dozen out of 1600-1700 firms. These are "tailor-made" rules. In addition, ad hoc tax exemptions are granted or payments due are postponed to help firms in financial trouble. Firms suffer from the unpredictability of taxation. Any time that the central authorities feel that firms have "too much money," tax rates may be arbitrarily increased or new taxes introduced or firms might be forced to save (for example, by prescribing mandatory deposits or reserves).

The total of all subsidies for the entire state-owned sector is about equal to the total gross profit before taxation; the total taxes are even larger than total gross profit because the state sector is a net tax payer. This means that a huge reshuffling of gross profits goes on taxing away and handing out money through hundreds of channels.

*Investment.* Investment decisions and financing were highly centralized before the reform. As a result of the reform, the firm's discretion has increased; a substantial fraction of profit can be retained for investment purposes. Nevertheless, central power is still very strong. For major projects the firm needs additional capital either from the bank or from the governmental budget. Only a small part of state sector investments, about one-fifth of the total, is really decided at the firm's level and financed exclusively from the firm's own savings. As for the rest, the firm must come to an agreement with those who

give external assistance; consequently the bureaucracy can have a decisive influence on the allocation of investments (Várhegyi 1986 H). Another form of intervention is to freeze the firm's savings originally reserved for investment purposes.

The central allocation of investment resources is not guided by profitability criteria. Almost the opposite can be said. Redistribution assists the losers with money taxed away from firms making large profits. A closer look at the financial data of firms in the study of Kornai and Matits (1983 H, 1984), Matits (1985 H), and Várhegyi (1986 H) shows that there is no substantial correlation between pre- or post-tax profitability in a certain year and investment activities in later years (no effect of past and present profitability). And there is no substantial correlation in the opposite direction, either, namely, between investment activity in a certain year and pre- or post-tax profitability in later years. Thus, expected future profitability has no effect, assuming that there is substantial correlation between expected and actual profitability.

The situation is eased to some extent by recent developments. New financial intermediaries have been created, and new ways of raising capital are permitted. We shall come back to that in section V.C.

### C. *Soft Budget Constraint and Weak Price Responsiveness*

In official declarations, profitability is the main criterion in appraising the performance of a firm. The bonus of the managers is linked to profitability and there is also profit sharing for employees.<sup>13</sup> It was hoped that these measures would

<sup>13</sup> Two remarks. First, a manager's bonus is linked to post-tax profitability, giving the manager an extra stimulus to fight for less tax and more subsidy. Second, profit sharing is leveled off; in contrast to the high variance of profitability, the ratio of profit sharing and wage per worker has a very small variance (Kornai and Matits 1983 H, 1984).

TABLE 2  
TRANSITION PROBABILITIES DUE TO FISCAL  
REDISTRIBUTION IN THE STATE SECTOR OF  
MANUFACTURING IN 1982

From Original Profitability	To Final Profitability			
	Loss Maker	Low Profitability	Medium Profitability	High Profitability
Loss maker	.233	.500	.122	.145
Low profitability	.038	.853	.103	.006
Medium profitability	.000	.734	.206	.060
High profitability	.008	.394	.515	.083

Source and detail: Matits (1984a H, p. 48).

Note: The research background of this table is indicated in footnote 12, above. *Transition* means the proportion of firms in any given original profitability class that became members of a given final profitability class as a result of fiscal redistribution. The transition from "original" to "final" profitability means the transition from the pretax and presubsidy position to the post-tax and postsubsidy position.

transform the firms into genuine profit maximizers. That has not come true. The situation is illustrated in Table 2.

First let us look at the losers. Loss, even if long lasting, can be compensated for by different means: ad hoc or permanent subsidies, ad hoc or permanently favorable tax conditions or bail-out credits. Price authorities can be permissive, allowing increase of the administrative price or deviation from certain interventionist price rules. The author (1979, 1980, 1986) coined the term *soft budget constraint* to describe this phenomenon. The financial position of the state-owned firm is not without influence. Although there is a budget constraint that forces some financial discipline on the firm, it is not strictly binding, but can be "stretched" at the will of the higher authorities. In principle, the firm should cover expenditures from revenues made on the market. In practice,

earnings from the market can be arbitrarily supplemented by external assistance.

The crucial issue is the fate of the chronic loss makers. Their fate will clearly show whether profit is something "dead serious" or only an illusion. The state bureaucracy exhibits a paternalistic attitude toward state-owned firms. This is understandable, for they are creations of the state, and the creator cannot let them down. There are strong social and political pressures to keep ailing firms alive for many reasons, for example, for the sake of job security (Granick 1984) or of import substitution. But then many observers ask the following question. If the firm is in deep financial trouble and for sociopolitical reasons it cannot be shut down, why at least are the managers not fired? Such harsh treatment would—so these observers say—increase the influence of the profit motive. In fact the managers may either stay or they are transferred to another job without significant loss in income and prestige. The reason is simple. Because of the thousands of bureaucratic interventions, the manager does not have full responsibility for performance. In case of failure he can argue, perhaps with good reason, that he made all crucial decisions only after consulting superiors. Furthermore, many of the problems are consequences of central interventions, arbitrarily set prices, and so on. Under such circumstances, the bureaucracy feels obliged to shelter the loss makers.

On the other end of the spectrum are the firms making large profits. Table 2 shows that there is a peculiar egalitarian tendency operating to reduce the larger profits. The budget constraint is not only soft, but also perverse. Because of the ceaseless and unpredictable changes of the financial rules, taxes, and subsidies, firms feel insecure and exposed to the arbitrary improvisations of the bureaucracy (Károly A. Soós 1984).

There are differences in terminology, but in substance a large group of Hungarian economists agree: financial discipline is lax, and there is no strong market coercion to enforce the search for profits. This "soft budget constraint" syndrome has many negative consequences. Only one will be mentioned at this point, namely, weak responsiveness to prices, especially on the input side. If a wrong adjustment to relative prices does not entail an automatic penalty through a well-functioning selective market process, the firm does not have a strong stimulus for quick and complete adjustment. There are some studies, unfortunately not many, that show the firms' weak response to relative prices. For example Judit Szabó and Imre Tarafás (1985) with the aid of multiple regression analysis demonstrate that changes of the foreign exchange rate have only a weak impact on producers' choice of the output and still less of inputs.

We are facing a vicious circle between the arbitrariness and irrationalities of the relative price system on the one hand and the soft budget constraint syndrome on the other, as argued by Halpern and Molnár (1985), Antal (1985a H), and Kornai and Matits (1984). Because prices are arbitrary and distorted, firms have legitimate reasons to ask for compensation. And when external assistance is granted, it leads to the preservation of the wrong price.

#### D. *Size Distribution, Monopolies*

The size distribution of firms in Hungarian production is much more skewed in favor of large units than in developed capitalist economies (Iván Schweitzer 1982 H, Gábor Révész 1979, Éva Ehrlich 1985a,b H) as illustrated in Table 3. In 1975 in Hungarian industry the three largest producers supplied more than two-thirds of production in 508 out of 637 product aggregates (Zoltán Román

TABLE 3  
SIZE DISTRIBUTION OF FIRMS IN MANUFACTURING

	Hungary	Sample of capitalist economies
Average number of employees per firm:	186	80
Percentage distribution of employees by size categories:		
10-100	14	35
101-500	26	33
501-1000	19	13
more than 1000	41	19

Source and detail: Ehrlich (1985b H, p. 92).

Note: The figures refer to averages of various years in the Seventies. The right column covers the following sample of countries: Austria, Belgium, France, Italy, Japan, and Sweden.

1985).<sup>14</sup> The extremely high concentration weakens or eliminates potential rivalry and creates monopolies or oligopolies in many segments of production.

There are quite a few organizations that have the legal status of a "state-owned firm," but are practically playing the role of a state authority. Their number at present is smaller than before the reform, but still not negligible. They have the power to determine the rationing of the goods or services they supply to customers. For example, this is the situation with the monopoly company delivering automobiles. There is a monopoly bank with the exclusive right to grant consumer credit and mortgage loans.

In the last few years, there have been serious efforts to break up monopoly positions and to partition large entities into several smaller ones. The size distribution has become somewhat less extreme, shifting a bit toward smaller units. But the process is slow and meets with strong resistance.

<sup>14</sup> The 637 product aggregates cover about 75% of total manufacturing.

There is a peculiar disparity in the treatment of large and small state-owned firms. On the one hand, large firms are much more successful in lobbying for favors, particularly for investment resources. Some of them are in great financial trouble; nevertheless large credits or subsidies are handed out to them (Mária Csanádi 1979 H, 1980 H, 1983 H, Erzsébet Szalai 1982, Matits 1984c H). On the other hand, smaller units count for less in the eyes of the supervisors. They suffer less from frequent inspections, and it is easier for them to evade certain rigid regulations than it is for large firms (Tamás Bauer 1976, 1985b).

#### E. Summary: From Direct to Indirect Bureaucratic Control

The reform has improved the performance of the Hungarian state sector. Firms now have more room for maneuver; they have become less rigid and more adaptive. They respond in a more flexible way to changes in demand and pay more attention to quality improvement and technical progress. These achievements become even more visible if one compares Hungary with the unreformed socialist economies.

This appreciation notwithstanding, the reform went only halfway. Hungarian state-owned firms do not operate within the framework of market socialism. The reformed system is a specific combination of Forms 1 and 2, that is, of bureaucratic and market coordination. The same can be said, of course, about every contemporary economy. There is no capitalist economy where the market functions in the complete absence of bureaucratic intervention. The real issue is the relative strength of the components in the mixture. Although we have no exact measures and, therefore, our formulation is vague, we venture the following proposition. The frequency and intensity of bureaucratic intervention into market processes have

certain critical values. Once these critical values are exceeded, the market becomes emasculated and dominated by bureaucratic regulation. That is exactly the case in the Hungarian state-owned sector.<sup>15</sup> The market is not dead. It does some coordinating work, but its influence is weak. The firm's manager watches the customer and the supplier with one eye and his superiors in the bureaucracy with the other eye. Practice teaches him that it is more important to keep the second eye wide open: managerial career, the firm's life and death, taxes, subsidies and credit, prices and wages, all financial "regulators" affecting the firm's prosperity, depend more on the higher authorities than on market performance.

In the course of the reform the bureaucracy itself has changed: it has become less tightly centralized. It is a peculiar complex of partial multilevel bureaucracies that often act in an inconsistent manner; it is more polycentric than before the reform. The head of each branch has his own priorities and performs his own interventions, granting favors to some firms and putting extra burdens on others. The more such lines of separate control evolve, the more they dampen each other's effects.

The "rules of the game" are not generated in a natural, organic way by economic and social processes; rather they are elaborated artificially by the officers and committees of the administrative au-

thorities. They are, of course, never perfect: they do not produce exactly the results expected and are therefore revised time and time again. Hence they are unable to provide stable guidance for the behavior of the firm. Once the reactions of the firms become manifest, the rules are revised again.

The role of the state is not restricted to determining or influencing a few important macroaggregates or economy-wide parameters like the exchange rate or interest rate. As we have seen, there are millions of microinterventions in all facets of economic life; bureaucratic *microregulation* has continued to prevail.

The firms are not helpless. Every new tactic of the higher organs evokes new countertactics. First of all, bargaining goes on about all issues all the time. This is a bargaining society, and the main direction is vertical, namely bargaining between the levels of the hierarchy, or between bureaucracy and firm, not horizontal, between seller and buyer. All issues mentioned in section III.B—entry, exit, appointment, output, input, price, wage, tax, subsidy, credit, and investment—are subject to meticulous negotiations, fights, lobbying, the influence of open or hidden supporters and opponents. The Hungarian literature calls this phenomenon "regulator bargaining"; it has taken the place of "plan bargaining" which had prevailed in the command economy. Firms had quite a bit of bargaining power even in the classical command system and their bargaining position improved substantially in the new system, especially in the case of the large firms.

If bargaining does not succeed, there is one more instrument in the hands of the firm: to evade the regulations preferably not in an explicitly illegal way, but by using some tricks, seemingly following the letter of the law, but violating its intentions. And then, when the lawmaker recognizes that there are loopholes, he

<sup>15</sup> Portes (1972, p. 657) made the same general point much earlier, writing that "there is a threshold beyond which decentralization must go to take firm roots." He was, however, rather confident that Hungarian "strategy and tactics has brought the reform across this border." These views were shared by many outside observers. The opinion expressed in the present paper is different: the Hungarian reform did not cross the critical threshold that separates a genuine market economy (associated with a certain degree of bureaucratic intervention) from an economy basically controlled by the bureaucracy (with certain elements of market coordination).

tries to create a new, more perfect decree—and the game starts again.

Let us sum up. For later reference we need a short name for the system that has developed in the Hungarian state-owned sector. We propose calling it *indirect bureaucratic control*, juxtaposing it to the old command system of *direct bureaucratic control*. The name reflects the fact that the dominant form of coordination has remained bureaucratic control but that there are significant changes in the set of control instruments.

#### IV. The Nonstate Sector

##### A. Digression: The Reform in Agriculture

Sections III and IV proceed generally by reviewing the various social sectors based on different types of ownership. Here in section IV.A we digress to take a closer look at all ownership types in one particular branch, agriculture. This is perhaps the most successful area of the reform. It is therefore instructive to discuss agriculture as a whole (Ferenc Donáth 1980, Swain 1981, Csaba Csáki 1983, Michael Marrese 1983, Aladár Sipos 1983).

Contradictory tendencies developed in the last 25–30 years. The share of state-owned farms remained rather stable. There were two big waves of “collectivization,” that is, forced formation of agricultural cooperatives: the first in the early fifties and the second in 1959–61. The latter brought more than two-thirds of arable land from private ownership into the hands of the cooperatives. Members of the cooperatives were allowed to hold only a small private plot and a few animals. The present shares of the various types of ownership are shown in Table 4. Still, in spite of dramatic changes in the direction of collective ownership, Hungarian agriculture is different from the prototype “collectivized” organization of agricultural production.

*Cooperatives.* This has remained the

TABLE 4  
CONTRIBUTION OF SOCIAL SECTORS TO TOTAL  
AGRICULTURAL GROSS OUTPUT  
(percentage distribution)

	1966	1975	1980	1984
State-owned farms	16.4	18.0	16.8	15.3
Cooperatives	48.4	50.5	50.4	51.1
Household farming	23.7	19.0	18.5	18.4
Auxiliary production and private farms	11.5	12.5	14.3	15.2

Source: CSO H.

largest social sector in agriculture. Many important changes have occurred in their functioning. In the prereform system the position of a cooperative was not far from that of a state-owned farm. It was tightly fitted in the framework of a command economy; it received detailed mandatory plan targets like state-owned firms. As a result of the reform process, the system of mandatory plans was abolished in 1966, just as in the state sector two years later. Frequent informal interventions, however, remained.

Even in the old system leaders of the cooperatives were elected and not appointed; that was the essential legal difference between a state-owned and a cooperative enterprise. In practice, however, elections were manipulated and there was only a formal approval of the preselected managers by the membership. This practice has not been rooted out, although the participation of the members in the selection and appointment of managers has become more active; the word of the membership carries more weight than it did.

In the cooperatives of the early fifties material incentives were weak. Compulsory delivery quotas at very low administrative prices absorbed the largest part of production. In other words, the peasantry carried a heavy tax burden. In years of poor harvest even seeds for the next year and foodstuff for the farmers' own con-



sumption were barely left in the village. In the expression coined during those times, the attics of the farmers' houses were swept clean by compulsory deliveries. The sale of surplus on the market was legally permitted but little or no surplus was left to sell.

There have been substantial changes in this respect. Some (though not all) price distortions, both on the output and on the input side, have been eliminated. Material incentives are strong. As has been mentioned, the compulsory delivery system was abandoned as early as 1956-57. The cooperatives can sell to state trade organizations on a contractual basis, but they are allowed to do their own marketing if they prefer. The cooperative as a whole is motivated to earn more income and more profit. The cooperatives have more autonomy in deciding on the use of their own profit. In many areas a special kind of decentralization is applied within the cooperatives: working teams or individuals are in charge of a certain line of production and get their own share of their production line's net income.

Before the reform, agricultural cooperatives were prohibited from engaging in any but agricultural activities. In the reform process nonagricultural activities have developed. The cooperatives have engaged in food processing, in the production of parts for state-owned industry, in light industry, in construction, in trade, and in the restaurant business. The share of nonagricultural production in the total output of agricultural cooperatives was 34% in 1984. In this way profits have increased and seasonal troughs of employment can be bridged more easily (Kálmán Rupp 1983).

*Private household farms of cooperative members.* Here one finds the most spectacular changes. Whereas the legal limitations on the size of the household plot have remained unchanged, much more family work is devoted to this special kind

of private agriculture. Restrictions on keeping animals and on owning machinery have been lifted. Household farms produce a large fraction of meat, dairy and other animal products, fruits and vegetables. With few exceptions, there is no legal restriction on selling output, and prices are determined by supply and demand on the free market for foodstuffs; hence the peasants have a strong impetus to work hard and produce more. The attitudes of both the cooperative and of the agricultural administrative apparatus toward the household farm are now very different from what they were. In the old system the cooperative was hostile; private household farming was regarded as a "bourgeois remnant" that should be replaced soon by collective forms of production. Now private household farming is declared a permanent component of agriculture under socialism. Cooperatives render assistance in different ways: they provide seeds, help with transport, lend machinery, give expert advice, and assist in marketing. A remarkable division of tasks has evolved in which the cooperatives concentrate more on grain and fodder, which can be produced most efficiently by large-scale operations, while private household farms focus on labor-intensive products where small-scale operations succeed better.

We do not want to paint an idealized picture: in fact, there are many troubles in this sphere. There have been periodic capricious bureaucratic interventions into the household farming sector, confusing the farmers and weakening their confidence. There are gross distortions in prices offered to the private producers by the state trade organizations, who are the main buyers of many agricultural products. In spite of these problems, the household farms are relatively successful.

*Auxiliary agricultural production.* Hungary is a country with a strong agricultural tradition. People working in nonagricultural professions like to have a garden

or a small plot, where they can grow fruit and vegetables, or raise poultry or pigs. The liberalization measures in agriculture gave new impetus to these activities. Auxiliary agricultural production turns out to be a nonnegligible fraction of total output, covering not only a substantial portion of the participating households' own consumption, thereby decreasing demand for marketed products, but also contributing to the marketed supply. Some of these producing units developed into specialized, capital-intensive private farms producing commodities almost exclusively for the market.

*State-owned farms.* The share of state-owned farms in total agricultural output has not changed much, but their situation is now different. All the systemic changes discussed in section III appear in the state-owned part of agriculture also. Here we also find dual dependence, but the relative strength of the market is stronger and that of bureaucratic coordination is weaker than in other branches of the state-owned sector. Prices are more reasonable, managers are more "entrepreneurial," and the profit motive is more intense. The difference is explained mainly by the fact that in agriculture a small number of state-owned enterprises are surrounded by a very large number of more competitive, more market- and profit-oriented cooperatives and private household farms. The minority's behavior adjusts to some extent to the behavior of the dominant parts of the branch.

To sum up: Hungarian agriculture shows a particular blend of spectacular successes and unresolved problems. The main achievements are the significant improvement of domestic food supply, some good results in exports and the stronger motivation for work in all subsectors. But all these results were obtained at high cost: with the aid of a very large investment of capital and of the peasants' hard "self-exploitation."

The present size distribution is unsatisfactory; medium size units, smaller than the large-scale state-owned and cooperative units and larger than the "mini"-scale units in household farming are almost nonexistent. In other countries with highly developed agriculture the dominant form is a farm operating with a small number of people, but with high capital intensity. Such an efficient and highly productive form has not yet developed in Hungary either in the cooperative or in the private sector. Development in that direction has been hindered by the privileges of the existing large-scale units and by conservative bureaucratic restrictions.

#### B. *Nonagricultural Cooperatives*

We now return to our main course of thought, discussing the various social sectors one by one. Our next topic is the cooperative sector and because we have discussed agricultural cooperatives in section IV.A, we focus here on the nonagricultural cooperatives. Their significance has increased in the reform process in manufacturing, construction, commerce, and services. They are similar to the agricultural cooperatives in many respects; we will not repeat what has been said already.<sup>16</sup> One important distinction: there is less favorable treatment of nonagricultural than of agricultural cooperatives as far as credit, tax, subsidy, and import are concerned.

What are the main similarities and differences between state-owned firms and cooperative enterprises? Everything described in sections III.A and III.B, the abolition of mandatory plans and the dual dependence of the enterprise, applies to the cooperatives as well. There is, however, a difference in relative weights; in all issues (exit, entry, selection of managers, price, wage, tax, credit) there is somewhat less bureaucratic intervention and some-

<sup>16</sup> See Gábor Agónacs et al. (1984 H) and Gyula Tellér (1984 H) for important studies about the indirect bureaucratic control of cooperatives.

what stronger influence of market forces than in the state sector. The budget constraint is somewhat harder; nonagricultural cooperatives (especially the smaller ones) cannot expect unconditional survival<sup>17</sup> and almost automatic bail-out by the bureaucracy. The cooperative is much more responsive to prices; its profit motivation is stronger.<sup>18</sup> The cooperatives receive less favorable treatment than state-owned firms in the allocation of investment credits and subsidies.

The average size of the cooperatives is much smaller than that of the state-owned firms, and this has been so especially in recent years, because more possibilities have opened up for establishing so-called small cooperatives that work under easier and more flexible legal and financial conditions than do the rest of the cooperatives.

The situation of cooperatives is important from the viewpoint of socialist ideology. The idea that cooperatives will be one of the basic forms of ownership in socialism, or even *the* basic form, has a long-standing intellectual tradition in the Hungarian Left. The advocates of the traditional cooperative idea have always stressed the principle of voluntary participation. Nowadays this principle is more or less consistently applied in the nonagricultural sector. (The same cannot be said about the formation of cooperatives in the past.) There is general shortage of labor in Hungary. The vast majority of present members therefore, have a genuine choice between entering and remaining in a cooperative or getting a job in other sectors. Those who stay seem to prefer this form because it combines the effi-

ciency of a medium size firm with a certain degree of participation in managerial decisions. The linkage between individual and collective performance and individual earning is more direct than in the state-owned firm. Of course, a conclusive test can come only if the economic environment of the cooperative sector becomes more competitive and market oriented, and the cooperatives have to demonstrate efficiency and profitability against more vigorous competitors.

### C. *The Formal Private Sector*

The most spectacular trend of the Hungarian reform process is the growth of the private sector. From the point of view of ideology, this is the boldest break with orthodoxy.

The term *private sector* has both narrower and wider definitions. In the present section we discuss only a well-defined part of it, the *formal* private sector; other parts and also some definitional problems will be the topics of the next section. What distinguishes the formal private sector from the other private ventures is that it is officially licensed by the bureaucracy.

Table 5 shows the size of the formal private sector. The majority of personnel are craftsmen, construction contractors, shopkeepers, and restaurant owners. They work alone or are assisted by family members or a few hired employees. The size of this sector has increased rapidly in the last few years when the authorities began to grant licenses more liberally. Also the regulations concerning employment became less restrictive: at present the maximum number of employees, apart from family members, is seven. This is, of course, a very small number for those accustomed to private market economies, but large in comparison with other socialist countries. It means the legalization of "small capitalism." We must add that medium- or large-scale capitalist business is prohibited in Hungary.

<sup>17</sup> Agricultural cooperatives are much more sheltered. Small wonder that this segment of the economy stubbornly opposes the introduction of bankruptcy laws and other measures of hardening the budget constraint.

<sup>18</sup> All these differences are smaller and the similarities greater between *large* cooperatives and state-owned enterprises.

TABLE 5  
THE SIZE OF THE FORMAL PRIVATE SECTOR  
(in thousands of persons)

	1953	1955	1966	1975	1980	1984
1. Private craftsmen	51.5	97.6	71.3	57.4	63.7	76.1
2. Employees and apprentices of private craftsmen	4.0	16.0	26.7	19.7	20.1	26.9
3. Private merchants	3.0	9.0	8.5	10.8	12.0	22.4
4. Employees of private merchants	—	1.0	1.5	3.4	8.2	28.5
5. People working full time in business work partnerships	—	—	—	—	—	11.0
6. Total number of people working full time in the formal private sector	58.5	123.6	108.0	91.3	104.0	164.9

Sources: Rows 1-4: CSO H. Row 5: Ministry of Finance.

Note: Since 1968 individuals who have a regular full-time job in the state-owned or cooperative sector can get a license for a second part-time job in the formal private sector. Data for 1984: 47.2 thousand individuals work as part-time licensed private craftsmen, and 31.5 thousand individuals as part-time members of business work partnerships.

A new form has appeared recently: the so-called business work partnership, a small-scale enterprise based on the private ownership by the participants. It is a blend of a small cooperative and a small owner-operated capitalistic firm. This form also belongs to the formal private sector.

The formal private sector is still a minor segment of the economy (see Table 1). Nevertheless, its rate of growth is remarkable: mere permission to exist and perhaps also some encouragement in official speeches were enough to induce a sudden boom. Apparently thousands of people had a latent desire to enter private business; at the first opportunity, they ran to join the formal private sector. And this happened in the face of many difficulties. Private business is at a disadvantage in getting inputs from the state sector. It rarely gets credit from the state-owned banking sector and therefore must rely on raising money through private and fre-

quently illegal channels. Private credit does not have satisfactory legal backing.

It is widely believed that tax evasion is quite common; in any case, enforcement of the tax law is rather lax. Tougher enforcement could easily scare away many people from private business. This leads to a wider issue, namely the problem of confidence.

At present the majority of people working in the formal private sector are probably satisfied with their current income. Perhaps they are not all aware that their relative position in the income distribution is much better than that of small business people in a private market economy. There, craftsmen or small shopkeepers usually have very modest incomes. In Hungary, many of them are in the highest income group. Yet they cannot be sure how long that will last. These individuals or their parents lived through the era of confiscations in the forties. In spite of repeated official declarations that their ac-

tivity is regarded as a permanent feature of Hungarian socialism, deep in their hearts they are not so sure. That is why many of them are myopic profit maximizers, not much interested in building up lasting goodwill by offering good service, and quick and reliable delivery or by investing in long-lived fixed assets. Encouragement and discouragement alternate; quiet periods are interrupted by orchestrated media campaigns crying out against "speculation" and "profiteering." A confidence-strengthening experience of many years is still needed to extend the restricted horizon.

#### D. *The Informal Private Sector, the Second Economy*

We must start with conceptual clarification. Hungarian experts dealing with private activities and income earned outside the state-owned and cooperative sector do not agree on terminology and definitions.<sup>19</sup> The present paper applies the following notions.

To the *informal* private sector belong (a) all private activities pursued outside the formal private sector as defined in the earlier section and (b) all income that does not originate as payment for labor service rendered in government agencies, officially registered nonprofit institutions, state-owned firms, cooperatives, and formal private business. The activity and income components (a) and (b) of the definition are not completely overlapping.

The *first economy* is composed of the governmental agencies, officially registered nonprofit institutions, state-owned firms, and cooperatives. The *second economy* is the total of the formal and informal

private sector.<sup>20</sup> A caveat: the decisive mark distinguishing "first" and "second" economy in this usage is not legality versus illegality, or payment of taxes versus tax evasion. (That is the common criterion in the Western literature on the "shadow economy.") Many activities in our second economy are legal; a part of second-economy income is taxed. We apply a system-specific classification. The first economy is the sphere that was regarded by the prereform orthodox interpretation as the genuine "socialist" sector, the second economy was classified as "nonsocialist." We discuss this manifold sphere from various angles.

*Working time.* Hungary, with some delay, follows the tendency of industrialized economies by reducing hours of work in the first economy. Simultaneously, activities in the second economy consume more time than ever before. Some people work in the second economy as their main activity. Some members of a family are active full time in the private household farm, while other members of the family are employed in the state-owned farm or in the cooperative. Many pensioners have a full- or half-time (illegal or "half-legal") activity. But the majority work in the second economy as an activity supplementary to a first job in one of the formal sectors. They "moonlight" in the evenings, weekends, during paid vacations. It happens, illegally, that one works while on sick leave, paid by the national health service, or during regular paid working hours at one's first job.

Aggregate data are shown in Table 6. The incredibly high (one to two) ratio between total working time spent in the second and first economies demonstrates the high preference of a large part of the Hungarian population for more income and higher consumption over leisure. This is

<sup>19</sup> The most important Hungarian writings are by István R. Gábor (1979, 1985), Gábor and Péter Galasi (1981 H), Tamás Kolosi (1979 H), Pál Belyó and Béla Drexler (1985 H), János Timár (1985a H, b H), and Katalin Falus-Szikra (1986). In the foreign literature pioneering work was done by Gregory Grossman (1977) concerning the Soviet second economy; a detailed bibliography is presented in Grossman (1985).

<sup>20</sup> Here we follow more or less the definition of the second economy used by Gábor, the leading Hungarian expert in the field.

TABLE 6  
THE RELATIVE SIZE OF THE SECOND ECONOMY

	First Economy (State-owned Firms and Cooperatives) (percent)	Second Economy (Formal and In- formal Private Sector) (percent)
1. Distribution of total active time (excluding time spent on household work and transport) in 1984	67	33
2. Contribution of social sectors to residential construction (measured by the number of new dwellings) in 1984	44.5	55.5
3. Contribution of social sectors to repair and maintenance services in 1983	13	87

Sources: Row 1: Timár (1985b H, p. 306); Row 2: CSO H. Row 3: Drexler and Belyó (1985 H, p. 60). Both studies rely on microsurveys (interviews and questionnaires).

Notes: The table covers both the officially recorded and unrecorded part of total activities. The figures concerning the latter are based on estimates elaborated by the researchers who compiled the data base of the table. Figures in row 1 are aggregates of all branches of production, including residential construction. The latter is also surveyed separately in row 2. The "first economy" figures include the activities of so-called enterprise business work partnerships, which will be discussed in section IV.E. The "second economy" figures include household farming and "auxiliary production of employees." The "second economy" figures in row 3 are the sum of three parts: formal private sector 14%, informal private sector excluding "do-it-yourself" activities 19%, and "do-it-yourself" activities within the household 54%.

just one of the secrets of the "Hungarian miracle": people are willing to work more if allowed; they will exert themselves for the sake of higher consumption. In a large fraction of families, members are working to the point of psychological and physical exhaustion.<sup>21</sup>

Of the 33% of active time spent on second-economy activities, a smaller part is spent in the formal private sector, thus contributing to the officially recorded GDP. The larger part of the 33% is spent in the informal private sector. Depending on how productivity is measured in the informal private sector, this subsector may add perhaps 20% or more to the officially recorded GDP.

<sup>21</sup> As mentioned in the note to Table 5, many individuals have a first job in the state or cooperative sector and a second job in the formal private sector. Although we count this activity as part of the formal private sector, the comments above concerning the extension of working time apply also to this group.

*Production for own consumption: the role of the household.* Before the reform there was a strong tendency to reduce the role of the family and the household as a producing and property-owning institution and to shift more and more activity and property into the domain of large and preferably state-owned organizations. The reform reversed this trend to some extent.

The reversal is not consistent and is accompanied by many frictions. A kind of vacuum is present in some areas: the old forms of socialized services are no longer fully responsible for meeting demands on them while the household and the family are not yet in a position to take over these responsibilities satisfactorily (Bauer 1985b).

We have already discussed an important form of production for own-consumption: the extension of private household farming and auxiliary agricultural production.

These activities serve partly the household's own needs. The other extremely important area is housing. The trend in the prereform system was toward public housing. All apartment houses were nationalized; tenancy was rationed by the bureaucracy. This trend has been reversed. In 1980 71.4% of the total housing stock was in private ownership and the rest was owned by the state. The trend continues: 85.7% of the dwellings built in 1984 were private.<sup>22</sup> The new shift is associated with severe social and economic tensions (Iván Széleányi 1983, Zsuzsa Dániel 1985).

A further example is transport. Khrushchev advocated the complete abolition of private cars in favor of public transport as a desirable trend in socialism. Present-day Hungary is overcrowded with private cars. The number of privately owned cars increased 13.7 times from 1966 to 1984. But repair service and the building and maintenance of the road network cannot keep up with the increasing number of private cars.

There are many more examples of the reversal from "socialization" toward self-sufficiency within the family and household: child care, sick care, cooking and other household work, and do-it-yourself repair and maintenance. How far the latter trend has gone is demonstrated in Table 6.

*Contribution to consumer supply.* Another approach to indicate the importance of the second economy is to look at the contribution to consumer supply. Table 6 presents a few characteristic data demonstrating the extremely large share of the second economy in this respect. And, of course, there are many more areas not shown in the table.

*Yields of private property.* The preceding paragraphs of section IV.D discussed activities where the participant in the sec-

ond economy combined his own labor with his own equipment, say the toolkit of a repairman. It may happen, however, that he uses, illegally, the equipment of his first-economy employer. There is also another category of person: income earners whose source of second-economy income is a return from some private property. The most common example is the subletting of privately owned housing or renting out second homes in recreation areas, either to long-term lessees or to short-term visitors and tourists.<sup>23</sup>

*Legality.* There is a wide continuum running from perfectly legal, "white" and perfectly illegal, "black" activities, the latter being only the cases where law is strictly enforced. An informal private sector, or a second economy exists in all socialist countries. Quantitative comparison is not possible, but experts are convinced that the share of this sector in Hungary is much larger than in most other socialist economies. This is a direct consequence of the state's attitude. There is a deliberate effort to legalize formerly illegal activities, or to be tolerant of ambiguous cases, provided that these activities are regarded as socially useful or at least not harmful. This tolerance awakened tremendous energy in a large part of the population. It is certainly not a very satisfactory organization of human activity; it is full of conflicts and unfair actions, but still, without the tolerance, this energy would remain dormant. It must be added, however, that the spirit of tolerance and the trend toward legalization do not work consistently. What has been said about alternations of encouragement and discouragement of the formal private sector applies

<sup>22</sup> Tenants in a public apartment have in practice a "quasi ownership" under the conditions of chronic shortage. Tenancy can be inherited, sold for money illegally to a new tenant or legally to the state. Therefore it is not out of place to put the arrangement of subletting in a public apartment in the same category as using the equipment of a first-economy employer.

<sup>22</sup> Source: CSO H (1984, p. 470), (1985b, p. 10).

even more to the informal sector. As a consequence, the situation here is rather unstable.

#### E. *Combined Forms*

A characteristic feature of the Hungarian reform is the experimentation with different mixed forms, combining state ownership with private activity or private ownership. We discuss briefly three forms.

*Firms in mixed ownership.* A few dozen firms are owned jointly by the Hungarian state and foreign private business. A sharing of business by the Hungarian ownership state and Hungarian private business does not exist.

*Leasing.* This form is widely applied in trade and in the restaurant sector. Fixed capital remains in state ownership, but the business is run by a private individual who pays a rent fixed by a contract and also taxes. He keeps the profit or covers the deficit at his own risk. The lessee is selected by auction; the person offering the highest rent gets the contract. In 1984 about 11% of the shops and 37% of the restaurants were leased this way (CSO H, 1985a, p. 210).

*Enterprise business work partnership.* In contrast to "business work partnership," which is a form clearly belonging to the formal private sector as shown in section IV.C, here we look at a group of people who are employed by a state-owned firm. They do some extra work under special contract for extra payment, but in some sense within the framework of the employer state-owned firm. In many cases the team is commissioned by its own firm. Or it gets the task from outside, but with the consent of the employer. In many instances the members are allowed to use the equipment of the firm. The "enterprise business work partnership" can be established only with the permission of the managers of the firm; each member needs a permit from his superiors to join the team. More detailed

description and analysis can be found in Teréz Laky (1985) and David Stark (1985).

The purpose of creating this new form is clear. It gives a legal framework for certain kinds of activities, formerly not legal, mentioned in section IV.D, and at the same time allows the employing firm to keep some control over these activities. Many managers support this arrangement because they can get around central wage regulation in this way: the partnership undertakes work for extra payment that it would otherwise do (perhaps in regular overtime) within the framework of its regular job. The number of such units is increasing rapidly. It was 2,775 in 1982 and grew to 17,337 by the end of 1984 (CSO H 1985a, p. 326). Many observers are highly critical and question whether it is really efficient to have a first and a second job within the same organization. On the other hand, the arrangement may perhaps lead to some healthy intrafirm decentralization later on.

#### F. *Summary: Strong Market Orientation and Bureaucratic Constraints*

As we have seen, the reform process has created or strengthened a large variety of nonstate ownership forms and activities. It is a great merit of the reformers that they allowed or initiated such experimentation with courage and an open mind.

In the midst of the variety of forms, there are a few common features. The economic units in the nonstate sector (perhaps with the exception of large cooperatives) have a hard budget constraint; they cannot rely on the paternalistic assistance of the state as far as survival and growth are concerned. They enter business in the hope of profits and they go out of business if they fail financially. All activities are more market oriented and price responsive than those carried out by the state-owned firms.

The nonstate sector acts as a built-in sta-



bilizer of the economy, which is less sensitive to the "stop-go" fluctuations so strongly felt in the state sector. It is able to grow even when there are troubles with the balance of payments or restrictions on import and investment.

The nonstate sector is, however, not free from bureaucratic control. There are permanent restrictions and regulations, and also unpredictable, improvised interventions and frequent changes of the rules. The same phenomenon we have just praised, namely, bold experimentation, can also be rather confusing. The lack of stability and the many bureaucratic restrictions do not give full scope to the initiative of the individuals engaged in the nonstate sector.

Nevertheless, with all its shortcomings, the appearance of a vital nonstate sector represents something brand new and important in the history of socialist countries.

## V. Overall Resource Allocation and Distribution

In sections III and IV we surveyed various social sectors. In section V we shall be studying issues that cut across the economy, regardless of the breakdown by ownership forms. We shall also make a few remarks concerning the relationship between the social sectors.

### A. Planning

In the usage of socialist countries "planning" has a double meaning. First, it refers to an *ex ante* exploration of possibilities and comparison of alternative solutions. A plan sets targets and assigns instruments to fulfil the targets. The "product" of the planners' work is the plan itself—a document accepted by the political and legislative bodies, which serves as a working program for the government. Second, the term *planning* is also used to denote what the present pa-

per calls direct bureaucratic control. The official ideology of the command economy deliberately wanted to convince people that these two concepts are inseparable.

We suggest a strict separation of the two concepts and reserve the term *planning* only for the first. The official documents of the Hungarian reform adopt this interpretation when they repeat that, although mandatory targets and quotas are abolished, planning must be maintained.

Nominally, these resolutions have been implemented. The planning apparatus is at work, and plans are elaborated in due time. Nevertheless, a closer examination shows that planning has not found its appropriate new role. One would expect that after being freed from the nuisances of "dispatcher work," (that is, setting quotas, checking performance, urging deliveries, etc.) the planner's time and intellectual energy could finally be spared for his genuine tasks of exploration, calculation, comparison, and *ex ante* coordination. These possibilities have not been fully exploited. There are efforts to elaborate long-term plans, but the linkage between these plans and the actual regulation of economic affairs is rather weak. Planners have achieved impressive results in coordinating short-term macropolicy and the microregulation described in section III.B in a state of emergency (for example, when tensions developed in Hungary's international credit position). Yet the problem has not been solved. The old methodology suitable for imperative planning is no longer applicable and a consistent new methodology compatible with the systemic changes is not yet available.

### B. Fiscal System

The fiscal system has remained extremely large (Mihály Kupa 1980 H, László Muraközy 1985 H). Total central government expenditure was 52.8% of GDP in 1970, grew to 62.7% by 1980, and decreased slightly to 61.3% by 1983.

In capitalist economies this ratio is strongly correlated with the level of development (GDP/capita). For the sake of comparison we look at European capitalist countries that have reached about the same level of development as Hungary: in 1980 the government expenditure/GDP ratio was 37.7% in Finland, 36.5% in Greece, and 29.4% in Spain.<sup>24</sup>

There are several reasons for the high degree of centralization of financial flows through the government budget. Most of them are associated with issues already discussed, the huge burden of subsidies, the deep fiscal involvement in financing investment, and the expenditures of the large bureaucratic apparatus. These properties of the fiscal system provide remarkable evidence that genuine decentralization of economic processes through market coordination has not gone very far.

The next section will discuss the role of banks and the capital market. One remark can be made in advance. The fact that a very large fraction of the economy's net income flows through the central government budget allows less scope for the activity of banks, other financial intermediary institutions, and enterprises and households in the reallocation of funds. This is eminently clear in the case of investment allocation. The larger the fraction of investment financed by the central budget, the less disposable capital is left

<sup>24</sup> The Hungarian ratio in 1980 was somewhat higher even than the ratio of Sweden, Denmark, and the Netherlands, although all three countries are at a much higher level of development and spend relatively much more on welfare purposes. The ratio of governmental expenditure on production (mainly investment and subsidies) in industry, agriculture, transport, commerce, and service as a percentage of GDP was 25 in Hungary and less than 9 in the average of a sample of 14 industrialized capitalist countries. The figures are calculated on the basis of definitions assuring comparability. They refer to the same set of expenditures (including central and local governmental expenditures). GDP is calculated according to Western definitions for Hungary.

Source of all data is Muraközy (1985 H, pp. 746-47) and an unpublished paper of Muraközy.

to the discretion of other actors and the less possibility arises for the creation of a well-functioning capital market.

In that respect there is a trend toward decentralization. The share of investment financed by the central government budget was 40% in 1968-70 and diminished to 21% in 1981-84; the share of investment financed by bank credit and by the producers' own savings increased accordingly (János Dudás 1985 H).

### C. *Monetary System, Capital Market*

In a fully monetized market economy money is a means of integrating the whole national economy. That is assured by the possibility that money is a universal medium of exchange, which can be used by each money holder for any purpose he chooses. The classical prereform system fragmented the economy in this respect. Certain types of money flows between different segments of the system were permitted while others were strictly prohibited. The state sector paid money wages to the households, but, except for minimal tightly restricted consumer credits granted by the monopoly savings bank, it could not give credit to customers. The household paid the price for goods and services marketed by the state sector, but could not invest its savings in real capital formation by the state sector. Even within the state sector money was "earmarked." The firm had at least three kinds of money: "wage money," "money covering current costs other than wages," and "investment money." These categories of money could be used only for the assigned purpose (Brus [1961] 1972, Grossman 1966, Kornai 1980, Tardos 1980).

The reform has brought some relaxation in this respect; the economy has come closer to a system integrated by money. It is, however, still far from one with free flows of funds.

*Banks.* Until recently, Hungary has had

a "monobank system." In that respect it has remained similar to the classical socialist economy. The Hungarian National Bank has combined two functions: it plays the usual role of a central bank and also acts as a commercial bank, practically as the monopoly commercial bank for most financial operations of the state-owned and cooperative sectors. There have also been a few specialized banks, for example, the foreign-trade bank and the bank for household savings, but these have enjoyed only a seeming autonomy.

There are now resolutions to establish a two-level banking sector in the near future. There will be a central bank at the top with the usual functions and a set of state-owned, but competing commercial banks on the lower level, regulated by the central bank. Even before this plan is realized, a few small financial intermediaries that can lend for specific purposes (certain kinds of investment, innovation, export promotion) have been established. In any case, we do not know yet how much genuine autonomy the units of the decentralized banking sector will enjoy and to what extent they will be subject to the pressure of the central and local bureaucracy.

*Firms.* Before the reform, the state-owned firm had almost no choice concerning financial decisions.<sup>25</sup> The portion of working capital that had to be deposited in the Central Bank was strictly regulated; there was a very small part of gross investment financed from retained profit and depreciation funds. Trade credit was prohibited. The bank had a strictly protected monopoly in granting credit to the firm.

Now the situation is different. Let us start with the asset side. A firm can deposit money in the bank and in the near future it will also be able to choose between banks. It can grant trade credit to other

<sup>25</sup> Because space is limited, we cannot discuss the same issue as far as other social sectors are concerned.

TABLE 7  
THE AVAILABILITY OF BONDS, MAY 1986

	Total nominal value (billion forints) <sup>a</sup>	Yield (percent)	Relative size (percent)
Available to private citizens	4.5	7-13	2.0 <sup>b</sup>
Available to firms and institutions	2.0	7-15	9.7 <sup>c</sup>

*Sources:* Data on nominal values, information given by the State Development Bank. Data on yield, *Heti Világgazdaság* (1986 H, p. 55).

<sup>a</sup> Covers all bonds issued prior to May 1986.

<sup>b</sup> Total nominal value ÷ stock of household deposits in savings banks.

<sup>c</sup> Total nominal value ÷ stock of outstanding bank investment credit.

firms buying its output.<sup>26</sup> It can invest in its own plant or it can establish a small subsidiary, holding only a part of equity in the newly created firm. It can contribute to the capital of a newly founded company jointly with other firms or institutions. It can buy bonds issued by other firms or local authorities and traded on the bond market. Table 7 provides information about the size of the bond market.

On the liability side the situation is symmetrical; only a few additional remarks are needed. Interest rates have been raised several times since 1976. The average interest rate for medium- and long-term credits granted to state-owned firms was 13% in 1985, that is, a real interest rate of about 5%. There is no conclusive evidence concerning how firms re-

<sup>26</sup> This is only partly a sign of healthy "commercialization" of trade relationships. A large fraction of trade credit is involuntary; the buyer simply does not pay the bill in the agreed time, in this way forcing the seller to grant credit. Actually this arrangement is becoming a common method of "softening the budget constraint." Involuntary trade credit was, of course, known before the reform.

sponded to the increase in interest rates (Miklós Breitner 1985 H, Tivadar Grósz 1986 H). There is permanent excess demand for credit, though the ratio of rejected to accepted credit applications has declined a little. Most observers agree that the sudden decrease of investment activity was achieved mostly through direct bureaucratic intervention into the approval and execution of large projects, and by cutting credit supply—not by the influence of interest policy.

Formerly the only source of credit for the firm was the central bank. Now if the firm wants to raise capital, it can apply to one of the newly created intermediaries just mentioned. As for bonds, they can be bought by households, which opens a new source of fund raising.

The long list of options gives a more favorable impression than does a closer look at the real situation. There are still many formal and informal restrictions both on the asset and the liability side: blocked or temporarily frozen deposits, constraints on self-financed investment. Many of the options are promises for the near future and not yet facts. For example, it is remarkable that firms are not very enthusiastic about buying bonds; the total number of bonds is very small. Most firms prefer to use their savings for reinvestment in their own production even if the expected yield is lower than the return of bonds issued by other firms or local authorities.<sup>27</sup>

*Households.* The set of options open to households has also become wider. Before the reform households could deposit money in the savings bank.<sup>28</sup> They could also buy, under strong legal restrictions,

precious metal or real estate. The reform extended the potential portfolio recently by permitting the purchase of bonds. The first steps were taken to establish a kind of institutionalized bond market. This is an important new possibility, but its true significance is hard to judge at this early stage.

As mentioned earlier, individuals can lend to other individuals or invest money in a "silent partnership" of a private business. Without sufficient legal protection, however, this may involve high risks.

To sum up: the first vague contours of a credit and capital market are emerging, but the Hungarian economy is still far from overall "monetization" and from the solidified institutions of a full-grown, well-operating, flexible credit and capital market.

#### D. *Labor Market*

While steps toward an extended capital market are modest, movement toward a free labor market is substantial. At the peak of direct bureaucratic centralization, labor was rigorously tied to the workplace. There were various restrictions: administrative prohibition on changing jobs except on the explicit instructions of the authorities, prohibition against taking employment in cities without a special permit, and distribution of many goods and services through employers, the state-owned firms, of such items as housing, child care, recreation, food rations or food, and other consumption goods in kind.

In the course of reform the first two of these restrictions on individual choice have been abolished. Remnants of the third still exist in housing, recreation, health care, and child care. These are, however, less binding ties than before.

Not only has overall full employment been achieved, but hidden rural unemployment was also absorbed in the early seventies. This is an important success. The general chronic excess demand for

<sup>27</sup> This phenomenon indirectly supports the observation that state-owned firms are not highly profit motivated. They are more interested in the expansion of their own capacity.

<sup>28</sup> The interest rate paid for a one-year deposit to households by the savings bank is 5%, while the inflation rate in the last few years has been about 6–9% according to the official statistics.

labor, however, is accompanied by labor hoarding and does not exclude minor frictional unemployment in certain professions or regions (Galasi and György Sziráczky 1985, Károly Fazekas and János Köllő 1985a). Excess demand, together with the elimination of administrative ties, results in high quit rates: 15.7% in 1982, as compared, for example, to 7% in Czechoslovakia in the same year. Labor is sensitive to benefits and also to differentials between the wage offers of different firms and moves quickly in the direction of better terms (Fazekas and Köllő 1985b H). This is true of the labor movement within the state-owned sector. It applies even more to the relationship between the state-owned and the private sectors. Income offered by the formal and informal private sector attracts labor away from state-owned firms, which pay much less. The formal private sector can offer full-time employment. Or employees of the first economy can engage in informal private activities, such as "moonlighting" or even working illegally during regular working time. In any case, the extra activities exhaust the individual and use up much of his energy; hence he will work with less attention and diligence at his first job. Here lies a hidden cost of bureaucratic regulation. State-owned firms are restricted in raising wages, but the formal and even more the informal private sector can get round the restrictions. That is a painful dilemma; simple deregulation of wages would not help if all other circumstances such as excess demand for labor, weak profit motive, soft budget constraint remain unchanged. It would only lead to more forceful wage-push inflationary pressures (Gábor and György Kővári 1985 H, Falus-Szikra 1985 H).

*E. Summary: Coexistence and Conflict of the Social Sectors*

This completes our description of the systemic changes. The observations can be summarized as follows.

Hungary has a multisectoral economy; different forms of ownership coexist and compete with each other. But competition is on unequal terms. With some simplification we may speak about a preference ordering of the bureaucracy: 1. large state-owned firms, 2. small state-owned firms, 3. agricultural cooperatives, 4. non-agricultural cooperatives, 5. formal private sector, 6. informal private sector.<sup>29</sup> This ordering is followed in bail-outs (for 1, 2, and 3; with more certainty for 1), and in handing out credits (1, 2, 3, 4). The formal private sector only occasionally receives these favors; the informal private sector gets nothing. It does not mean, however, that the actual relative position of the various sectors follows the same ranking. Again with some simplification one may say, that the same ordering prevails regarding the following troubles and burdens: frequency and intensity of microinterventions, inspections and auditing, especially interference with price and wage determination, and enforcement of tax laws. In these respects the informal private sector has the advantage of being farther away from the eyes of the bureaucracy. This is an important, although not the only reason why many people prefer, in spite of fewer formal favors, to work in sectors placed lower on the state's preference scale.

Bureaucratic and market coordination are thoroughly intertwined in all sectors. The lower we go on the state's preference scale, the more freedom for market coordination. That is not necessarily because the bureaucracy would deliberately grant this freedom, but at least partly because it is less able to apply the same methods to several thousands of business units or millions of individuals that it can to a few hundred large firms. But even the formal and informal private sectors do not work

<sup>29</sup> In some instances large agricultural cooperatives get more favorable treatment than small state-owned firms.

in a "free" market; the bureaucracy regulates the scope of legality and has many other instruments of restriction and intervention.

There is a feeling of complementarity, but also a feeling of rivalry between the various sectors; and there are collisions between them. The sectors lower on the state's preference scale suffer because in many allocative processes regulated by the bureaucracy, they are "crowded out" by sectors higher on the scale. At the same time, the same lower-preference sectors may be successful in "crowding out" the favorites of the state in the competition on the market. The most important example, namely bidding for labor in short supply, has just been mentioned.

In short: the Hungarian economy is a symbiosis of a state sector under indirect bureaucratic control and a nonstate sector, market oriented but operating under strong bureaucratic restrictions. Coexistence and conflict exist between the social sectors in many ways and all the time.

## VI. *Tensions and Imbalances*

The idea of market socialism is associated with the expectation that the "marketization" of the socialist economy creates equilibrium of supply and demand. It is a crucial litmus test of reform to see whether such equilibrium has been established in Hungary or whether tensions and imbalances characteristic of the former bureaucratic command economy have remained or others appeared.

### A. *The Classical Shortage Economy*

The prereform classical system in Hungary suffered from chronic shortages, and shortages are characteristic of other socialist economies. The first studies were Kornai [1957](1959), Franklyn D. Holzman (1960), Herbert S. Levine (1966). The shortage phenomenon and its causal explanation are analyzed in more detail in the author's book *Economics of Shortage*

(1980). There is widespread excess demand on many markets, associated with queuing, forced substitution of less desired but available goods for the goods desired, forced postponement of purchases, and forced saving. Shortage phenomena torment both the consumer and the producer, the latter in his capacity as buyer of inputs. There is also excess demand for investment resources, for foreign exchange, and, in the more industrialized socialist economies, shortage of labor as well. There are spillover effects: short supply of inputs creates bottlenecks retarding production and generating shortages elsewhere. The unreliability of deliveries induces hoarding of inputs. Shortage breeds shortage.<sup>30</sup>

Chronic shortages do not exclude the appearance of underutilized resources, excess capacities, and excess inventories. On the contrary, shortages even contribute to the creation of unnecessary surpluses, because of hoarding and because of frequent bottlenecks that leave complementary factors of production underutilized.

Chronic shortages damage consumer welfare; the buyer feels frustrated because

<sup>30</sup> There is an important school of thought (frequently called, rightly or wrongly, the "disequilibrium school") dealing with centrally planned economies which denies that shortage is chronic in the classical prereform socialist system or at least on the consumer market of this economy. The intellectual leader of this school is Richard Portes (Portes and David Winter 1977, 1978, 1980; Portes, Richard Quandt, Winter and S. Yeo 1983; Portes 1986). Many remarkable and valuable studies have been produced using the theoretical ideas and econometric methods of this school. An extended bibliography can be found in Portes 1986.

The author has an ongoing debate with the disequilibrium school (Kornai 1980, 1982). The controversy concerns questions of aggregation, measurement and interpretation of the notion of aggregate excess demand, the insulation of the consumer market from the rest of the economy, independence versus co-determination of demand and supply, the existence of forced saving, the relationship between shortage and labor supply, etc. This is not the place to go into these controversial issues. We shall come back to some empirical results of the disequilibrium school in the next section.

of unsatisfied demand and/or forced adjustment to available supply. It means the dominance of the seller over the buyer: the latter is treated rudely and is frequently humiliated. In production, the disturbances of supply and improvised forced substitutions in input-output combinations cause losses of efficiency. The seller has a safe market and the buyer is willing to accept unconditionally what he gets. This leads to the most detrimental consequence of shortage: the lack of stimulus for quality improvement and product innovation.

Chronic shortage is the joint result of several interactive causal factors.

In spite of restrictive efforts on the side of macropolicy, there are systemic tendencies for demand to run to excess. The strongest force is the so-called *investment hunger*, the insatiable demand for investment resources. The hunger appears at all levels of hierarchical control, starting with the top policy makers and planners who seek high growth rates and ending with firms' and shops' managers, who also have a drive to expand. This is closely linked to the "soft budget constraint" syndrome discussed in section III.C. Because potential investment failure does not threaten severe consequences, there is little voluntary restraint on the claimant's demand for investment resources, that is, for project permits, subsidies, or credits. If the budget of the decision maker is not strictly constrained, his desire to expand remains unconstrained as well.

The rush to investment is more intensive in periods when central economic policy is pushing more aggressively for accelerated, forced growth. Central policy pulsates in this respect; stop and go periods, decelerations, and accelerations alternate causing cyclical fluctuations (Bauer 1978, 1981 H, Soós 1975-76, Mária Lackó 1980, 1984).

Demand for intermediate goods is amplified by the tendency to hoard men-

tioned before. The buyer does not insist on getting just what he needs right now, but is willing to purchase everything that may be of some use at a later time.

Demand of producers for imported intermediate goods is very strong. As a counterbalance, central policy wants to push exports. Importers' demand in foreign economies is, of course, constrained.<sup>31</sup> Yet the foreign trade companies in the socialist country are willing to sell at lower prices just to increase the total amount of foreign exchange earned by export. If dumping leads to losses domestically, the loss will be covered by the manifold instruments of the soft budget constraint. In other words, the demand of the state-owned foreign trade sector vis-à-vis producers of exportable goods is almost unlimited, adding a further component to runaway total demand.

Households have a hard budget constraint; in the classical system their income is under tight central control. Therefore excess household demand may or may not appear, depending on macrodemand management exercised, in the first place, through wage and consumer price policy. In some countries in certain periods, however, excess household demand is one of the main sources of runaway total demand (for example in Poland in the last 5-10 years.)

Relative prices are distorted. Many goods and services have absurdly low prices or are distributed free of charge, generating almost insatiable demand.

The adaptive properties of the system are poor for many reasons. That applies to short-term adjustment: quick modification of input-output combinations requires mobile reserves of all complementary factors at all points of production. If there are shortages of one or two factors, bottlenecks do not allow flexible adjust-

<sup>31</sup> Except for the import hunger of other shortage economies for certain goods.

ment. Long-term adaptation is also slow. Uncommitted slack capital should be available for entrepreneurs who want to make use of unforeseen opportunities. But the irresistible investment hunger ties up *ab ovo* all investment resources. The great concentration of net income in the central governmental budget, the bureaucratic procedures of project approval, and the lack of a capital market hinder a fast decentralized adjustment of investible resources.

Adaptation is also dependent on motivation. The producer seller is in a contradictory position. On the one hand, he cannot be indifferent to the urging of the dissatisfied customer, who is supported by his own higher authorities in many cases. On the other hand, he is interested in preserving shortage, which makes his life easier on the output side, because he need not pay much attention to quality, delivery time, and costs.

The relative weight of the different shortage-causing factors is controversial (Soós 1984, Szabó 1985 H, Stanislaw Gomulka 1985, Kornai 1985a, b). There is, however, general agreement in that all these factors play an important role in explaining chronic shortage.

The issues described in sections III.A, B, and C—direct bureaucratic control, soft budget constraint, weak price responsiveness—and the problems discussed above concerning the causes and consequences of chronic shortage are closely interrelated, or more precisely, they are interacting properties of the same system. Chronic shortage is the necessary consequence of a system that is dominated by bureaucratic coordination and that almost totally excludes market coordination. At the same time, shortage is indispensable for the command economy as a legitimation (“rationing, intervention, taut planning are needed because of shortage”), as a stimulant (“produce more because your output is urgently demanded by the

buyer”), and as a lubricant of the creaking mechanism of adaptation (in spite of poor quality, unreliable delivery, and poor adjustment to demand, all output is accepted).

### B. *Preservation and Elimination of Shortages*

Hungary has moved away from the classical shortage economy. In important spheres the change is apparent. All observers agree that the supply of food and of many industrial consumer goods is much better in Hungary than it is in other Eastern European economies. In the winter of 1985–86, when the present paper was written, Hungarian households are provided with electric energy and heating, while in Rumania and Bulgaria drastic measures were introduced to force people to cut energy consumption.

Highly visible signs of improvement notwithstanding, careful examination is needed, because the situation is complex and diverse. We focus on areas where shortages persist and start with a review of *consumer goods and services*.

*Service supplied exclusively by non-business state organizations free of charge or at nominal prices.*<sup>32</sup> The most important example is medical care. Almost insatiable excess demand prevails: long average waiting time for hospital admission (except for emergency), overcrowded hospitals and clinics, hurried examinations, and so on. There is legal private practice, but only for office visits to the physician. Shortage is accompanied by large gratuities to doctors and other medical staff.

*Service supplied exclusively by state monopolies at effective prices.* The most important example is the telephone ser-

<sup>32</sup> Each price has a critical value. Under this value the own-price elasticity of demand is zero; that is, the price is nominal. Above the critical value the own-price elasticity of demand is nonzero; that is, the price is effective. Many goods and services have nominal prices in socialist economies.



vice. Shortage is very severe in this field. The number of telephone lines increased at an annual rate of 4.5% and the number of applications for a line at an annual rate of 7.6% in the last 25 years. The average waiting time is getting longer and longer; at present it is about fifteen years *ceteris paribus*. The network is overutilized: customers have to wait a long time for a dial tone, lines are almost always busy, and wrong connections are frequent.

*Goods and services supplied by a dual system.* The most important example is housing. Most urban apartment houses are publicly owned and rented out at very low rates covering only a small fraction of construction and maintenance costs. Although the right to join the queue (different entitlements based on income, family size, etc.) has been subjected to more severe restrictions, the waiting time in the capital is still several years. The other subsector is composed of condominiums in private ownership, owner-occupied family houses, and sublets. In the private sector, prices and rents are very high. The market operates but with many frictions; real estate intermediaries are few (Dániel 1985).

Another example of duality is the allocation of cars. The supply of new cars is monopolized by a state-owned company. The average waiting time is two to three years. Supply responses tending to preserve shortage can be observed. If the growth of demand is retarded by price increase, authorities and the car sellers monopoly retard supply as well (Zsuzsa Kapitány, Kornai, and Szabó 1984, Ágnes Tibor 1984 H). About one-tenth of all new cars is sold to privileged customers jumping the queue. The other subsector is the private market for second-hand cars. Here, prices are determined by supply and demand.

*Imported consumer goods.* The bulk is both imported and distributed by state-owned firms. Supply is capricious. Equilibrium or excess supply occurs in some

cases. Sometimes demand is created by introducing a new good imported from the West and then supply is cut, causing shortages. A small supplement is the private import of Hungarian tourists: imported (in many instances smuggled) goods are sold on the informal market.

*Goods and services produced and sold simultaneously by various social sectors,* including the formal and informal private sectors. A variety of situations exist. The most typical is equilibrium in the aggregate of a larger commodity group. For example, a sufficient quantity of "shoes" or "meat products" in the shops does not necessarily mean that demand is satisfied: frequently the consumer does not find the kind of shoe or meat product he is looking for, and must therefore resort to forced substitution. Excessive inventories and empty shelves may exist side by side. Concerning the attitude of the seller, in some markets one finds a healthy competition, where attention is paid to the demands of the customer. In some other markets, where shortage persists, the private seller exhibits all the well-known traits prevailing on a sellers' market: he can be rude, may try to cheat, and so on.<sup>33</sup>

As for *intermediate goods*, shortages are rather frequent. Firms do not suffer from brutal cuts of energy supply as in some other Eastern European countries or as in Hungary in the early fifties. It is rather the unreliability of deliveries that causes many losses. That is particularly true for imported intermediate goods, where short supply can cause great troubles in production (Gács 1982). There is an enlightening index, the composition of inventories. In a shortage economy firms

<sup>33</sup> The attitude of the seller vis-à-vis the buyer is determined by the seller's membership in a certain social sector (state-owned firm versus private business) and by the state of disequilibrium in the market (sellers' versus buyers' market). Hungarian experience shows that the second factor is the more important.

TABLE 8  
INTERNATIONAL COMPARISON: COMPOSITION OF  
INVENTORIES IN MANUFACTURING INDUSTRY

Country (Years of Observation)	Ratio of Input Inventories to Output Inventories	
	Lowest	Highest
1. Austria (1975-76)	1.04	1.07
2. Canada (1960-75)	1.06	1.40
3. United Kingdom (1972-77)	1.20	1.56
4. Hungary (1974-77)	5.72	6.38
5. Hungary (1978-84)	4.90	5.25

Sources: Rows 1-4: Chikán (1981, p. 84). Row 5: CSO H.

Note: "Input inventory" covers stocks of purchased materials and semifinished goods; "output inventory" covers goods ready for sale. For more detailed definitions see the sources.

hoard on the input side and output is easily sold: therefore, the ratio of input inventories to output inventories is relatively high. In an economy where selling difficulties are predominant, the reverse tends to be true (Ervin Fábri 1982, Attila Chikán 1981, 1984 H). Table 8 shows that the Hungarian state-owned production sector is still closer to the characteristic situation of a sellers' than to that of a buyers' market.

As mentioned earlier, there is excess demand for credit in general, and for long-term investment credit in particular. Pressure for credit became stronger, because credit supply was cut in the late seventies. These cuts were parts of the general macroadjustment program to improve Hungary's position on the international financial market. Following tough central intervention, investment activity and demand for investment goods fell off.

To sum up: Hungary today is less of a

shortage economy than it was before reform, and some segments have been able to rid themselves of tormenting shortages to some degree. The change has been due more to changes in the proportionate weight of the various social sectors and less to the changes within the dominant state sector. The formal and informal private sectors play a substantial role in filling the gap left by the state sector. But even then, shortages have not been eliminated, because many of their causes have not disappeared.<sup>34</sup> A vicious circle exists: recentralization contributes to the generation of shortages and shortages contribute to the trend of recentralization.

### C. Inflation

Table 9 shows that inflation has accelerated in the past decade.<sup>35</sup> According to a widespread view, the acceleration in Hungary was caused by the reform. This is an oversimplification, although it is not without some truth. Before the reform started, prices and wages had been tightly controlled and fixed for longer periods.

<sup>34</sup> The most important Hungarian representative of the disequilibrium school mentioned in footnote 30 is Katalin Hulyák (1983 H, 1985 H). Based, at least partly, on a different theoretical foundation and the estimation methods applied by Portes and his associates, her empirical results are in conformity with the observations presented above. She demonstrates chronic excess demand for housing, automobiles, and investment resources. As for aggregate consumption, she shows fluctuations in the intensity of general shortage. The chronology and the signs of the fluctuations are closely correlated with fluctuations revealed by other studies, for example Kornai (1982).

<sup>35</sup> We compare Hungary with a small sample of capitalist countries that are close to the Hungarian level of development (measured by GDP/capita). We do not make comparisons with other socialist countries concerning inflation rates, because adequate information about the statistical methodology of constructing price indices in these countries is not available.

Many analysts agree that some hidden inflation exists in all socialist countries all the time. Certain kinds of price increases are not sufficiently reflected in the official price indices because of systematic bias in measurement methods (Kornai 1980, section 15.4, and Domenico M. Nuti 1985).

TABLE 9  
INTERNATIONAL COMPARISON OF INFLATION

	Rate of Increase of Average Annual Consumer Price Index (percent)			
	1960-67	1967-73	1973-78	1978-84
Austria	4.8	4.9	6.8	5.2
Finland	4.8	6.6	13.8	9.2
Portugal	3.4	9.3	22.1	22.9
Spain	4.1	6.8	18.8	13.9
Hungary	1.0	1.6	3.9	7.5

Sources: United Nations (1970, pp. 524-29), (1979, pp. 690-96), (1983b, pp. 200-206), and (1985b, pp. 220-24).

Firms were not particularly interested in profits; hence they had no strong reason to raise prices. Some creeping inflation, however, had been going on already long before the first reform measures (not sufficiently reflected in the official price indices). True, the reform relaxes price and wage control in many spheres and strengthened somewhat the firms' interest in higher profits. Yet these changes are not enough to constitute a full explanation of the acceleration; there are other explanatory factors at work as well.

First of all, in the last few years central macropolicy has been deliberately using inflationary measures as instruments of an austerity program. Hungary has serious problems with foreign indebtedness and with the deterioration of the terms of Hungarian trade; policy makers decided to shift the balance of trade from deficit to surplus by every means possible. As a precondition of such a shift, the growth of domestic consumption had to be stopped or cut back. Prices of many basic consumer goods and services were, therefore, raised again and again by government decrees accompanied by decisions to raise nominal wages as a partial compensation. The deliberate central price and wage increases have put in motion the whole

price level, including prices and incomes in the formal and informal private sectors.<sup>36</sup> Using the terminology introduced in section II.B, we can see that the change in *policy* and not the change in the system is the main causal factor. A similar policy was also applied in certain periods before the reform, for example, in the early fifties when the standard of living was deliberately kept down using the instrument of sudden price increases.

Central policy is ambivalent in this respect. While centrally decided price increases lead the inflationary process, there are official statements attacking managers of firms and the formal and informal private sectors for forcing prices up and for profiteering. Quite a few academic adherents of the reform show a similar ambivalence. They think that inflation, provided it is not too fast, may help the reform, because it makes the correction of distorted relative prices and wages easier. Actually, the same argument comes up also in the official statements justifying some of the price increases. Other economists, the author among them, feel that, with the protracted sequence of partial price increases, Hungary is walking a dangerous path. Each partial price rise has spillover effects in costs of production and/or in the cost of living. The interminable series of partial upward corrections puts in motion the well-known *dynamic process* of the price-cost-wage-price spiral (Klára Csoór and Piroška Mohácsi 1985 H). That can do much harm to the core of decentralization: to financial discipline and rational calculation based on prices and profits. Inefficiencies can be comfortably covered up by passing over cost increases to the buyer.

<sup>36</sup> Unfortunately, the observation of prices and incomes in the formal and informal private sectors is not organized in a satisfactory manner. Petschnig (1985a H, 1985b H) provides many examples of the fact that price increases in these sectors are much faster than in the rest of the economy.

One last remark on the interaction between shortage, inflation, and reform. Shortage, acceleration of inflation, deficits in the trade balance, the growing burden of indebtedness, liquidity troubles, or any other type of tension and unhealthy disequilibrium are good excuses for recentralization. They provide legitimation for suppressing market forces and reviving tight control, formal and informal interventions, and rationing of intermediate goods. This is a trap, because recentralization solidifies the deeper systemic causes that created most of the troubles. In some cases recentralization is accompanied by solemn promises that the measures are only provisional and will be applied only as long as the troubles prevail. The trouble is that the provisional bureaucratic measures tend to become permanent, because they restore the systemic roots of the difficulties.

#### D. External Imbalances

Disequilibrium in the balance of trade and current accounts is not a system-specific phenomenon; many nonsocialist economies are suffering from the same problem. What deserves special attention in this paper are some characteristic linkages in Hungary between external imbalances on the one hand and systemic changes and macropolicies on the other.

There is an ongoing dispute in and outside Hungary about the causes of the external imbalances. Did they occur mainly because of the deterioration of external conditions (worsening terms of foreign trade, intensified protectionism of Western importers, less access to foreign credit, increase of interest rates), or because of the delayed and inefficient response to the changing conditions? Nobody denies that both classes of factors played a certain role; the controversy is about their relative importance. The author joins those who put the emphasis on the latter group of explanatory factors, that is, on the defi-

TABLE 10  
INDICATORS OF GROWTH IN HUNGARY, 1957-84

	Average Annual Growth Rates (percent)			
	1957-67	1967-73	1973-78	1978-84
	(in real terms)			
1. National income	5.7	6.1	5.2	1.3
2. Investment	12.9	7.0	7.8	-3.0
3. Wage per wage earner	2.6	3.1	3.2	-1.4
4. Consumption per capita	4.2	4.6	3.6	1.4
	<u>1972-73</u> <u>1973-78</u> <u>1978-84</u>			
	(at current prices)			
5. Gross convertible currency debt		16.0	38.9	2.8

Sources: Rows 1-4: CSO H. Row 5: *International Currency Review* (1981, p. 31); *Quarterly Review* (1985, p. 33).

Note: The concept of national income is explained in the note to Table 1.

ciencies of Hungarian adjustment to the changes in the external world.

The dividing point in the time series shown in Tables 10 and 11 is 1973-74, the first worldwide oil shock. Before this event Hungarian growth rates were rather similar to the rates achieved by European private market economies. (As in an earlier table, the small sample contains countries that are close to the level of development of Hungary.) There is, however, a striking difference in the response to the oil shock. While the capitalist economies sank into stagflation and recession following the oil shock, Hungary was progressing on the path of forced growth. The expansion drive continued without interruption; foreign credit was easily available. The accumulation of foreign debt was a consequence of two closely intertwined factors: macropolicy aiming at uninterrupted growth at any cost and the lack

TABLE 11  
INTERNATIONAL COMPARISON OF GROWTH RATES  
IN CONSTRUCTION ACTIVITY

	Annual Growth Rates (percent)		
	1968-73	1973-78	1978-81
Austria	5.5	1.0	0.0 <sup>a</sup>
Finland	3.9	1.1	1.8
Portugal	8.9	0.9	—
Spain	5.9	-2.1	-1.9
Hungary	6.6	5.7	-0.6

Sources: United Nations (1979, pp. 365-68; 1983a, pp. 827-30; 1985a, pp. 828-29.

Note: We use construction activity as a proxy for investment activity.

<sup>a</sup> Last period for Austria: 1979-80.

of genuine decentralization, that is, the inconsistencies in reforming the economy. It is difficult to separate "policy" and "system" in this respect. The incomplete change of the system produces (or at least intensifies) the expansionary policy at all levels of the hierarchy. Firms were sheltered from the losses due to the contraction of Western markets and the deterioration of the terms of foreign trade by softening the budget constraint and delaying appropriate changes of domestic relative prices.<sup>37</sup> This is striking evidence that the reform of the state-owned sector remained superficial: the national troubles were not "decentralized" down to the firms, which consequently were not forced to adjust to the new world market situation. Instead of restraint in undertaking new investment and in carefully selecting projects well adapted to the new composition of external demand, an indiscriminating investment hunger continued and was even encouraged by the macropolicy of forced growth.

Finally, after a long delay, macropolicy

<sup>37</sup> The effect of the oil shock was also dampened by the fact that Hungary could obtain Soviet energy at prices below world market level.

responded to the dangers emerging in the external position of the country. Suddenly brakes were applied: radical investment cuts followed by austerity measures and a decline of real wages as mentioned earlier. Again, this has been and has remained mostly a centralized policy. It is not the market response of decentralized agents to price and quantity signals (external prices and quantity signals converted into decentralized domestic signals). Or more accurately, such decentralized signaling plays only a relatively minor role. It is more a result of recentralization, a revival of administrative interventions in favor of import substitution and of a costly forced export drive that helped in solving the most burning troubles of trade imbalances and international liquidity. Hungary's balance of trade improved: its credit worthiness is rather exemplary compared to many other socialist and developing countries. But the deeper roots of external imbalances are alive. Bureaucratic control, both direct and indirect, is incapable of "fine tuning." A system cannot have two faces: rigidities, delays in deliveries, slow innovation and technical progress for domestic use and the opposite for the foreign customer. Efficient foreign trade can be assured only by a breakthrough in the reform process (Marer 1981, Balassa and Laura Tyson 1983, András Köves and Gábor Obláth 1983).

#### E. Individual Choice and Distribution

We have now arrived at the end of the descriptive parts of the paper. There is one more problem to be raised before turning to the discussion of "visions." How do the systemic changes and the remaining or newly emerging tensions and imbalances affect the individual citizen? As shown in Table 10, real consumption was increasing impressively for a while, but was then followed by a slowdown. We pointed out in the previous section that the deceleration cannot be charged to the account of the reform. It is explained by

an unfortunate coincidence of deteriorated external conditions, policy mistakes, and poor adjustment to the external changes due to the inconsistency of systemic change. Something more should be said, however, not about real consumption recorded in official statistics, but about a different aspect of the quality of life: the individual's rights of choice.

We limit the discussion to economic aspects; choice in political, cultural, and moral dimensions is not the topic of the present paper. One more qualification: freedom of economic choice is not a simple question of "yes" or "no," but a matter of degree. We shall glance at the change in the degree of freedom in the different aspects of economic choice.

In the classical command economy the household could choose between marketed goods and services within its budget constraint. But the situation was very far from consumer sovereignty for many reasons.<sup>38</sup> A large part of total consumption was distributed through nonmarket channels by bureaucratic procedures as fringe benefits. As for the marketed part, chronic shortages created a situation in which the buyer bought not what he wanted but what he could get. Recurrent forced substitution is a violation of economic freedom. Prices did not reflect relative scarcities, and supply did not respond to prices. The consumer's choice had only a weak influence on the composition of supply. On the contrary, arbitrary relative consumer prices shaped demand.

A part of saving was forced by shortage; even after forced substitution some money remained practically unspendable. There was no choice between alternative schemes of sick care or retirement; these were fully institutionalized by bureaucratic arrangements. Savings could not be used for productive investment.

The individual's choice of work was limi-

ted. He was free from the great suffering of unemployment, but his choice of profession was, if not dictated, at least "channeled" in the prescribed directions. The working place was assigned in many instances and movement to another job was greatly restricted by administrative prohibitions.

The great achievement of the Hungarian reform is the significant extension of choices. And the great shortcoming of the reform is that it did not go far enough in this extension.

Consumers' choice has become wider. Shortages are less intensive and less frequent, but they still exist. The domain of bureaucratically rationed goods and services has become narrower but has not been eliminated. There are goods and services where prices convey the consumers' signals to the producer, who responds to them with changes in supply. But this linkage is restricted to certain spheres, mainly where the consumer is served by the non-state sector and even there the functioning of the market is distorted. In the rest of the economy the composition of supply is controlled by a peculiar combination of influences: in part by legitimate protection furthered by well-considered plans that promote society's general long-term interests against myopic and individualistic decisions, but also by arbitrary paternalistic bureaucratic interference with the consumer's free choice,<sup>39</sup> and by the influence of the consumer's decision and, finally, also by merely random effects.

The choice set concerning saving and investment has become wider as well. The most important change is that individuals can invest in their own private housing instead of passively waiting for bureau-

<sup>38</sup> The problem is discussed in a wider context by Ferenc Fehér, Ágnes Heller, and György Márkus (1983).

<sup>39</sup> The arbitrariness of intervention in consumer choice is demonstrated by the high dispersion of turnover tax rates on consumer goods. No reasonable social preference imposed on individual preferences can explain a turnover tax of +11% on household chemicals, +5% on shoes, of -11% on sugar and of -26% on fish (Csikós-Nagy 1985 H, p. 58).

cratic allotment. True, the purchase or building of a private house or condominium requires tremendous sacrifices caused by bureaucratic obstacles, shortages, and scarcity of credit. There are new options in holding financial assets, although the number of alternatives is still small. There is still little choice between alternative schemes of medical insurance or retirement.

The individual now has much more choice in deciding on a profession and job. Administrative restrictions of labor movements have been eliminated. The most important new opportunity is the impetus given to the formal and informal private sector. Those who feel they have entrepreneurial abilities have some (rather modest) possibilities of using them. Those who are willing to work more for the sake of higher consumption can enter the second economy. The study by Robert Tardos (1983 H) showed that in response to the stagnation or decline of real wages, 47% of the families opted for working more in the first and second economy, because they wanted to maintain their standard of living. Again, the choice set is still rather restricted by frictions and administrative limits.

The problem of individual choice is strongly linked to income distribution. The prereform system associated the narrow limitations of individual choice with a certain type of egalitarian tendency. Income differentials of employees of the state-owned and cooperative sectors were moderate, although there was never a perfectly egalitarian distribution. Privileges existed for people higher up in the bureaucracy, not so much in the form of higher money wages as in perquisites: a service car, allotment of better housing, special shops with better supply, special hospitals and places of recreation and so on.

As mentioned earlier, the Hungarian economy achieved full employment and

job security. The latter is a controversial issue; several economists point out negative side effects on working morale and on the artificial preservation of inefficient production lines. Income differentials in the first economy exhibit a mild decreasing trend as demonstrated in Table 12. There are suggestions that the rapid growth of the second economy counterbalanced this change or perhaps led to some increase of inequality, but there is no reliable evidence supporting these conjectures. Careful studies (Kolosi 1980 H, Szelényi 1983) show that Hungary now exhibits neither the characteristic inequalities prevailing in the prereform classical socialist system, nor the typical inequalities of a capitalist economy, but a peculiar combination of these. We still see differentials based on one's position in the hierarchy, but these appear less in the form of fringe benefits handed out in kind; they are more often reflected in money income differentials. (Although the shift is not complete, privileges in kind still exist.) At the same time, new inequalities have been created by the market, and in particular, by the appearance of the formal and informal private sector. While incomes at the upper end of the distribution increased, social policy at the lower end did not develop sufficiently. For a long time, reformers had a one-sided technocratic orientation, concerned only with growth, efficient adaptivity, trade balance, and financial regulators and did not pay sufficient attention to the great moral objectives of social justice (Zsuzsa Ferge 1984 H).

In this respect as well, Hungary is a mixture of the distributional consequences of both bureaucracy and market.

## VII. *Confrontation of Visions with Reality*

Having described the reformed Hungarian economy we turn to alternative vi-

TABLE 12  
INCOME DISTRIBUTION

	Shares in Total Recorded Money Income (percent)			
	1967	1972	1977	1982
1st decile	4.1	4.0	4.5	4.9
2nd decile	6.0	5.9	6.3	6.4
3rd decile	7.1	7.0	7.3	7.3
4th decile	8.0	7.9	8.1	8.1
5th decile	8.9	8.8	8.9	8.8
6th decile	9.9	9.8	9.8	9.6
7th decile	10.9	10.8	10.8	10.7
8th decile	12.2	12.1	12.0	11.9
9th decile	14.0	14.0	13.7	13.7
10th decile	18.9	19.7	18.6	18.6
Measure of inequality	1.92	1.96	1.84	1.82

Source: CSO H.

Note: The interpretation of the first 10 rows is as follows. The population is ranked in increasing order according to recorded per capita money income and divided into 10 classes. The first figure in the first column means: the poorest 10% of the population received 4.1% of the total recorded money income of the population in 1967.

The term *recorded money income* excludes recorded but nonmoney income (for example benefits in kind), and also unrecorded income, mostly earned in the second economy.

The last row shows a synthetic measure of inequality calculated by the Central Statistical Office in Hungary. Income earners are divided into two classes. Group 1: income earners above average; group 2: income earners below average. "Measure of inequality"; ratio of average income of group 1 to average income of group 2.

sions of market socialism.<sup>40</sup> We will discuss past ideas (sections 1 and 2) as well as contemporary Hungarian thinking (sections 3 and 4). Some visions took the form of pure theory as in the Lange model; others are blends of normative theory and practical proposals.

#### A. Oscar Lange's Market Socialism

The literature of the celebrated debate about socialism in the thirties, including the original writings and the later appraisals, fill up a library.<sup>41</sup> The present paper

does not survey the literature but concentrates on Lange's classical paper (1936-37) which is the central piece in the debate.

The first question is a positive one: is the reformed Hungarian system a "Lange economy" or anything that comes close to a Lange economy? Based on information provided by sections III and IV the reader has the answer already: a definite "no."

Caution is needed in formulating a fuller reply. Lange presents in a brief pa-

<sup>40</sup> The alternative visions of *market* socialism are only a small subset of the much larger variety of visions concerning alternative forms of socialism.

<sup>41</sup> The most outstanding works in the Great Debate were Enrico Barone [1908](1935), Ludwig von Mises

[1920](1935), Fred M. Taylor (1929), Friedrich Hayek (1935), and, of course, Lange's paper. The classical summary is Abram Bergson's (1948) review. Important new points have been added by Bergson (1967), Alec Nove (1983), and Don Lavoie (1985).



per a *model*. Model building inevitably abstracts from complications of reality irrelevant to the main line of argument. It is a cheap and unfair criticism of a theoretical model to point out that reality is richer than the model. With certain simplification we focus on the most substantial assumptions and properties of the theory, both in a comparison with Hungarian reality and in considering the criticism of the theory that follows later.

Because a description of the Hungarian system has been presented already, very brief references will suffice. Lange thought of the possibility that socialism would be a dual economy consisting of a public and a private sector, but he formulated his disputed suggestions for the sector in public ownership. Therefore, it is legitimate to compare the Lange model with the Hungarian state-owned sector.

The Lange economy has a Walrasian information structure. Sufficient information is provided by the price system and by the observation of excess demand. A trial and error method generates Walrasian equilibrium prices or at least prices that converge toward them. Agents respond to prices. In contrast to that, the prices of the output produced by Hungarian firms even since reform are not Walrasian prices and do not converge to such prices. Official declarations do not reveal even an intention to generate market-clearing prices everywhere in the economy (Csikós-Nagy 1985 H). The prices of products or services originating in the state-owned sector do not reflect relative scarcities. The prices of products and services originating in the nonstate sector may come closer to Walrasian prices but only with severe distortions. The non-market-clearing prices of the state sector spill over to the rest of the price system. Apart from the question whether prices give the right signal, the main problem is that price responsiveness of the state-owned firms is weak. They give as much

or, in many cases, more attention to other signals.

In the Lange economy the firm is essentially a profit maximizer. In contrast, the Hungarian firm has multiple objectives; the search for more profit is only one of its set of objectives and not necessarily the strongest one. The profit incentive is weakened by the soft budget constraint syndrome. The firm's vertical dependence on the superior bureaucracy dominates its horizontal dependence on the market.

In the Lange economy the central authorities restrict their activities to price determination. In the Hungarian economy the bureaucracy is busy intervening in all dimensions of economic life. Intervention into price formation is only a small part of its hyperactivity.

The question is still open: is the establishment of a Lange economy viable and desirable? The first is the primary question, because in case of infeasibility, the second question loses relevance. Of course the experience of a single country cannot give a convincing answer, but can help in the reconsideration of speculative argumentation.

Lange's model is based on erroneous assumptions concerning the nature of the "planners."<sup>42</sup> The people at his Central Planning Board are reincarnations of Plato's philosophers, embodiments of unity, unselfishness, and wisdom. They are satisfied with doing nothing else but strictly enforcing the "Rule," adjusting prices to excess demand. Such an unworldly bureaucracy never existed in the past and will never exist in the future. Political bu-

<sup>42</sup> What Lange had in mind concerning the role of the Central Planning Board and the market when he wrote his paper is controversial. In a private letter addressed to Hayek he stressed the importance of market forces directly determining prices in sectors where genuine competition prevails (Tadeusz Kowalik 1984). The present paper does not discuss Lange's thinking in the thirties, but the so-called Lange model as perceived by the profession (in textbooks and papers referring to Lange) from the time of publication up to now.

reauracies have inner conflicts reflecting the divisions of society and the diverse pressures of various social groups. They pursue their own individual and group interests, including the interests of the particular specialized agency to which they belong. Power creates an irresistible temptation to make use of it. A bureaucrat must be interventionist because that is his role in society; it is dictated by his situation. What is now happening in Hungary with respect to detailed microregulation is not an accident. It is rather the predictable, self-evident result of the mere existence of a huge and powerful bureaucracy. An inherent tendency to recentralization prevails (Teréz Laky 1980).

Lange's model is based on an equally erroneous assumption concerning the behavior of the firm. He expects the firm to follow the Rule designed by the system engineer. But society is not a parlor game where the inventor of the game can arbitrarily invent rules. Organizations and leaders who identify themselves with their organizations have deeply ingrained drives: survival, growth, expansion of the organization, internal peace within the organization, power and prestige, the creation of circumstances that make the achievement of all these goals easier. An artificial incentive scheme, supported by rewards and penalties, can be superimposed. A scheme may support some of the unavowed motives just mentioned. But if it gets into conflict with them, vacillation and ambiguity may follow. The organization's leaders will try to influence those who imposed the incentive scheme or will try to evade the rules.

These remarks are well known in the modern sociology, economics, and social psychology of bureaucracy, hierarchy and organizations. The Lange of the thirties, although a convinced socialist, lived in the sterile world of Walrasian pure theory and did not consider the sociopolitical underpinning of his basic assumptions.

Lange hoped that a market could be *simulated* by a bureaucratic procedure. This hope appears time and again in contemporary writings, for example in Hungary (Csikós-Nagy 1985 H). There is an inner contradiction in the logic of the idea. An army of bureaucrats is needed to adjust and readjust millions of prices almost continuously. The contemporary successor of Lange might say: determine with the aid of computers only price indices of large aggregates and give Rules to the actors prescribing calculation principles for breaking down the aggregates. This is happening, more or less, in Hungary. But as was said above, the firm can get around the calculation principles if these conflict with its interest. As a countermeasure, the authorities will add more detailed instructions, restrictions, and prohibitions. What emerges from this procedure is not a successfully simulated market, but the usual conflict between the regulator and the firms regulated by the bureaucracy.

The next objection concerns competition. Lavoie (1985) rightly points out that in the neoclassical debate about socialism, the emphasis shifted one-sidedly to the issue of computing the correct price signals. What got lost was the crucial Mises-Hayek-Schumpeter idea regarding "rivalry." In a genuine market process actors participate who want to make use, and can make use, of their specific knowledge and opportunities. They are rivals. In that sense the market is always in a state of dynamic disequilibrium. The total potential of all rivals normally exceeds actual demand. Some win and some lose. Victory brings rewards: survival, growth, more profit, more income. Defeat brings penalties: losses, less income, and in the ultimate case, exit. Using the vocabulary of the present paper, the Mises-Hayek-Schumpeter market implies a hard budget constraint and a buyers' market. As long as the system and the policy do not assure the prev-

absence of these two conditions, there is no genuine market. The great shortcoming of the Lange model is that it does not even contemplate these conditions and many of Lange's followers committed the same error.

This argument is related to our last remark. Lange had in mind a market using a Walrasian feedback mechanism that equilibrates supply and demand. There are, however, built-in tendencies in a centrally controlled system based on state ownership generating chronic excess demand in various spheres of the economy as described in section VI.

### B. *The Naïve Reformers*

This is a name given by the author to a group of economists who were the pioneers of the reform process. In Hungary, György Péter (1954a H, b H, 1956 H, 1967) must be mentioned first. Others are Sándor Balázs (1954 H), Péter Erdős (1956 H), Tamás Nagy (1956 H), and István Varga (1957 H). The author of the present paper, when writing his first book, *Overcentralization*, in 1955-56 (published in English in 1959), can be put in the same category.<sup>43</sup> Brus [1961] (1972) in Poland, Evsey G. Liberman [1962] (1972) in the Soviet Union, and Ota Sik (1967) in Czechoslovakia belong to the same group. This is an arbitrary and all too short list, just to illustrate the concept of naïve reformer. We refer here to early works of authors who, with the exception of Péter and Varga, are still alive; most have deviated more or less from their early theoretical position.

The group is heterogeneous; the members did not share exactly identical opinions. We shall point out a few common characteristics. These seem to be all the more significant because it was exactly this set of common ideas that was so clearly reflected in the official resolutions and

documents of the Hungarian reform in 1968.<sup>44</sup> What is more, rather similar ideas appear in Chinese official writings nowadays. Most Hungarian economists have lost their naïveté through long and sometimes bitter experience. But many of their colleagues in other socialist countries, impatiently advocating the start of a reform, having no first-hand experience as yet, show the same naïveté today and are irritated by the critical attitude of Hungarians.

Before turning to critical remarks, first a word of acknowledgement. The fact that the author's early work is included in the list above must not restrain us, out of false modesty, from recognizing the intellectual and political courage of the pioneering works. The descriptive part of these studies contains a deep and still valid critical analysis of the prereform system. The prescriptive part points in the direction of the later practical reforms in Hungary and China and to the reform attempts in Czechoslovakia and Poland: firms' autonomy, right price signals, profit incentive, use of market forces, shift toward a buyers' market, and so on. But the pioneers did not foresee many complications which, as it turned out, are the barriers to consistent applications of their proposals.

The naïve reformer does not recognize the conflicts between indirect bureaucratic control and the market. He thinks that abandoning the command system and turning from direct to indirect control is a sufficient condition for the vigorous operation of a market. His line of thought can be characterized as follows. Let us have a profit-maximizing, almost autonomous firm. It will respond with appropriate changes of supply and demand to the

<sup>44</sup>The most significant documents can be found in the collection by Henrik Vass (1968 H). See also the book of Nyers et al. (1969). Nyers was the secretary of the party in charge of economic affairs at the time of the 1968 measures and can be regarded as the chief architect of the 1968 blueprint.

<sup>43</sup>References to surveys are listed in footnote 2.

signals of relative prices, interest rates, taxes, credit rations. If so, there is no contradiction between central regulation and market. Just the contrary, the market is an "instrument" in the hands of the central policy maker. The officers in the central authorities pull all the strings of indirect control and the profit-maximizing agents respond like obedient puppets. As Hungarian experience demonstrates, this fundamental assumption is wrong.

The underlying philosophy is an optimistic belief that perfect harmony can be achieved or at least approached. A market is a rather good, but not perfect automaton. Market imperfections should be corrected by central interventions, because the center knows social interests *ex officio* better than do blind market forces. The naïve reformers admit that central planners are not infallible. But then, planners' imperfections can be eliminated with the aid of the market, which makes some corrections automatically. The faith placed in the harmonious, mutually correcting duality of "plan" and "market" (or, in the language of the present paper, bureaucracy and market) is the centerpiece of the pioneers' naïveté.

The coexistence of bureaucratic and market coordination does not guarantee that we get "the best of two worlds." It does not lead inevitably to the opposite case either,— "the worst of two worlds." These are extreme simplifications. Certain mutual corrections are possible. If market forces lead to income distribution that is judged to be unfair by society, or to undesirable externalities damaging to the environment and so on, the bureaucracy can and should apply corrective measures. (Even these corrections, however, are not made sufficiently in Hungary.) If state interventions have undesirable side effects, market disequilibria can give a signal and the planner can make adjustments provided that he listens to the signal. But such favorable complementarity cannot be re-

lied on too much. As section III.E pointed out, the greater the bureaucratic intervention, the more one intervention weakens the effect of the other. Each string puller thinks that he can control the firm; the firm, confused by a hundred strings, starts to twitch. It does not respond clearly to bureaucratic regulation, but does not respond to market signals either. This is what László Antal (1979) aptly termed the "illusion of regulation."

The naïve reformers searched for a reasonable line of separation between the role of the bureaucracy and the role of the market. Many of them thought that such a separation line could be drawn like this: "simple reproduction" (in Marxian terms) regulated by the market and "extended reproduction" by the planners. In other words, current production controlled by the market and investment by the planner. It turned out that this separation is not viable. On the one hand, the bureaucracy is not ready to restrict its activity to the regulation of investment. On the other hand, the autonomy and profit motive of the firm become illusory, if growth and technical development are separated from the profitability and the financial position of the firm and are made dependent only on the will of higher authorities.

The pioneer reformers wanted to reassure all members of the bureaucracy that there would be ample scope for their activity. Their intention is understandable. The reform is a movement from "above," a voluntary change of behavior on the side of the controllers and not an uprising from "below" on the side of those who are controlled. There is, therefore, a stubborn inner contradiction in the whole reform process: how to get the active participation of the very people who will lose a part of their power if the process is successful. The reassurance worked too well in the Hungarian case; the bureaucracy was not shattered. The number of people

employed by the apparatus of economic administration changed hardly at all (Kornai 1984). Small wonder that, instead of the harmonious coexistence of "plan" and "market" or the establishment of a "regulated market," we got the phenomenon of dual dependence, described in section III.B which actually gives dominant influence to the bureaucracy. And as was explained earlier, once bureaucratic intervention exceeds a certain critical threshold, the market is more or less deprived of energy.

The naïve reformers were concerned with the problems of the state-owned sector and did not spend much hard thought on a reconsideration of the nonstate sectors' role. It turned out, however, that up to the present time, it has been just the nonstate sectors that have brought the most tangible changes into the life of the economy.

### C. *Galbraithian Socialism*

The present Hungarian economic community cannot be easily classified. In a certain sense, every economist and government official is an adherent of reform: reform is the officially declared policy of the political leadership and the government. What really matters is not general notions but the concrete appraisal of the present system and the practical proposals for the future. In these respects the views are heterogeneous; debates go on about dozens of issues. Two economists who agree about Issue No. 1 may disagree about Issue No. 2. Each individual has his own personal collection of criticisms and proposals. Nevertheless, for the orientation of the foreign reader this section and the next will delineate two "schools." A warning is in order: there is some arbitrariness in my characterizations. Those who undeniably belong to one or to the other schools may still maintain some individual reservations or dissents. What we present are rather stylized "prototypes" of two

somewhat amorphous currents of thought.

We call the first school *Galbraithian socialism*. This is a name coined by the present writer; it may easily be that neither the members of the school nor Galbraith would be pleased. Anyway, Galbraith's work is a very characteristic reference in the writings of the school (László Horváth 1976 H, Ferenc Kozma 1983a H, b H, Tamás Sugár 1984 H, Andrea Szegő 1983a H, b H). A dispute, marked sometimes by rather sharp polemics, goes on between them and the school of *radical reformers* whose thoughts will be reviewed in the next section. The ideas of the first school can be understood best in the framework of the dispute.

The Galbraithians contend that the radicals advocate an anachronistic system. The radicals, they say, want to introduce a mechanism into a socialist economy that would recall early 19th-century Manchester capitalism: a market free from any governmental intervention and the predominance of small economic units. They are socialistic Friedmanites—so the rebuke goes—although the true nature of contemporary capitalism is quite different. And here comes the emphatic reference to John Kenneth Galbraith (1967a, b) and to other authors describing modern private market economies. Contemporary capitalism is a dual economy. The first sector is a small group of huge and very powerful corporations, many of them in monopolistic or oligopolistic positions, intertwined with and sheltered by the government. It operates in an environment created by a large and powerful bureaucracy that intervenes in the economy continuously through Keynesian demand management, price and wage regulation, protectionist measures, and so on. The second sector is composed of small producers, small merchants, and the households, whose activities are coordinated by the market. Although both sectors do exist, the first is the really powerful and domi-

nant one and the second is ancillary and subservient. If that is true in case of modern capitalism—so the argument of the Galbraithian school goes—there is no reason to require more decentralization in socialism. On the contrary: a socialist system has the possibility and the obligation to apply central planning and coordination more consistently and establish more thorough links between the central planners and the large enterprises. The crucial role of central planning must not be disguised bashfully, but should be openly and proudly declared and, of course, much better organized than before. The large monopolies, oligopolies, and the state associated with them must become “entrepreneurial”; “entrepreneurship” should not be a privilege of the small units.

The Galbraithian school is accused in some writings of desiring the restoration of the prereform command economy. As far as their published writings are concerned, these do not suggest a return to an all-embracing command economy. What they do suggest is the legitimation of the status quo. They justify the dualities of the present system: the coexistence of public and private sectors, bureaucracy and market, large and small firms, provided that the first component in all these pairs has the undisputed upper hand. Some of their writings suggest that they do not have much confidence either in the market or in the private sector and would rather see their roles diminished. They would legitimate the actual state of affairs, suggesting minor changes for improvement, but reject any further radical change that would go much beyond the present situation. For that purpose the school proposes to utilize all theoretical results and practical experience of contemporary capitalism: Kaleckian and Keynesian macroeconomics, the textbooks of Western business schools, the lessons drawn from study tours to ministries, large banks and corporations in industrial-

ized countries. Every bit of experience that points in the directions outlined above is welcome.

It is, of course, a paradoxical “ideological” support for present Hungarian practice to say: “Look, the system is in many respects not so very different from the practice of modern capitalism.” The trouble is that the similarity is exaggerated. True, modern capitalism is a system very different from a perfectly competitive atomistic Walrasian world. Admitting that, there are decisive differences between today’s Hungarian economic mechanism and the system of highly developed capitalist economies (the “West” for short in what follows). Without seeking completeness we underline only a few attributes relevant in the present context.

There is a state- and a nonstate sector in the agriculture, industry, and commerce of both systems, but the proportions are radically different. The state sector is dominant in Hungary, while it is an important but minor sector in the West.

There are powerful large firms in both systems, but the size distribution is very different. The concentration in Hungary is much higher than in the West, as shown in Table 3.

The “soft budget constraint” syndrome appears in both systems. In Hungary it is the normal way of life; in the West similar phenomena are more nearly an exception. Related to this is the issue of price responsiveness, which is rather weak in the Hungarian state-owned sector and strong in Western business life, including large corporations.

There are bureaucratic interventions in both systems. In Hungary it is all-encompassing; millions of microinterventions make the state-owned firm highly dependent on the authorities. In the West the influence of the governmental bureaucracy is not negligible, but the frequency and intensity of intervention are much smaller. By and large it does not exceed

the critical threshold where the vigor of the market would be diminished.

Shortage and surplus coexist in both systems. In Hungary shortages are widespread; strong competition of the sellers for the favor of the buyer is rather exceptional. In the West, the reverse is true. Shortages appear sporadically, but the typical situation is rivalry between competitors for the buyers' attention. That applies not only to small business but to the large corporations as well. They too feel the threat of actual or potential competition, of newcomers, large or small, of new products brought to the market by firms in the same sector or in other sectors, and also the competition of foreign sellers.

In the dialectics of the debate, however, the proponents of the "Galbraithian" school deserve full attention, because they put their fingers on some weak points in the argumentation of the other school, the radical reformers.

#### D. *The Radical Reformers*

This is not a group with a commonly accepted consistent reform program. We are talking about economists working in different research institutes or in the apparatus of some higher authorities who share more or less similar opinions about the reform. The most characteristic writings are those of Nyers and Tardos (1978, 1979, 1984), Tardos (1986), Bauer (1984, 1985a), Antal (1985a H, 1985b), but there is a much larger set of articles written in a similar spirit.<sup>45</sup>

Radical reformers elaborate profound critical analyses of the present situation; this paper has made extensive use of these

<sup>45</sup> A pioneer of radical reform was Tibor Liska (1963 H, 1969 H). Later he elaborated a blueprint of socialism based on leasing state-owned capital to individuals. His ideas are clearly distinguishable from the proposals of other radical reformers listed above. Space does not permit me to take up his suggestions and their criticism. Liska's program is discussed in Jenő Bársony (1982), Norman Macrae (1983), and István Siklaky (1985 H).

studies. We focus here on their normative proposals. Out of the fragments a blueprint of market socialism takes shape. These are more circumspect suggestions than those of the naïve reformers of 20–30 years ago. The main ideas may be summarized as follows.

A system of market-clearing prices is needed; this and only this price determination principle is acceptable. Price determination must be left to the market. Deviation from these principles can be allowed only exceptionally. Profit incentives should be strengthened to make them sufficiently responsive to prices. Beyond that, new incentive schemes must be introduced; firms should be stimulated to try to increase their net worth as their primary goal.<sup>46</sup>

The distortion of the size distribution should be corrected. It would be good to encourage the appearance of medium- and small-size economic units by a variety of policies to support the free entry of new units and the breakup of monopolies or overconcentrated, excessively large units. Large firms are needed only when they generate economies of scale and are able to operate successfully in worldwide competition.

Barriers to competition must be eliminated. Various forms of competition should be promoted: rivalry between units belonging to different social sectors, between large, medium, and small units, between domestic production and import.

A reform of the system dedicated consistently to these objectives, together with appropriate macropolicy, should greatly extend the scope of the buyers' market.

Barriers to a free labor market must be eliminated. The state sector must not be at a disadvantage relative to the rest of

<sup>46</sup> This is a reasonable maximand. Unfortunately, the doubts raised in earlier sections against the viability of artificial "rules," "incentive schemes" imposed on living organizations with inherent endogenous motivations, apply also to this proposal.

the economy in acquiring labor. More flexibility of wage determination is needed.

Tough financial discipline, the hardening of the budget constraint, must be assured. This effort must be combined with more decentralization in the allocation of funds and with the creation of a flexible capital market. The possibility of bankruptcy must be an ultimate threat. At the same time, prosperous firms must have the opportunity to expand quickly by self-financing, by loans or by raising capital on the capital market. As a precondition for such changes the share of the government budget in the total flow of income must be diminished.

A commercial banking system must be fully developed and must operate according to business principles.

More competition must be allowed in export and import activities. Realistic exchange rates must become more influential. Conditions of import liberalization and full convertibility must be created.

Laws are needed that protect private business and clarify unambiguously the legal possibilities and limitations of private activities.

Political conditions of systemic economic changes must be created; the various social and economic groups must get appropriate political representation. At the same time, the state must continue to play an active role in the economy. Its main obligations are the macromanagement of demand, the regulation of monopolies, the development of the infrastructure, the protection of society against harmful externalities, the redistribution of personal income for the sake of social justice.

The changes listed above and perhaps a few more important measures must be introduced in a consistent manner, as a "package." Any one of these changes, implemented separately without the appropriate conditions created by the other necessary changes can be risky or harmful.

The author of this paper is convinced that the implementation of these proposals is highly desirable. Yet quite a few substantial questions are left open. The problem of ownership and property rights is not clearly elaborated in the writings of the radical reformers. This large issue can be divided into two subproblems.

First, what should be the future of non-state ownership and, in particular, private ownership in the blueprint of a reformed socialist system? Can its share be enlarged? Is a small unit with seven employees the upper limit of a private enterprise acceptable in a socialist country?

Second, is the traditional form of state ownership compatible with the proposed changes listed above, including strong profit motivation, free entry, hard budget constraint, flexible wage determination, workable capital market?<sup>47</sup> Different authors offer various solutions for separating the firms' management from the governmental bureaucracy. Some economists suggest labor-management, because that might assure independence from the bureaucracy (Bauer 1984, István Csillag 1983 H).<sup>48</sup> There are counterarguments: the history of Yugoslav labor-management and also the first experiences with the participation of employees in the selection and appointment of managers are not sufficiently reassuring. Others, for example Tardos (1982), suggest the separation of management from a special institution that would be the declared representative of "ownership interests." The latter, like a board of directors in a capitalist joint stock corporation would appoint and supervise the managers. Critics are sceptical: can ownership interest be simulated by an artificially created body, which is commissioned (by whom? by the bureau-

<sup>47</sup> This is an objection raised repeatedly by the opponents of these proposed changes. Szegő (1983b H).

<sup>48</sup> A comprehensive survey is presented in Tamás Sárközy (1982).



cracy?) to represent society as the "owner"?

Many arguments put forward in earlier sections of this paper come to mind. Is genuine autonomy of the public firm under the conditions of the Hungarian political structure feasible? Will the bureaucracy observe a voluntary restraint of its own activity without exceeding the limits assigned by the proposals surveyed above?

Such questions lead to the ultimate problem: can a reform process in a socialist country go much beyond what has been accomplished in Hungary? Or does contemporary Hungary exhibit more or less the ultimate limits of reform? Other minor systemic changes, whatever their desirability, are irrelevant when considering the essence of this question.

The author must frankly confess his own ambivalence. As a Hungarian citizen he sincerely hopes that the answers to the series of questions raised above will be positive. As an occasional adviser he may try to help the process go in the direction outlined. As a researcher he reserves the right to doubt.

One lesson that can be safely drawn from study of the socialist economies is the large degree of unpredictability as far as deep system-wide changes are concerned. The questions raised above cannot be answered by speculation, only by historical experience. Up to now, Hungary does not provide a conclusive answer. We must wait and see what may be revealed by Hungarian or Yugoslav or Chinese experience or by the history of any other socialist country that may take the route of reform.

#### REFERENCES

*This list does not include works in Hungarian. These are distinguished in the text by the letter "H". (See Footnote 1.) Readers wishing to obtain the list of Hungarian references should write to the Journal or the author.*

- ANTAL, LÁSZLÓ. "Development—with Some Digression. The Hungarian Economic Mechanism in the Seventies," *Acta Oecon.*, 1979, 23(3-4), pp. 257-73.
- . "About the Property Incentive," *Acta Oecon.*, 1985b, 34(3-4), pp. 275-86.
- BALASSA, BÉLA. *The Hungarian experience in economic planning*. New Haven: Yale U. Press, 1959.
- . "The Economic Reform in Hungary. Ten Years After," *Europ. Econ. Rev.*, Oct. 1978, 11(3), pp. 245-68.
- . "Reforming the New Economic Mechanism in Hungary," *J. Compar. Econ.*, Sept. 1983, 7(3), pp. 253-76.
- BALASSA, BÉLA AND TYSON, LAURA. "Adjustment to External Shocks in Socialist and Private Market Economics." Mimeo. Washington, DC: World Bank Development Research Department, 1983.
- BARONE, ENRICO. "The Ministry of Production in the Collectivist State," in *Collectivist economic planning*. Ed.: FRIEDRICH A. HAYEK. London: Routledge & Kegan Paul, [1908] 1935, pp. 245-90.
- BÁRSONY, JENŐ. "Tibor Liska's Concept of Socialist Entrepreneurship," *Acta Oecon.*, 1982, 28(3-4), pp. 422-55.
- BAUER, TAMÁS. "The Contradictory Position of the Enterprise Under the New Hungarian Economic Mechanism," *Eastern Europ. Econ.*, Fall 1976, 15(1), pp. 3-23.
- . "Investment Cycles in Planned Economics," *Acta Oecon.*, 1978, 21(3), pp. 243-60.
- . "The Second Economic Reform and Ownership Relations: Some Considerations for the Further Development of the New Economic Mechanism," *Eastern Europ. Econ.*, Spring/Summer 1984, 22(3-4), pp. 33-87.
- . "Reform Policy in the Complexity of Economic Policy," *Acta Oecon.*, 1985a, 34(3-4), pp. 263-74.
- . "The Unclearing Market." Mimeo. Budapest: Institute of Economics, 1985b.
- BERGSON, ABRAM. "Socialist Economics, in *A survey of contemporary economics*. Ed.: HOWARD S. ELLIS. Homewood, IL: Irwin, 1948, pp. 1412-48.
- . "Market Socialism Revisited," *J. Polit. Econ.*, Oct. 1967, 75(5), pp. 655-73.
- BERLINER, JOSEPH S. *Factory and manager in the USSR*. Cambridge, MA: Harvard U. Press, 1957.
- BOGNAR, JÓSEF. "Further Development in Economic Reform," *The New Hungarian Quart.*, Autumn 1984, 25(95), pp. 45-54.
- BORNSTEIN, MORRIS. ed. *The Soviet economy: Continuity and change*. Boulder, CO, & London: Westview Press, 1981.
- BRUS, WŁODZIMIERZ. *The market in a socialist economy*. London: Routledge & Kegan [1961] 1972.
- CHIKÁN, ATTILA. "Market Disequilibrium and the Volume of Stocks," in *The economics and management of inventories*. Ed.: ATTILA CHIKÁN. Amsterdam: Elsevier, 1981, pp. 73-85.
- CSÁKI, CSABA. "Economic Management and Organization of Hungarian Agriculture," *J. Compar. Econ.*, Sept. 1983, 7(3), pp. 317-28.

- DÁNIEL, ZSUZSA. "The Effect of Housing Allocation on Social Inequality in Hungary," *J. Compar. Econ.*, Dec. 1985, 9(4), pp. 391-409.
- DONÁTH, FERENC. *Reform and revolution: Transformation of Hungary's agriculture 1945-1975*. Budapest: Corvina, 1980.
- EHRlich, ÉVA. "The Size Structure of Manufacturing Establishments and Enterprises: An International Comparison," *J. Compar. Econ.*, 1985a, 9(3), pp. 267-95.
- FÁBRI, ERVIN. "Superficial Changes and Deep Tendencies in Inventory Process in Hungary," *Acta Oecon.*, 1982, 28(1-2), pp. 133-46.
- FALUS-SZIKRA, KATALIN. "Wage and Income Disparities Between the First and Second Economies in Hungary," *Acta Oecon.*, 1986, 36(1-2), forthcoming.
- FAZEKAS, KÁROLY AND KÖLLŐ, JÁNOS. "Fluctuations of Labour Shortage and State Intervention after 1968," in PÉTER GALASI AND GYÖRGY SZIRÁCSZKY, 1985, pp. 42-69.
- FEHÉR, FERENC; HELLER, ÁGNES AND MÁRKUS, GYÖRGY. *Dictatorship over needs*. Oxford: Blackwell, 1983a.
- GÁBOR, R. ISTVÁN. "The Second (Secondary) Economy. Earning Activity and Regrouping of Income Outside the Socially Organized Production and Distribution," *Acta Oecon.*, 1979, 22(3-4), pp. 291-311.
- . "The Major Domains of the Second Economy," in PÉTER GALASI AND GYÖRGY SZIRÁCSZKY, 1985, pp. 133-78.
- GÁCS, JÁNOS. "Passive Purchasing Behaviour and Possibilities of Adjustment in the Hungarian Industry," *Acta Oecon.*, 1982, 28(3-4), pp. 337-49.
- GALASI, PÉTER AND SZIRÁCSZKY, GYÖRGY, eds. *Labour market and second economy in Hungary*. Frankfurt & NY: Campus, 1985a.
- GALBRAITH, JOHN KENNETH. *The new industrial state*. Boston: Houghton-Mifflin, 1967a.
- . *American capitalism*. Boston: Houghton-Mifflin, [1952] 1967b.
- GOMULKA, STANISLAW. "Kornai's Soft Budget Constraint and the Shortage Phenomenon: A Criticism and Restatement," *Econ. Planning*, 1985, 19(1), pp. 1-11.
- GRANICK, DAVID. *Management of the industrial firm in the USSR*. NY: Columbia U. Press, 1954.
- . "Central Physical Planning, Incentives and Job Rights," *Comparative economic systems: Present views*. Ed.: ANDREW ZIMBALIST. Boston, The Hague: Kluwer-Nijhoff, 1984.
- GREGORY, PAUL R. AND STUART, ROBERT C. *Comparative economic system*. Boston: Houghton-Mifflin, 1980.
- . *Soviet economic structure and performance*. NY: Harper and Row, 1981.
- GROSSMAN, GREGORY. "Gold and the Sword: Money in the Soviet Command Economy," in *Industrialization in two systems*. Ed.: HENRY ROSOVSKY. NY: John Wiley, 1966, pp. 204-36.
- . "The 'Second Economy' of the USSR," *Problems of Communism*, 1977, 26(5), pp. 25-40.
- . "The Second Economy in the USSR and Eastern Europe: A Bibliography." Mimeo. Berkeley & Durham: U. of California and Duke U., 1985.
- HALPERN, LÁSZLÓ AND MOLNÁR, GYÖRGY. "Income Formation, Accumulation and Price Trends in Hungary in the 1970s," *Acta Oecon.*, 1985, 35(1-2), pp. 105-31.
- HARE, PAUL; RADICE, HUGO K. AND SWAIN, NIGEL, eds. *Hungary: A decade of economic reform*. London & Boston: Allen & Unwin, 1981.
- HAYEK, FRIEDRICH A., ed. *Collectivist economic planning*. London: Routledge & Kegan Paul, 1935.
- HEWETT, EDWARD A. "Lessons of the 1970's and Prospects for the 1980's," in *East European economic assessment. Part I, country studies*. A Compendium of Papers Submitted to the U.S. Congress: JOINT ECONOMIC COMMITTEE. Washington, DC: U.S. GPO, 1981.
- HOLZMAN, FRANKLYN D. "Soviet Inflationary Pressures 1928-1957: Causes and Cures," *Quart. J. Econ.*, May 1960, 74(2), pp. 167-88.
- HUNTER, HOLLAND. "Optimal Tautness in Developmental Planning," *Econ. Develop. Cult. Change*, July 1961, 9(2), pp. 561-72.
- INTERNATIONAL CURRENCY REVIEW, May 1981, 13(2), p. 31.
- KAPITÁNY, ZSUZSA; KORNAI, JÁNOS AND SZABÓ, JUDIT. "Reproduction of Shortage on the Hungarian Car Market," *Soviet Stud.*, 1984, 36(2), pp. 236-56.
- KEREN, MICHAEL. "On the Tautness of Plans," *Rev. Econ. Stud.*, Oct. 1972, 39(4), 469-86.
- KEREN, MICHAEL; MILLER, JEFFREY AND THORNTON, JAMES R. "The Ratchet: A Dynamic Managerial Incentive Model of the Soviet Enterprise," *J. Compar. Econ.*, Dec. 1983, 7(4), pp. 347-67.
- KONRÁD, GYÖRGY AND SZELENYI, IVÁN. *The intellectuals on the road to class power*. NY: Harcourt Brace Jovanovich, 1979.
- KORNAI, JÁNOS. *Overcentralization in economic administration*. London: Oxford U. Press, [1957] 1959.
- . "Resource-Constrained Versus Demand-Constrained Systems," *Econometrica*, July 1979, 47(4), pp. 801-19.
- . *Economics of shortage*. Amsterdam: North-Holland, 1980.
- . *Growth, shortage and efficiency*. Oxford: Blackwell, 1982.
- . "Bureaucratic and Market Coordination," *Osteuropa Wirtschaft*, Dec. 1984, 29(4), pp. 306-19.
- . "On the Explanatory Theory of Shortage. Comments on Two Articles by K. A. Soós," *Acta Oecon.*, 1985a, 34(1-2), pp. 145-64.
- . "Gomulka on the Soft Budget Constraint: A Reply," *Econ. Planning*, 1985b, 19(2), pp. 49-55.
- . "The Soft Budget Constraint," *Kyklos*, 1986, 39(1), pp. 3-30.
- KORNAI, JÁNOS AND MATITS, ÁGNES. "Softness of the Budget Constraint—An Analysis Relying on Data of Firms," *Acta Oecon.*, 1984, 32(3-4), pp. 223-49.

- KÖVES, ANDRÁS AND OBLÁTH, GÁBOR. "Hungarian Foreign Trade in the 1970s," *Acta Oecon.*, 1983, 30(1), pp. 89-109.
- KOWALIK, TADEUSZ. "Review on the Economics of Feasible Socialism Written by Alec Nove 1983," *Contribution to Political Economy*, Mar. 1984, 3(1) pp. 91-97.
- LACKÓ, MÁRIA. "Cumulating and Easing of Tensions," *Acta Oecon.*, 1980, 24(3-4), pp. 357-77.
- . "Behavioral Rules in the Distribution of Sectoral Investments in Hungary, 1951-1980," *J. Compar. Econ.*, Sept. 1984, 8(3), pp. 290-300.
- LAKI, MIHÁLY. "Liquidation and Merger in the Hungarian Industry," *Acta Oecon.*, 1982, 28(1-2), pp. 87-108.
- . "The Enterprise Crisis," *Acta Oecon.*, 1984, 32(1-2), pp. 113-24.
- LAKY, TERÉZ. "The Hidden Mechanism of Recentralization in Hungary," *Acta Oecon.*, 1980, 24(1-2), pp. 95-109.
- . "Enterprise Business Work Partnership and Enterprise Interest," *Acta Oecon.*, 1985, 34(1-2), pp. 27-49.
- LANGE, OSCAR. "On the Economic Theory of Socialism," *Rev. Econ. Stud.*, Oct. 1936 & Feb. 1937, 4(1-2), pp. 53-71, 123-42.
- LAVOIE, DON. *Rivalry and central planning. The socialist calculation debate reconsidered*. Cambridge: Cambridge U. Press, 1985.
- LEVINE, HERBERT S. "Pressure and Planning in the Soviet Economy," in *Industrialization in two systems*. Ed.: HENRY ROSOVSKY. NY: John Wiley, 1966, pp. 266-85.
- LIBERMAN, EVSEY G. "The Plan, Profits and Bonuses," in *Socialist economics: Selected readings*. Eds.: ALEC NOVE AND D. M. NUTI. Middlesex: Penguin Books, [1962] 1972, pp. 309-18.
- LINDBLOM, CHARLES. *Politics and markets. The world's political economic systems*. NY: Basic Books, 1977.
- MACRAE, NORMAN. "Into Entrepreneurial Socialism," *The Economist*, 19-25. Mar. 1983, 286(7281), pp. 23-29.
- MARER, PAUL. "The Mechanism and Performance of Hungary's Foreign Trade, 1968-79," in P. HARE ET AL., 1981, pp. 161-204.
- . *East-West technology transfer. Study of Hungary 1968-1984*. Paris: OECD, 1986a.
- . "Economic Reform in Hungary: From Central Planning to Regulated Market," *East-European economics: Slow growth in the 1980's*. Country studies on Eastern Europe and Yugoslavia, Vol. 3, Joint Economic Committee, Congress of the United States, Washington, DC: U.S. GPO, 1986b.
- MARRESE, MICHAEL. "Agricultural Policy and Performance in Hungary," *J. Compar. Econ.*, Sept. 1983, 7(3), pp. 329-45.
- MISES, LUDWIG VON. "Economic Calculation in the Socialist Commonwealth," *Collectivist economic planning*. Ed.: FRIEDRICH A. HAYEK. London: Routledge & Kegan Paul, 1935, pp. 87-130.
- MONTIAS, JOHN M. *The structure of economic system*. London & New Haven, CT: Yale U. Press, 1976.
- NEUBERGER, EGON AND DUFFY, WILLIAM. *Comparative economic systems: A decision-making approach*. Boston & London: Allyn & Bacon, 1976.
- NOVE, ALEC. *The economics of feasible socialism*. London: Allen & Unwin, 1983a.
- . *The Soviet economic system*. London: Allen & Unwin, 1983b.
- NUTI, DOMENICO MARIO. "Hidden and Repressed Inflation in Soviet-Type Economics: Definitions, Measurement and Stabilisation," *EUI Working Paper*, No. 85/200, 1985 Oct.
- NYERS, REZSŐ; BAGOTA, BÉLA AND GARAM, JÓZSEF. *Economic reform in Hungary. Twenty-five questions and twenty-five answers. An interview with Rezso Nyers*. Budapest: Pannónia, 1969.
- NYERS, REZSŐ AND TARDOS, MÁRTON. "Enterprises in Hungary Before and After the Economic Reform," *Acta Oecon.*, 1978, 20(1-2), pp. 21-44.
- . "What Economic Development Policy Should we Adopt?" *Acta Oecon.*, 1979, 22(1-2), pp. 11-31.
- . "The Necessity for Consolidation of the Economy and the Possibility of Development in Hungary," *Acta Oecon.*, 1984, 32(1-2), pp. 1-19.
- PÉTER, GYÖRGY. "On the Planned Central Control and Management of the Economy," *Acta Oecon.*, 1967, 2(1-2), pp. 23-45.
- POLÁNYI, KARL. *The great transformation*. NY: Farrar & Rinehart, 1944.
- PORTES, RICHARD. "Economic Reforms in Hungary," *Amer. Econ. Rev.*, May 1970, 60(2), pp. 307-13.
- . "The Tactics and Strategy of Economic Decentralization," *Soviet Stud.*, Apr. 1972, 23(4), pp. 629-58.
- . "Hungary: Economic Performance, Policy and Prospects," in *East European economics post-Helsinki*. Joint Economic Committee, Congress of the United States, Washington, DC: U.S. GPO, 1977.
- . "The Theory and Measurement of Macroeconomic Disequilibrium in Centrally Planned Economies." *Econometrica*, forthcoming.
- PORTES, RICHARD; QUANDT, RICHARD; WINTER, DAVID AND YEO, S. "Macro-economic planning and disequilibrium: Estimates for Poland." London: Centre for Economic Policy Research Discussion Paper No. 91, 1986.
- PORTES, RICHARD AND WINTER, DAVID. "The Supply of Consumption Goods in Centrally Planned Economies," *J. Compar. Econ.*, Dec. 1977, 1(4), pp. 351-65.
- . "The Demand for Money and for Consumption Goods in Centrally Planned Economies," *Rev. Econ. Statist.*, Feb. 1978, 60(1), pp. 8-18.
- . "Disequilibrium Estimates for Consumption Goods Markets in Centrally Planned Economies," *Rev. Econ. Stud.*, Jan. 1980, 47(1), pp. 137-59.
- QUARTERLY REVIEW, Budapest. 1985, 3(3), p. 33.
- RÉVÉSZ, GÁBOR. "Enterprise and Plant Size: Structure of the Hungarian Economy," *Acta Oecon.*, 1979, 22(1-2), pp. 47-68.
- ROMÁN, ZOLTÁN. "The Conditions of Market Competition in Hungarian Industry," *Acta Oecon.*

- SÁRKÖZY, TAMÁS. "Problems of Social Ownership and of the Proprietary Organization," *Acta Oecon.*, 1982, 29(3-4), pp. 225-58.
- SIK, OTA. "Socialist Market Relations and Planning," in *Socialism, capitalism and economic growth. Essays presented to Maurice Dobb*. Ed.: C. H., FEINSTEIN. Cambridge: Cambridge U. Press, 1967, pp. 133-57.
- SIPOS, ALADÁR. "Relations Between Enterprises in the Agro-Industrial Sphere in Hungary," *Acta Oecon.*, 1983, 31(1-2), pp. 53-69.
- SOÓS, KÁROLY ATTILA. "Causes of Investment Fluctuations in the Hungarian Economy," *Eastern Europ. Econ.*, Winter 1975-76, 14(2), pp. 25-36.
- \_\_\_\_\_. "Á Propos the Explanation of Shortage Phenomena: Volume of Demand and Structural Inelasticity," *Acta Oecon.*, 1984, 33(3-4), pp. 305-20.
- STARK, DAVID. "The Micropolitics of the Firm and the Macropolitics of Reform: New Forms of Workplace Bargaining in Hungarian Enterprises," in *State versus markets in the world-system*. Eds.: PETER EVANS, DIETRICH RUESCHEMEYER, AND EVELYNE HUMBER STEPHENS. Beverly Hills, CA: Sage, 1985, pp. 247-69.
- SWAIN, NIGEL. "The Evolution of Hungary's Agricultural System Since 1967," in P. HARE ET AL., 1981, pp. 225-51.
- SZABÓ, JUDIT AND TARAFÁS, IMRE. "Hungary's Exchange Rate Policy in the 1980's," *Acta Oecon.*, 1985, 35(1-2), pp. 53-79.
- SZALAI, ERZSÉBET. "The New Stage of the Reform Process in Hungary and the Large Enterprises," *Acta Oecon.*, 1982, 29(1-2), pp. 25-46.
- SZAMUELY, LÁSZLÓ. "The First Wave of the Mechanism Debate in Hungary 1954-57," *Acta Oecon.*, 1982, 29(1-2), pp. 1-24.
- \_\_\_\_\_. "The Second Wave of the Economic Mechanism Debate and the 1968 Reform in Hungary," *Acta Oecon.*, 1984, 33(1-2), pp. 43-67.
- SZELÉNYI, IVÁN. *Urban inequalities under state socialism*. Oxford: Oxford U. Press, 1983.
- TARDOS, MÁRTON. "The Role of Money: Economic Relations Between the State and the Enterprises in Hungary," *Acta Oecon.*, 1980, 25(1-2), pp. 19-35.
- \_\_\_\_\_. "Developing Program for Economic Control and Organization in Hungary," *Acta Oecon.*, 1982, 28(3-4), pp. 295-315.
- \_\_\_\_\_. "The Conditions of Developing a Regulated Market," *Acta Oecon.*, 1986, 36(1-2), forthcoming.
- TAYLOR, FRED M. "The Guidance of Production in a Socialist State." *Amer. Econ. Rev.*, Mar. 1929, 19(1), pp. 1-80. Reprinted in Ed.: *On the economic theory of socialism*. BENJAMIN E. LIPPINCOTT. NY: McGraw-Hill, [1938] 1964.
- UNITED NATIONS. *Statistical Yearbook 1969*. NY, 1970.
- \_\_\_\_\_. *Statistical Yearbook 1978*. NY, 1979.
- \_\_\_\_\_. *Statistical Yearbook 1981*. NY, 1983a.
- \_\_\_\_\_. *Monthly Bulletin of statistics*, Jan. 1983b, (37)1.
- \_\_\_\_\_. *Statistical Yearbook 1982*. NY, 1985a.
- \_\_\_\_\_. *Monthly Bulletin of Statistics*. Oct. 1985b, (39)10.
- WEBER, MAX. *The theory of social and economic organization*. Oxford: Oxford U. Press, [1922] 1947.
- WILLIAMSON, OLIVER. *Markets and hierarchies: Analysis and antitrust implications*. NY: The Free Press, 1975.