

INDUSTRIAL POLICY IN HUNGARY: LESSONS FOR AMERICA

Josef C. Brada

Introduction

If we view industrial policy as the concentration of government attention and resources on industries regarded as deserving of special support or rapid development, then it is evident that East European leaders have pursued industrial policies since the end of World War II. Policymakers had very definite ideas about the restructuring of the market or quasi-market economies they inherited from previous regimes. Until at least the mid-1950s and, in several of the less-developed socialist countries, until many years later, the central authorities pressed for the priority growth of heavy industry, spear-headed by metallurgy and machine-building, and for systematic import substitution both in heavy and light industry.

In the 1960s, industrial policy began to achieve a greater focus, presumably as part of the shift from extensive growth to intensive growth. The German Democratic Republic was the first to propose a strategy for a "scientific revolution" in industry, according to which those products that were most likely to be carriers of technological progress—chiefly products of the electronics, precision, and optical industries—would be given special priority in the allocation of investment and research and development resources. "Structure-determining tasks" that focused on these priority sectors were directed centrally, while responsibility for other, less important products was

Cato Journal, Vol. 4, No. 2 (Fall 1984). Copyright © Cato Institute. All rights reserved.

Josef C. Brada is Professor of Economics at Arizona State University. He presented an earlier version of this paper at the Hungarian-American Economists' Round Table in Budapest in November 1983.

This paper is part of a larger study, coauthored with J. Michael Montias, examining industrial policy in Czechoslovakia, Hungary, and Poland (forthcoming in the *Journal of Comparative Economics*). The author wishes to thank Professor Montias for allowing him to use material from their joint work in this article. He also acknowledges the helpful comments and information he received from Hungarian colleagues and officials.

delegated to ministries, associations (*Kombinaten*), and enterprises (Granick 1975, pp. 146–7). The idea of concentrating resources on technologically advanced products was also influential in other East European countries, although the means of implementing these policies varied from country to country in keeping with the growing diversity in national economic systems.

A new conception of an industrial policy of the Japanese style, aimed at developing branches or subbranches of industry capable of generating specialized exports that would be competitive in world or CMEA (Council for Mutual Economic Assistance) markets, emerged in Eastern Europe in the second half of the 1960s. This export-oriented strategy was somewhat like the notion of promoting technologically advanced products, but it assumed different forms and emphases in different countries.

In this paper we examine the experience of Hungary with the development and implementation of its industrial policy. Hungary is a particularly interesting case study for several reasons. First, industrial policy is particularly important for Hungary. It is a small country with few resources beyond bauxite and fertile soil. Thus, like Japan, it is highly dependent on foreign trade for its economic welfare. Second, Hungary has undertaken significant reforms in its economic system, moving from the *dirigisme* of Soviet-style central planning in the 1950s to the market-oriented reforms introduced by the New Economic Mechanism (NEM) of 1968 and the additional reforms implemented in the 1970s and 1980s. Finally, Hungary is interesting because it differs from other East European countries in that agriculture appears to be—if not a conscious element of industrial policy per se—at least a sector perceived to be progressive and important to Hungary's foreign trade performance.

Elements of Industrial Policy

Before we can examine Hungary's efforts at formulating and implementing an industrial policy aimed at developing competitive export industries, we require an analytical framework. An effective industrial policy would seem to consist of four elements: selecting industries for promotion; selecting markets; allocating resources; and achieving production and exports.

Selecting Industries for Promotion

Perhaps the most controversial aspect of industrial policy is whether the government is indeed better able to select the industrial sectors that ought to be promoted than is the market, and whether the pace

at which government policy redeploys resources is more efficient than that of the market. For advanced countries industrial policy, to a great extent, must be based on forecasts of the future pattern of technological progress and structural change. For less-developed countries the technological choices are less difficult, but questions regarding the ability to absorb new technologies, to manage new industries, and the rate at which more advanced countries will yield their markets to new competitors create at least as much uncertainty.

A second difficulty in setting industrial policy is that the choice of sectors to be promoted is often not based on considerations of comparative advantage as prescribed by the factor endowments theory of Heckscher and Ohlin. Rather, new and nontraditional theories of comparative advantage are used to justify choices of sectors slated for promotion. Some of these new theories stress firm-specific sources of comparative advantage. Among these are economies of scale at the firm level. Thus government assistance in concentrating firms into large agglomerations, as well as promoting a high volume of sales, would be appropriate policies to capture such economies. The lumpiness of the capital stock in certain industries, coupled with an optimal firm size that preempts a large share of the existing and prospective market, is also a source of comparative advantage that can be promoted through government support. To the extent that research and development outlays appear especially risky to firms, and thus lead to a divergence between perceived private and social returns to research, the subsidization of research by the government can create a greater willingness on the part of firms to undertake innovative activities. Finally, firm-specific advantages can be based on elements of monopolistic competition where local firms compete with their foreign rivals on the basis of differentiated products or superior organization, both of which may be promoted by appropriate government policies. With the exception of economies of scale and optimal firm size, the creation of firm-specific sources of comparative advantage depends in large part on the willingness and ability of firms to respond to government policies and to the external environment. They must expand research outlays and make changes in their organization, methods of production, and output mix to produce the hoped-for competitive advantages.

Other bases for industrial policy are economywide. While factor endowments may be part of such broader considerations, they appear not to be uppermost in policymakers' minds. Rather, emphasis has been on the need to develop "structure determining" industries that will have technological externalities for other sectors of the economy that use the products of the favored sector. The promotion of the

electronics, computer, chemical, and machinery industries' production of computers and robots, by both market and planned economies, is often justified on the basis of the "modernizing" effect of these industries' output on a wide range of user industries.¹ Another criterion not specific to the firm is the level of productivity and productivity growth in the sector to be promoted. Governments desiring to maximize the growth of output should seek to promote the movement of resources from sectors of low productivity or few prospects for productivity growth to those where productivity or the potential for future productivity growth are high.²

While theoretical underpinnings for these bases of comparative advantage have been proposed (see Krugman 1980), much skepticism remains about choices of industries that appear to be inconsistent with the traditional factor-proportions doctrine. Nevertheless the perception that industrialization, and indeed industrialization along a specific line, is necessary for national economic success clearly makes policies that bypass the implications of factor-endowments theory attractive to policymakers. Thus Japan, for example, embarked on an expansion of its steel, shipbuilding, automobile, and chemical industries at the close of World War II despite the fact that its factor endowment clearly suggested that Japan's comparative advantage lay in more labor-intensive industries (Reischauer 1964; OECD 1972).

Selecting Markets

In selecting the industries that are to receive government support, the characteristics of the production process are not the only criteria to consider. The government certainly ought to seek out industries where productivity and productivity growth are high, and where economies of scale will create the potential to preempt rivals from other nations. However, equally important are the demand-side characteristics of these industries. That is the income elasticity of new products ought to be high, as should the price elasticity of the market share of established products. Industries aimed at the leading edge of the product life cycle in advanced economies will benefit more from longer lives than industries geared to older products. For new products, as advanced-country markets become saturated, the markets of less-developed countries will begin to expand.

¹That the level of sophistication of the computer industry has an important effect on other sectors is shown by the study of the Soviet machine tool sector in Amann, Cooper, and Davies (1977), where the capabilities of Soviet automated machine tools were found to be seriously limited by the shortcomings of the Soviet computer industry.

²This doctrine has East European roots, as it stems from the work of Manoiiescu (1931), although it has since been taken over by a number of development economists.

In the case of Japan, for example, the postwar decision to promote capital-intensive industries was as much influenced by their appealing supply-side characteristics as by the realization that, at the time decisions on industrial policy were made, the United States was the only large market open to Japanese exports. Thus the Japanese predilection toward sectors with high productivity growth was reinforced by the need to serve a large, sophisticated market with high income elasticity of demand for certain goods which are often produced under conditions of increasing returns to scale or by industries characterized by relatively uncompetitive price policies.

Allocating Resources

Even if the government is able to identify winners and losers, it faces the problem of reallocating resources from the latter to the former. Existing industries have a vested interest in remaining in existence, and both management and labor are likely to exert strong pressure to turn industrial policy into a policy of protecting declining industries (Reich 1982). Similarly representatives of industries viewing themselves as potential winners are likely to pressure government decision makers to make allocations favorable to them. Since existing industries are likely to have greater political leverage than nascent or nonexistent ones, the possibilities for developing industries ab ovo would appear to be questionable. Moreover, given the political demands of labor and management advocates from different sectors seeking access to the benefits of industrial programs, the government may be forced to spread the access to additional capital and labor among too many industries, thus precluding the possibilities of creating economies of scale and establishing comparative advantage for these industries.

Achieving Production and Exports

To the extent that the government is able to identify and to direct resources toward favored sectors, the possibility of a successful industrial policy exists. However, actual success will depend on effective production, so that economies of scale, potential productivity gains, and other sources of comparative advantage are realized. This requires appropriate management skills as well as the ability to create the necessary technology or to master technology imported from abroad. Finally, once produced, goods must be marketed effectively in the target countries.

Consequently it is evident that a successful industrial policy rests on a combination of political, technical, managerial, and business factors. The Hungarian experience has some lessons for market

economies—even, as we hope to show, for the United States. These implications arise, in the main, not from similarities in circumstance and economic system but rather from differences in them. Only by seeing which experiences with industrial policy are common to market and planned, or large and small, economies can we gain some feeling for what pitfalls can be avoided by appropriate policies and what problems appear to be an inseparable part of industrial policy.

Hungarian Industrial Policy under Central Planning

The post-World War II Hungarian economic system was initially patterned on that of the Soviet Union. Resources were centrally allocated by means of plans expressed in physical terms, and enterprises were judged largely on their success in meeting physical output targets. In such a system planners would appear to have a great deal of power to shape industrial policy. Not only could they allocate labor and investment to priority sectors but, by means of production plans, they could influence the pattern of production and innovation at the enterprise level. Thus central planning, combined with the small size of the Hungarian economy, provided an opportunity for the development and implementation of an industrial policy “from the top down”; that is, a policy devised by and executed at the behest of the central authorities.

A survey of these early efforts at an industrial policy by Schweitzer (1980) demonstrates that an industrial policy planned and executed from the top down was subject to a number of difficulties. Before essaying some generalizations about the nature and source of these difficulties, we present a brief overview of the experiences of the favored sectors of industry that were singled out for special development.

Transportation Equipment

The first comprehensive effort to promote a sector of industry into the role of an important exporter involved the manufacture of diesel-powered railway cars. Based on some firm-specific advantages that had enabled Hungarian firms to export such cars in the prewar period, the government hoped to update production to service promising markets in the Soviet Union, other socialist countries, and in developing countries. The prewar technology had to be updated, however, largely by providing the cars with a newer, more powerful diesel engine. The design of such an engine, the provision of appropriate components and materials for its manufacture, and the ability of suppliers to develop new systems and subassemblies all proved

inadequate. As a result the cars proved unreliable in service and exports were neither dynamic nor profitable.

Machine Tools

In the late 1950s Hungary attempted, within the framework of CMEA cooperation, to modernize and narrow the assortment of machine tools it produced. As with the railroad cars, reliance was placed on domestic research and development resources. As a result all the new machines were introduced well behind schedule, and some of the designs proved so unsatisfactory that a number of them were not put into production.

Precision and Electrical Engineering

A variety of precision engineering products, including medical instruments and automation and instrumentation equipment for oil and gas distribution pipelines, were promoted in the 1960s with a view toward developing exports to the Soviet Union. In neither case was Hungary able to generate the volume of exports anticipated, due to difficulties in updating product technology and because Soviet demand did not evolve as anticipated.

In telecommunications the need of the Soviet market for switching equipment was consistent with the technical capabilities of the Hungarian producers, but due to a lack of industrial infrastructure, economies of scale could not be captured in the production of components, and excessive reliance had to be placed on components imported from the West, rendering exports to the Soviet Union unprofitable.

Passenger Buses

Another attempt at developing transportation equipment into an export sector involved the production of passenger buses. As in the case of the railroad cars, the decision to develop the production of passenger buses was based on the demands of the Soviet market. The basis for the international competitiveness of the bus industry was to be a large (by world standards) volume of production and the attendant economies of scale.³ However, given the large size of the project relative to the capacities of the Hungarian economy, a great degree of international subcontracting and technology transfer was necessary. The cooperation with suppliers of components from other CMEA countries was not satisfactory. Western technology was

³Schweitzer (1980, p. 333) reports that Hungarian production of buses was to exceed that of countries such as Poland, Italy, and Sweden and approach that of the Federal Republic of Germany. Hungary is now one of the four or five largest bus manufacturers in the world.

obtained for the engine, gear boxes, and other systems, largely through the purchase of licenses. In addition components and materials were, and continue to be, imported from the West (Bauer and Soos 1979).

Evaluated in terms of growth of production and of exports, the Ikarus bus program appears to be an example of a successful industrial policy. As Table 1 shows, the output and export of buses have both grown at above-average rates. Moreover, what was originally viewed as a product intended exclusively for the socialist market has evolved into one that is also exported to the West.

TABLE 1
HUNGARIAN BUS PRODUCTION AND EXPORTS

	1960	1980
Buses Produced*	2,200	12,500
Buses Exported to Socialist Countries*	2,000	9,500
Buses Exported to Non-Socialist Countries*	100	2,500
Share in Industrial Production (%)	8	19
Share in Industrial Exports to Socialist Countries (%)	11	20
Share in Industrial Exports to Non-Socialist Countries (%)	1	4

*Approximate number

The expansions of production and exports are not the only criteria for evaluating the success of industrial policy. The economic return obtained for the resources invested in the favored sector must also be considered. Certainly Hungary has achieved a scale of bus production that should yield economies of scale. Admittedly there have been some difficulties in achieving efficient volumes of production for all components, but these difficulties do not appear sufficient to vitiate the economies of scale in assembly and in engine production implied by the current level of production.⁴ On the negative side the buses use a comparatively large proportion of imports, in the form of Western licenses and components, for which hard currency must be

⁴For example economies of scale in engine production were to be gained by using the engine in a dumper. Unfortunately, as Schweitzer reports, the design of the dumper created serious problems and few were produced. Moreover, domestic needs for small buses and their nonavailability from other CMEA countries forced Ikarus to produce a wider array of models than originally planned.

paid. The profitability of selling such hard-currency intensive products on the CMEA market for nonconvertible currencies is questionable. Interestingly the buses Ikarus exports to the West tend to use even more hard-currency inputs, lowering domestic value-added even further.

Overall, then, the implementation of an industrial policy from the top down was not especially successful. This lack of success does not appear to stem from the choice of products and sectors whose market prospects were not favorable. Rather, the failure of the projects is due to the inability of industrial units to implement the policies by developing and producing competitive products, and thus firm-specific competitive advantages, quickly enough. This failure at the enterprise level stems directly from the fact that central planners chose the priority projects without true knowledge of the basis of potential firm-specific sources of comparative advantage, and because their expectations of economies of scale were not realized due to the high degree of vertical integration of Hungarian industrial enterprises. Only in the case of Ikarus buses, where foreign technology and a good deal of international subcontracting was employed, has industrial policy produced potentially favorable results.

Hungarian Industrial Policy under the New Economic Mechanism

In 1968 the Hungarian system of economic planning was reformed, with directive planning in physical terms replaced by the so-called New Economic Mechanism (NEM). Given the uniqueness of NEM measures and the systemic barriers to an effective industrial policy evident during the pre-NEM period, it is worthwhile to examine NEM features relevant to industrial policy. The allocation of investment was to be decentralized, with the state retaining control over one-half of investment resources, and enterprises control over the other half. Enterprises were to be given greater powers to make production decisions as well, with profits and market prices guiding choices of outputs and inputs. Output targets were abolished and branch ministries were to seek economic outcomes, rather than to plan in detail the activities of subordinate enterprises. Finally, a functional exchange rate was to provide links between producers and foreign markets, creating both competition from imports and a stimulus for export-oriented production.

Along with the NEM came new instruments for promoting industrial strategy. To provide capital for the development of priority

sectors, central capital allocations were consolidated into Central Development Programs (CDPs). CDPs reflect the recognition that

in order to accomplish major changes in the production and utilization structure of the national economy, development programs requiring large investments are also needed whose selection and financing cannot be subject to decisions influenced by current market demand and market conditions—considerations related to enterprise profit interests. [Balassa 1975, p. 91]

The authorities could also make use of a system of credit policies and explicit and implicit subsidies to steer investments of enterprises toward priority sectors.

Six CDPs were to be started during the 1971–75 period. They included a scheme for expanding the use of natural gas; the development of the petrochemical, aluminum, and motor vehicle industries; the promotion of computer production and use; and the use of lightweight structures in construction. Balassa (1975) lists some of the objectives of these CDPs, from which we can gain some insight into the criteria employed by Hungarian planners in choosing priority sectors. The expansion of the production of natural gas and aluminum was based on the availability of natural resources, as well as on the expectation that some downstream technological improvements could be fostered by these two industries. Petrochemicals, computers, and buses were also expected to foster technological progress, not only with their respective industries but in supplying and consuming sectors as well. All projects, of course, anticipated rapid increases in production. On the foreign-trade front, the criteria were unequivocal: Road vehicles were to be directed to socialist countries “to earn foreign exchange”; aluminum, petrochemicals, and computers were destined for CMEA markets under cooperation agreements; and the computer program was to “accomplish the substitution of domestic products for imports from capitalist countries.” Exports by any of these industries to capitalist countries were viewed as a minor consequence. The objectives of industrial policy in the early 1970s, then, were to promote sectors that would provide technological spillovers to the rest of the economy and would meet a large and dynamic demand on the CMEA market.

In view of Hungary’s deteriorating terms of trade and acute need for convertible currency earnings in the 1970s, neither the vague, excessively inward-looking supply-side criteria nor the orientation to the demands of the CMEA market could serve as a continuing basis for Hungarian industrial policy. In October 1977 the Central Committee of the Hungarian Socialist Workers’ Party met to discuss

INDUSTRIAL POLICY IN HUNGARY

the need to reorient industrial policy. Calling attention to Hungary's worsened terms of trade, the increasing difficulty of exporting even to CMEA markets, and the slow pace of adaptation of Hungarian production to the new international environment, the committee's secretary called for the strengthening of industrial policies (Nemeth 1977). Products to be promoted should be of high quality, up to date, and profitable to produce, and should involve a high degree of processing. The ability of the economy to allocate resources to these priority sectors would be limited by "the relative scarcities of labour, of resources for accumulation and of foreign exchange" (p. 242). The low rate of growth of output, deteriorating terms of trade, and the need to maintain consumption levels and to increase investments in energy, made investment resources particularly tight. Nemeth identified energy production and utilization, the engineering industry, light industry, and agriculture as sectors that met the criteria for priority development. The engineering industry was seen as vital to the "long term development of the Hungarian economy, as well . . . as the intensification of socialist economic integration and of the . . . expansion of exports to the dollar area." Within engineering, the existing range of products was "too broad" and of "mediocre technical standards." Resources were to be focused on road vehicles, agricultural machinery, machine tools, precision engineering, telecommunications, and the vacuum technical industry. Nemeth recognized that this concentration of resources would require eliminating certain engineering products, but cautioned this should be done only on the basis of "permanent and secure imports" (p. 243). In light industry the strategy was to replace low-quality production with higher-quality, more sophisticated products, thus shifting the pattern of production to more profitable items.

The Central Committee issued a set of directives on industrial policy that established scale of production, standards of technology, management and organization, market and trade positions, and "production background" as criteria for selecting favored sectors. In addition greater attention was directed toward specialization, higher standards for products and management, domestic and foreign demand, and the availability of infrastructure and manpower. To further emphasize the reorientation of industrial policy toward Western markets, a fund of 45 billion forints was established to finance investments that would expand exports to the West.

Hungarian economists have engaged in a lively debate over the merits of the existing industrial policy and its results. Among the aspects most frequently criticized are the following.

Criteria for Choosing Priority Sectors

Although economies of scale are used as a criterion for selecting priority sectors, such economies are often not obtained in practice (Roman 1978). In large part this occurs because it is assumed that economies of scale are to be reaped at the assembly stage. While some economies do exist at this stage, there are also large economies of scale in the production of components, subassemblies, and parts. This production in Hungary is not undertaken on a large scale by independent subcontractors, but rather by the enterprise responsible for assembly. Thus the production of these parts is usually carried out at a volume that either fails to capture economies of scale or actually suffers from diseconomies of scale. Benefits of mass production at the assembly stage, therefore, are offset by high-priced and inferior components. The stress on economies of scale may lead to the development of industries that rely on low-wage unskilled labor for their market advantage. In such industries Hungary is likely to lose comparative advantage to developing countries (Koves 1978, p. 112). Koves also criticizes the criterion of "modernity" or technological advance, arguing that "we may have to consider an important task to manufacture such products which otherwise do not fit at all into our ideas about a modern product pattern" but that are saleable on world markets due to "their good quality, flexible adjustment to individual demands, and fast delivery" (p. 112). While Koves' point is well taken, it is difficult to believe that quality, flexibility, and fast delivery were likely competitive strong points of the Hungarian economy in 1978, or that they would prove to be less elusive than economies of scale.

Finally, the criteria have been criticized because they lack a specific cost-benefit accounting (Roman 1978). There are no explicit considerations of the inputs needed to implement industrial policy. In particular the research and development expenditures, foreign licenses, and imports of components and parts required by priority projects do not appear to weigh heavily in determining development strategies. Evidently in this regard little progress has been made since the 1950s.

Criteria for Selecting Markets

As mentioned above, Hungarian industrial policy has been oriented toward import substitution and the needs of the CMEA market. As a consequence Hungary has developed a "dual economy." The CDPs rely on Western technology and equipment to develop large-scale production of goods saleable only on the CMEA market. The production technology is not advanced enough and the products are

of insufficient quality to permit exports to the West. To the extent that the technology is not updated, these products eventually lose their appeal on the CMEA market as well (Koves 1978). At the same time, a more traditional and less well supported sector that does not rely on Western technology and equipment exports resource-intensive commodities to Western countries (Kadar 1978).

The orientation of industrial policy to the CMEA market is also believed to be responsible for the failure to stress efficiency, quality, high technical standards, and responsiveness in Hungarian export production (Roman 1978, p. 3). Moreover, the CMEA market absorbs large quantities of goods that are reaching the mature or declining stages of their product life cycle in Western markets. Thus, to capture economies of scale in production, Hungary must adopt products that are unlikely to face a dynamic demand in the West.

While there may be some truth to these arguments, in large part they appear to be self-serving. True, the CMEA market does not demand the latest goods with the highest quality. However, neither does it reject such products, and one certainly can find evidence that goods of high quality and embodying new technology fare well in CMEA trade. That the CMEA market does not demand such quality is not the cause of its absence from Hungary's exports. The true causes of the lack of quality must be sought elsewhere, particularly in Hungary's economic system.

The Economic System as a Barrier to Industrial Policy

Although under the NEM one-half of the investment funds are centrally controlled and the other half decentralized among the enterprises, investment decisions are viewed as being excessively centralized (Nemeth 1978; Soos 1978; Deak 1978). This is because enterprise funds are comingled with central funds or bank credits, or are subject to central policies and criteria when enterprises bargain for subsidies and favorable prices. As a consequence there are no funds available for entrepreneurs to invest on the part of enterprises; the center's investment policies encompass virtually all investment resources. Once these investments have been allocated, "there is not enough money left over for export-oriented development" (Roman 1978, p. 114).

The allocation of 45 billion forints for loans to increase the production of exports to the West does little to remedy this, since the amount is less than 10 percent of total investment. Moreover, the great demand for these funds means that firms offer to repay loans in three or four years, hardly enough time to make significant structural changes. Certainly if industrial policy is intended to go beyond the

"narrow" concepts of enterprise profits and market fluctuations, then this fund would seem to do little to further industrial policies. Nevertheless, Kadar (1980, p. 283) argues that "it was not so much the central development programmes as the export-developing credit policy of the National Bank of Hungary that encouraged the expansion of Hungarian export capacities and their structural improvement."

The large size of Hungarian enterprises has resulted in a concentration of industry that reduces the decentralization inherent in the NEM. Often preferences for a particular sector or product become preferences for a single enterprise that has no competitors within Hungary (Deak 1978). Moreover, while branch ministries are to concern themselves with economic results rather than control over enterprise activities, when such results depend on the activities of one or a few enterprises, stimulating economic results and the direction of day-to-day activities become difficult to distinguish. To remedy these problems, Nyers and Tardos (1978, p. 41) suggest that enterprises be reorganized in a way reminiscent of Japanese *zaibatsu* (which include a bank and a trading company in addition to industrial plants) for purposes of investment allocation and enterprise guidance. Whether such a scheme would merely exacerbate the problems created by existing trusts (Keverai 1980) is unclear.

Finally, it is evident that the system lacks the incentives required to induce enterprises to produce quality goods that can compete on international markets. In this, of course, Hungary is not unique. While the new wave of reforms may deal with some of the systemic barriers to industrial policy, it is unlikely to solve them all.

In the case of Hungary it is evident that a number of systemic and environmental factors conspire to limit the types of industrial policy that can be successfully implemented. Most problematic are those industrial policies that rely on firm-specific sources of comparative advantage. The ability to preempt market share in industries where there is lumpiness of capital is low because neither the technological level of the Hungarian economy nor that of the Soviet Union, its largest customer, is geared toward goods that are new by world standards. The Ikarus bus example, therefore, is likely to be a fortuitous event, but an economy the size of Hungary's admittedly does not need too many such lucky finds. Hungarian firms are unlikely to rely more intensively on research and development. Nor are the domestic and CMEA markets likely to create greater pressures on Hungarian firms to push themselves to the point where they will enjoy significant competitive advantages over foreign firms on the basis of brand name or product differentiation. Thus, at the level of the firm, the only source of competitive advantage that industrial

policy can create, given the lack of interest of the firms themselves in international competitiveness, is economies of scale. Unfortunately, in view of the high degree of concentration and the small size of the Hungarian economy, the only way in which such economies can be obtained is through international trade in components. Because of the difficulties of obtaining such components on CMEA markets, Hungary is faced with a serious dilemma in its industrial policy. While the reference market of industrial policy is CMEA, an economically viable industrial policy is possible only by expanding trade with the West, so that imports of components can be increased. If the favored sectors cannot earn the hard currency they need by exporting more to the West, then a greater hard-currency export burden will be placed on the rest of the economy. There is a danger that these less-favored sectors—that are not given preferred access to capital and labor but that generate a disproportional share of hard-currency exports—will seek to gain power so as to improve their access to domestic resources, thus subverting the preferences of the planners.

The economy-wide sources of industrial policy, the structure-determining and productivity-growth elements, can also be fostered by the authorities, but they merely create the potential for export-oriented sectors to develop. As the experience under the period of central planning shows, the ultimate success or failure of industrial policy is at the enterprise level.

The Development of Hungarian Agriculture as an Example of Industrial Policy

The strikingly good performance of Hungarian agriculture in the 1970s and 1980s in terms of yields, domestic consumption of foodstuffs, and exports is viewed by many observers, Hungarian and foreign, as an example of what enlightened support of a sector, coupled with policies that promote individual initiative, can achieve. The case of agriculture and food processing is also appealing to many because agriculture appears to be a sector marked for promotion on the basis of the Heckscher-Ohlin doctrine. As one Hungarian economist put it, “[g]ood crop land is the most important natural resource of Hungary” (Csaki 1983, p. 317).

The alleged promotion of agriculture, through both favorable allocations of resources and systemic reforms, was based on a number of objectives. First, in the 1950s, agricultural performance was unsatisfactory in that Hungary was a net importer of grains. This not only strained the hard-currency balance of payments but also precluded an expansion of the livestock sector, since such an expansion would

have required additional supplies of fodder. Thus import substitution, either of fodder or meat, was one reason for promoting agriculture. Another reason for increasing the supply of capital and industrial inputs to agriculture was to improve the structure of the economy by moving labor out of agriculture and into industry, where labor productivity and its growth were higher.⁵

The first steps toward improving agricultural performance were to give agricultural units greater autonomy. Thus in 1957 compulsory deliveries were eliminated and procurement prices were raised. In the 1960s investment in agriculture was increased, with the construction of buildings as a first priority, followed later by greater attention to agricultural machinery. By this time agriculture's export potential was becoming evident and there were expectations that the burgeoning agricultural surplus could be exported to hard-currency markets.

As a result of the NEM reforms, agricultural units obtained the legal and financial means of exercising the autonomy that previously had been granted to them (Swain 1981). In addition to this enlightened policy of autonomy for collective farms and benevolent neglect of private-plot agriculture, Hungarian agriculture benefited from a large infusion of foreign technology. This was largely the result of the initiative of one individual, Robert Burget, who took advantage of the autonomy granted to agricultural units to develop the Babolna State Farm into a modern producer of poultry and pigs. Joining forces with a West German poultry-breeding firm, he introduced modern methods of animal husbandry and succeeded in exporting a good part of his output to Western markets. The next step was to import American corn-growing technology, to provide a reliable source of feed for the animal husbandry operation. This new method of scientific agriculture, often called TOPS (technically operated production systems), was then disseminated by Babolna, and by several Schumpeterian imitators, to other Hungarian farms on a cooperative basis.⁶

Despite the favorable anecdotal evidence regarding its performance, Hungarian agriculture appears to share a disturbing similarity with the rest of the Hungarian economy: The aggregate numbers somehow fail to reflect the favorable impression gained from the anecdotal evidence. Examining the data, rather than the statements

⁵Even at the end of the 1950s, agriculture employed about 40 percent of the labor force but accounted for only a little over 20 percent of gross production.

⁶For brief descriptions of the Babolna experience, see Marrese (1983) or Swain (1981). A detailed description is available in Wimpenny (1981).

of Hungarian and Western observers, leads one to wonder whether agriculture has really been favored by government policy. Agriculture's share in aggregate investment, with the exception of 1968-71, has held relatively steady for the past 15 years. At the same time agriculture's share of the labor force has been cut in half. These trends in inputs have been reflected in agriculture's share of net production, which fell from 21.9 percent in 1965 to 14.8 percent in 1976 (Swain 1981). Finally, agriculture's share of exports has held remarkably steady—between 21 and 24 percent since the early 1960s.

Of course, the pricing of agricultural output has much to do with our perception of agriculture's performance. It is often argued that agricultural prices are too low, largely as part of consumption policy but also to avoid too great a differentiation in farm incomes. Thus while the prices of industrial products, including inputs to agriculture, have risen, agricultural prices, save those tied to world market prices, have remained relatively stable to shield consumers from inflation. Although this is a valid point, it must also be borne in mind that many inputs to agriculture are subsidized as well (Swain 1981; Csaki 1983, pp. 327-28). Finally, the ability of Hungarian agriculture to turn its surplus production into hard-currency earnings has been hampered by West European restrictions on imports of agricultural products.

Overall, the agricultural system in Hungary has benefited from relatively enlightened government policies regarding the organization of agricultural production and its ability to make effective use of foreign technology and market opportunities. While such policies are obviously a form of support for the agricultural sector, particularly in comparison to developments in other socialist countries, it is also difficult to conclude that agriculture has benefited from policies to improve its access to labor and capital. While individual elements of price, infrastructure, and credit subsidies exist, they may be more than offset by price distortions that work to the disadvantage of agriculture.

Lessons from the Hungarian Experience

Surprisingly our survey of Hungarian experience with industrial policy suggests that choosing sectors to promote has not been especially difficult. Hungarian planners have been able to identify products that were in demand on the CMEA market and that could be produced under conditions that should have benefited from some firm-specific element of competitive advantage. Similarly there appears to have been little indecision about Hungary's target market.

The fact that Hungarian planners were able to identify a target market for their industrial policy should be viewed as a mixed success at best. That the socialist countries and the Soviet Union in particular did provide a large and relatively stable market for Hungarian products does not mean that it was the best reference market for formulating Hungarian industrial policy. Possibly an industrial policy oriented toward the West might have developed industries in the long run that could have exported successfully to both CMEA and the West.

That the choice of sector and market has been relatively easy for Hungarian planners should not be construed as proof that such choices would be equally easy for policymakers in the United States. The sectors Hungary chose to support are relatively traditional. If the policy of the United States were to be directed toward technologically advanced sectors, then choices would become more difficult, though perhaps not too much more so. The choice of markets for the United States is a more serious obstacle to the formulation of a viable industrial policy. Given the size and technological level of the United States economy, the obvious reference market for the United States is its own domestic market. However, by directing industrial policy toward the domestic market, there is a danger that industrial policy will turn into a policy of protectionism rather than a policy whose outcomes would have to meet the test of the world market.

The allocation of resources to favored sectors in Hungary, as in other countries, has been a source of controversy. In Hungary the problem has been that favored sectors pay a price for government support, in that they are forced to conform to government objectives that go beyond those of the industrial policy and may be inconsistent with the long-run economic performance of the firm. A second problem has been that in Hungary, and to an even greater extent in Poland, the benefits to firms of participating in industrial policy programs, regardless of their likelihood of success, have been so great that virtually all firms have lobbied to be part of industrial policy (Brada and Montias 1984). Finally, industrial policy has tended to be inflationary. To the extent that certain sectors are given priority access to capital and labor, other sectors must be made to reduce their demands for capital and to release workers to the priority sector. In general, planners in East Europe have been reluctant to shift resources away from entrenched industrial interests, so investments in favored sectors are generally seen as expenditures over and above the normal volume of investment, rather than as a redirection of a given volume of investment. Such problems, of course, could easily crop up in the

course of implementing an industrial policy in the United States as well.

The evident difficulty with Hungary's industrial policy has been one of implementation. However well planners may have identified products for promotion and markets where such products could be sold, even when resources were directed toward these sectors it has more often than not proven impossible to create the firm-specific sources of competitive advantage that are required for the ultimate success of industrial policy. Partly this has been a systemic problem. Hungarian enterprises lack both the incentives to exploit the opportunities perceived by the framers of industrial policy and the penalties for failing to act. The autarkic approach to industrial policy has also created serious difficulties in implementing it. Only in the production of buses have the Hungarians succeeded in implementing the objectives of their industrial policy. This case stands out largely because it is the only example of industrial policy where the internationalization of the priority sector was evident from the beginning and also particularly extensive in its contacts with foreign suppliers. Agriculture, while perhaps not as strongly supported as the bus program, has also benefited from extensive reliance on foreign inputs and technologies, as well as from stronger incentives and greater freedom of decision making. These two Hungarian successes indicate that the internationalization of production is an important component of success in implementing industrial policy. An examination of the debate over industrial policy in the United States reveals that this lesson needs to be considered by both proponents and opponents of industrial policy.

References

- Amann, R.; Cooper, J.; and Davies, R.W., eds. *The Technological Level of Soviet Industry*. New Haven, Conn.: Yale University Press, 1977.
- Balassa, B. A. "Central Development Programs in Hungary." *Acta Oeconomica*, Vol. 14, No. 1 (1975): 91-108.
- Bauer, T., and Soos, K. A. "Inter-Firm Relations and Technological Change in Eastern Europe—The Case of the Hungarian Motor Industry." *Acta Oeconomica*, Vol. 23, No. 5 (1979): 230-55.
- Botos, B. "Structural Development and Investments in the Hungarian Industry." *Acta Oeconomica*, Vol. 16, No. 2 (1976): 139-54.
- Brada, J. C., and Montias, J. M. "Industrial Policy in Eastern Europe: A Three Country Comparison." In Joint Economic Committee, U.S. Congress, *East European Economic Assessment*. Washington, D.C.: Government Printing Office, 1984.
- Csaki, C. "Economics Management and Organization of Hungarian Agriculture." *Journal of Comparative Economics*, Vol. 7, No. 3 (1983): 317-28.

- Deak, A. "Enterprise Investment Decisions and Economic Efficiency in Hungary." *Acta Oeconomica*, Vol. 20, No. 1-2 (1978): 63-82.
- Granik, D. *Enterprise Guidance in Eastern Europe; A Comparison of Four Socialist Economies*. Princeton, N.J.: Princeton University Press, 1975.
- Holtzer, L. "Innovation in the Hungarian Engineering Industry." *Acta Oeconomica*, Vol. 24, No. 1-2 (1980): 139-49.
- Kadar, B. "Major Specialization Tendencies of Hungarian Exports to the West." *Acta Oeconomica*, Vol. 20, No. 1-2 (1978): 147-69.
- Kadar, B. "Some Strategic Aspects of Structural Policy in Hungary." *Acta Oeconomica*, Vol. 24, No. 3-4 (1980): 277-88.
- Kevevari, B. "Some General Problems of Trust Organization in Hungary." *Acta Oeconomica*, Vol. 24, No. 1-2 (1980): 125-37.
- Koves, A. "Integration into World Economy and Direction of Economic Development in Hungary." *Acta Oeconomica*, Vol. 20, No. 1-2 (1978): 107-26.
- Kozma, F. "International Division of Labour and the Development of the Hungarian National Economy." *Acta Oeconomica*, Vol. 13, No. 2 (1974): 19-33.
- Krugman, P. R., "Scale Economies, Product Differentiation and the Pattern of Trade." *American Economic Review*, Vol. 70, No. 5 (1980): 450-59.
- Mandel, M., and Muller, J. "Aims of an Export-Oriented Economic Policy." *Acta Oeconomica*, Vol. 13, No. 1 (1974): 35-47.
- Manoilescu, M. *The Theory of Protection and International Trade*. London: P. S. King & Son, 1931.
- Marrese, M. "Agricultural Policy and Performance in Hungary." *Journal of Comparative Economics*, Vol. 7, No. 3 (1983): 329-45.
- Nemeth, K. "Long Term Foreign Economic Policy and Development of the Productive Structure in Hungary." *Acta Oeconomica*, Vol. 19, No. 3-4 (1977): 237-53.
- Nyers, R., and Tardos, M. "Enterprises in Hungary Before and After the Economic Reform." *Acta Oeconomica*, Vol. 20, No. 1-2 (1978): 21-44.
- Nyers, R., and Tardos, M. "What Economic Development Policy Should We Adopt?" *Acta Oeconomica*, Vol. 22, No. 1-2 (1979): 11-31.
- OECD. *The Industrial Policy of Japan*. Paris: Organization for Economic Cooperation and Development, 1972.
- Reich, R. "Making Industrial Policy." *Foreign Affairs*, Vol. 60, No. 4 (1982): 852-81.
- Reischauer, E. O. *The United States and Japan*. 3rd ed. New York: The Viking Press, 1964.
- Revesz, G. "Enterprise and Plant Size Structure of the Hungarian Industry." *Acta Oeconomica*, Vol. 22, No. 1-2 (1979): 47-68.
- Roman, Z. "Industrial Policy in Hungary—Today and Tomorrow." *Acta Oeconomica*, Vol. 21, No. 1-2 (1978): 1-27.
- Schweitzer, I. "Central Decision—Enterprise Effects." *Acta Oeconomica*, Vol. 24, No. 3-4 (1980): 321-40.
- Swain, N. "The Evaluation of Hungary's Agriculture Since 1967." In *Hungary: A Decade of Economic Reform*. Edited by P. G. Hare et al. London: George Allen & Unwin, 1981.

INDUSTRIAL POLICY IN HUNGARY

- Tardos, M. "Commodity Pattern of Hungarian Foreign Trade." *Acta Oeconomica*, Vol. 17, No. 3-4 (1976): 285-300.
- Veress, P. "Foreign Trade Aspects of Economic Development in Hungary." *Acta Oeconomica*, Vol. 12, No. 3-4 (1973): 335-48.
- Winpenny, P. G. "The Impact of Western Technology on the Hungarian Feed-Livestock Economy: A Case Study of the Babolna Agricultural Combine." Unpublished M.A. thesis, Carleton University, 1981.

“INDUSTRIAL POLICY IN HUNGARY”: A COMMENT

Paul Craig Roberts

Professor Brada (1984) concludes from his survey of Hungarian economic experience that one of the more difficult aspects of formulating industrial policy has been the selection of the sectors to be promoted. I do not think that should surprise us. The people who are the most expert at selecting the sectors to be promoted are the capitalists. They have a hard time playing their own game. It seems only obvious that government bureaucrats trying to imitate them are going to do worse. The question, then, is: Why have bureaucrats instead of capitalists?

Ever since Oscar Langer redefined central economic planning to be market simulation, there has been no reason for any planning (Roberts 1971). It is obvious that no bureaucrats will ever be able to simulate the activities of the real experts—the capitalists themselves. And of course we know that bureaucrats will never face the same incentives as venture capitalists. By now everyone knows that a fundamental problem with so-called socialist or planned economies is the absence of private capital markets. What, then, could be the reason in the United States for having an industrial policy other than to overrule the decisions of the capital markets? The only obvious reason to have an industrial policy is to increase the power of government.

The United States once had an industrial policy. It was run by the Reconstruction Finance Corporation (RFC). If the Hungarians are smart, they will learn their lessons from us. The United States dissolved its industrial policy in 1953, amid charges of corruption, fraud, and political favoritism. An article in the January 1952 issue of *Harp-er's* magazine confirmed the Senate Banking Committee's 1951

Cato Journal, Vol. 4, No. 2 (Fall 1984). Copyright © Cato Institute. All rights reserved.
The author holds the William E. Simon Chair in Political Economy at the Center for Strategic and International Studies, Georgetown University.

investigation of the RFC. It reported that the RFC had "thrust money on the proprietors of road-side snake farms, cultivators of cactus plants for sale in dime stores, dental clinics, paperboard makers, mattress makers, television manufacturers, canneries, movie houses, cafes, drug stores, truckers, a trailer manufacturer, a manufacturer of fluorescent lamps, a rainbow trout factory, and some very dubious fellows who wanted to be the concessionaires for the roulette room in a Nevada hotel." Someone remarked that the last item was probably the most successful of the RFC's capital allocations.

When I read between the lines of Professor Brada's paper, I believe I could conclude that in Hungary there is the use of "industrial policy" to dismantle or rationalize the remnants of central planning in Hungary. In the United States, however, industrial policy is an effort to replace liberty with government power. In the 1930s, 1940s, 1950s, and 1960s, academics could pretend that there was more to be gained than lost from subordinating liberty and elevating government power. They had careless theories about "market failure" despite the fact that every day they relied on markets to meet their needs. They produced slogans about how, once government had enough power, "planned production for community consumption" would replace the chaotic market economy. When F. A. Hayek and others argued that central planning would destroy liberty, many academics denied the obvious. One even went so far as to deny that Joseph Stalin was a dictator on the grounds that the Soviet constitution provided for no such office.

Today academics can no longer carry on the pretenses about the failures of markets and the successes of central planning. When it became impossible any longer to defend the Soviet economy, those academics who require a socialist illusion shifted to communist China. At Stanford University in the early 1970s, John Gurley, once the distinguished editor of the *American Economic Review*, found nirvana in Maoist economics. Today China itself is ruled by a convicted "capitalist roader," Deng Xiaoping, who is talking about opening a stock market. That and the generalized failure of central economic planning leave socialist-minded academics with only a sparse symbolism. The once fabulous claims for central economic planning have been reduced to a drab industrial policy, and in Hungary, Brada tells us, its only success is the production of buses. What socialist can be enthusiastic over that?

We have wasted several decades of scholarship while academics bent over backward to find successes in "Soviet-type economies." Today the last remaining claim for planning is the bus industry in

Hungary. With this pathetic claim, a sordid episode in the history of scholarship has come to an end.

Democratic societies must find some way to hold universities accountable. The politicization of scholarship that allowed academics to keep the failures of socialism under wraps for several decades, while they prattled on about the failures of markets, has adversely affected the lives and fortunes of large numbers of people. The social costs at home and abroad of this academic failure are enormous. I cannot say that the benefits of academic economics compensate for these costs.

References

- Brada, Josef C. "Industrial Policy in Hungary: Lessons for America." *Cato Journal* 4 (Fall 1984): 485-505.
- Roberts, Paul Craig. *Alienation and the Soviet Economy*. Albuquerque, N.M.: University of New Mexico Press, 1971.

ECONOMIC REFORM IN HUNGARY: ROLE OF PLAN AND MARKET

Janos Horvath

The question posed by Brada's paper (1984) is an important one: "Are there lessons for America from industrial policy in Hungary?" Quite likely the affirmative answer will ring with varying amplitudes of consent; all the way from a whispered "perhaps" to a resounding "yes." The differing degrees of consent may depend on the elements, processes, achievements, and institutions compared. Yet, in order to answer the question posed above, the inquiry must not be confined to international statistics which deal with size, growth, stability, equity, and other conventional indicators. The question can be more meaningfully answered by tracing changes in systemic parameters and variables such as plan, market, incentives, subsidies, mobility, and propensity to experiment. Indeed, by placing the United States and Hungary into juxtaposition as they currently debate their own industrial policy, some thought-provoking insights can be gained.

My answer to the rhetorical question posed by Brada's paper is that in the 1980s there are certain noteworthy lessons for America from Hungary as industrial policy issues evolve in the two countries. The prime lesson I find is that nowadays the Hungarians seem to trust the market mechanism more and the planning process less than the Americans. While the market's role is rising and the plan's role is declining in Hungary, simultaneously in the United States a reverse trend is afoot—a trend to reassign significant functions from the market sector to a planning apparatus. This trend is evident in the call for an industrial policy, the controversy over the deregulation of selected industries, and the rise in protectionist sentiment. In each

Cato Journal, Vol. 4, No. 2 (Fall 1984). Copyright © Cato Institute. All rights reserved.
The author is the John W. Arbuckle Professor of Economics in the College of Business Administration, Butler University. He is also President of the Indianapolis Export Trading Company USA, Inc. and a former member of the Hungarian Parliament (1945-47).

of these cases special interest groups are striving to retain some special subsidy or bounty. The tyranny of the status quo is a reality.

I hasten to caution anybody against overrating Hungary as a role model in comparison with the United States. A sense of proportion is indispensable. Notwithstanding controversies around governmental involvement with the economy—essentially through monetary and fiscal policies and business regulations—the representative form of government and market feedback mechanism do share decision-making in the United States. Competing ideas and institutions, bolstered by pressures of innovation, necessitate acceptable performance because of the threat of losing office and/or customers. In Hungary, the Communist Party continues to retain monopoly over the government as well as all essential public decision making throughout all segments of the society. No alternative ideologies and institutional arrangements are permitted to compete for the people's choice. There is no voting mechanism, for example, to reject the status quo; there is no chance for rotating governing elites via the democratic process.

The Intolerable Failures of Centralization

Now having pegged out the place of Hungary vis-à-vis the United States on the multi-dimensional map of contemporary realities, we may proceed to deal with the task stated at the outset. Professor Brada's paper sketches the framework for industrial policy in Hungary, identifies its salient events, and analyzes the evolving process accurately. What appears pertinent to add is that post-World War II Hungary, then still working within a market-coordinated, private-enterprise economic system, had accomplished during two years a remarkable reconstruction of industry and stabilization of money. Hungary's current industrialization policy reaches back to the political regimentation of Eastern Europe, which, in turn, imposed a centrally directed economic mechanism. As the country's political economy became patterned on that of the Soviet Union, plans were decreed and their implementation enforced "from the top down." After lengthy toils and traumas, most visibly the revolutionary reform attempts in 1956, the New Economic Mechanism was introduced in 1968 under which the state began to share decision-making roles with enterprise managers and broader segments of the populace.

During the 1970s the reform had certain setbacks and reinforcements until another resolute commitment in 1984. The tone and sophistication of the new reform movement can be seen from the following selection of excerpts from various studies, proposals, and

policy statements that have been produced in Hungary during the recent phase of national introspection.

In his 1984 New Year interview, "Newer Wave of Reforms," Ivan T. Berend, a leading historian, academician, and former rector of the Karl Marx University of Economics, reflects the state of a national soul-search (Berend 1983):

We have learnt at a very high historical price what *must not* be done in guiding the economy. Consequently the reform began. . . . The reform does involve risks, but the greatest risk is if we fail to accept the risk. Otherwise we cannot overcome the current difficulties which resulted from changes in the world economy as well as from our own weaknesses. We cannot afford to wait any longer. Due to the deteriorating terms of trade, the national income of a whole year has been lost in the course of the past 10 years. . . .

Willing to touch old taboos, such as the ideological commitment to full employment, Berend continues:

Presently in Hungary full employment is based on two pillars. One is the large factories where there is "over-employment" with harmful consequences. The other pillar is the retirement system. Women are eligible to retire at 55 years of age and men at 60. Full employment would not be possible otherwise, therefore 20 percent of the population is on pension. This retirement system could be regarded as a way of unemployment assistance. . . . The reallocation of labor force and material resources must be facilitated. Those enterprises, with only small exception, which are chronically incapable of breaking even, where the loss becomes permanent, *must not be subsidized*. The retrained workers find jobs at prosperous enterprises. The economy gains new momentum while the best enterprises and the best sectors of production advance to the forefront. Precious years have already been lost; we cannot afford to lose more.

Berend argues the case for market solutions, even in the ideologically very sensitive area of income distribution, by showing positive results:

The weakest segment is the state-owned manufacturing sector which also amounts to the largest sector of the national economy. It is here where the implementation of reform continues to lag behind expectations. The present difficult situation compels a consistent implementation of reform accepting the consequences of free price, wage, and investment adjustments. . . . The effective income stimulators led to higher income for some people--supposedly an undesirable phenomenon from the viewpoint of social stability. However, higher income stimulated more private saving, which in turn resulted in private investment in the service sector. Examples abound; here is a recent one. The introduction of a private taxicab system by a stroke of the pen, resulted in the doubling of the fleet in Budapest without

any state investment. Another success story is agriculture where the reforms have had the longest time to work their way. Indeed, in agriculture the 1968-type reforms had already begun in 1956.

The disappointment with concentrated economic power sounds like a textbook case against the evils of monopolies. Such encouraging sentiment inside Hungary's Ministry of Industry is expressed by senior policy analyst Gyorgy Marosan, who writes:

During the past decades it was a general doctrine of economic policy that the central direction could optimally allocate resources for development. . . . Unfortunately, experiences proved differently; quite often the expected success failed to materialize. No efficient sorting out of viable investment projects was possible within the given system of governmental directives which led central decision-making toward irrational directions. Arbitrarily chosen priorities resulted in weakening norms, unjustified preferences, and ultimately declining performance. Consequently, the preferred enterprises syphoned away resources from other areas. What aggravated the problems was that the enterprises in monopoly positions became preoccupied with protecting their privileges instead of strengthening competitive edges. [Marosan 1983, pp. 15-16]

From Centralized Directives toward Market Solutions

That the above statements are typical of present-day Hungary could be documented at length. Evidence abounds. What is noteworthy is that the lengthy and meticulous diagnosis has been leading to prescriptions to remedy pains and retardations. Decisive actions are called for with compelling urgency. For example, while gauging Hungary's position within the world economy, Bela Kadar reports (1983, p. 45): "The unfavorable changes in the external and internal conditions of Hungary's socio-economic development have recently made it particularly imperative to increase the efficiency of Hungarian industry." In fact specific steps toward reforms are recommended at various forums. Due to the fact that Kadar based his recommendations on the broader context of resource endowment, technological capabilities, and performance indicators, as well as institutional structure, it appears that his operational design has viability. The salient points are:

In the years to come the dynamism and stability of the economy will thus primarily depend on how the efficiency and international competitiveness of Hungarian industry can be improved, and how the various conditions of participating more successfully in the international division of labor can be created. In the 1980s, therefore, the tracing of its path of growth will not simply be an expedient

but also a social necessity determined by the unfavorable change in the internal and external conditions.

... The conditions and requirements of international industrial development in the 1980s ... have brought still more into prominence the importance of independence in enterprise decision-making for industrial policy. A system of enterprises, each of which has a direct interest in its own performance and operates independently with varied forms of ownership and different sizes of organization, can define products, means of execution, a management mechanism and organizational structure of its own.

The functioning of a market-oriented system of economic management and economic environment would bring out the comparative advantages and disadvantages of particular industrial products. ... This can be done within the framework of engaging more intensively in international cooperation between enterprises.

In macro-economic management of industry ... those direct methods of management—almost directives—must be replaced by those whose management strategy is of an indirect, coordinating character. ...

A path of growth that demands innovation and technical improvement, a strengthening of competitiveness and developing of infrastructure, usually requires very intensive investment. An internal economic prerequisite for this is to enhance the economy's ability to save, to encourage individual and enterprise savings, to decide on appropriate real rates of interest and real capital expenses. ... The development of certain sectors requires direct, close cooperation with long-term foreign capital, the evolution of joint ownership. ...

[One] can draw an appropriate profile of specialization without central interference where good opportunities for finance are available through self-generated resources, or from banks, and this should apply to 60 to 70 percent of the products of the processing industry.

[Kadar 1983, pp. 55, 60–61]

The prospects of technical development continue to be the topic of several symposia which focus on creating a favorable environment for future progress. Engineers urge that the first economic-financial task should be to rectify the grossly arbitrary price and wage system which fundamentally distorts the evaluating feedback mechanism and consequently hinders technical progress. Distorted price ratios among material, energy, and final products not only curb long-range growth but also stimulate waste. All observers advise against the coordination of development projects by state officials (Vamos 1983, pp. 85, 89).

Broad ranges of infrastructure studies are integrated by Ehrlich (1983, pp. 33–36) in search of management formulas which could lower the capital/output and labor/output ratios. The innovators

advocate "several sectors" conducive to competition between them. The "several sector" design means that within a specific infrastructure branch "the state, cooperative, family, and private sectors [ownerships] are operating side by side, their proportions being determined by technical parameters" (Ehrlich 1983, p. 34). Naturally the exclusivity of state ownership must be retained in several areas, yet "it will be expedient to spread and/or make characteristic the small cooperative, family, and private undertakings which are going to evoke true ownership identification in several fields" (Ehrlich, p. 34). The spreading of the "several sector" framework would bring about (1) the abolition of subsidies; (2) the enhancement of capital formation as private ventures recycle a part of their relatively higher personal incomes; (3) the legalization of some of the presently half-legal or illegal activities as part of the "second economy"; (4) freeing the state from the burden of investment appropriations in certain areas; and (5) the design of a workable system of income taxation as successful microeconomic enterprises give rise to entrepreneurial profit.

In reference to a rather controversial 1983 event, Rezso Nyers reflects:

It was fully understandable for me that a young cadre demanded more forceful reform policy. . . . What also contributed to the increased tension was that after 1979, motivated by the continuation of reform policy, certain fully rational measures were taken to stimulate small enterprises. Now balancing the advantages and drawbacks, I believe that the gains dominate even for those who feel drawbacks momentarily. But this intense change, while opening doors for a characteristically free market sphere—within our imperfectly functioning and in essence only simulated markets—did cause conflict in the income distribution. The resolution of such a market dilemma could come only through the reinforcement of economic reforms. Where do the directions of progress lie? First, more enterprising business management is needed. Second, the price, wage, tax, credit, and financial systems [need to] consistently broaden the freedom of enterprise management. [Nyers 1984, p. 14]

On the Limits of Experimentation

No need to belabor the fact that Hungary's economic reforms are not conducted in a political power vacuum. The country's geography, history, and international commitments do stake out room for experimentation. Yet the boundaries of experimentation are not always staked out unequivocally.

The above excerpts reflect the motives, the directions, and some of the accomplishments of the reformers. And it must be made clear

that the reform measures have been approved by the political establishment, which also encourages the careful contemplation of further scenarios. But occasionally the ground rules are reiterated. The politicians, who assert a sort of midwife role, do from time to time remind the reformers that there are limits to the experimentation. The message might be phrased this way:

A few years ago the political sphere initiated a process that could be labeled "reform movement." And we continue to endorse its continuation. However, as a political reality, only we can be the guardian of further experimentation. Therefore criticism rooted in distrust, and demands which mobilize adversaries, will only make our task more difficult. Instead of continuous criticism we expect expert advice. A little tension does no harm, but it hardly does any good if the advocates get carried away and overestimate their own importance. [Kovacs 1984, p. 47]

The above is perhaps the most formalistic assertion of the political sphere. In the balancing act of dogmatism versus pragmatism, a communist philosopher reflects upon re-reading Marx: "To sum up current Marxist thinking in Hungary: [F]or our present time the most important lesson from the Marxist legacy is the openness toward new realities and the ability for self-criticism. Nothing separates more distinctly Marx and Engels from certain latter-day Marxists than the capability to correct ideological dogmas in the light of new facts" (Agh 1984, p. 12).

While reassuring itself of authentic Marxist ideology and guarding the commanding heights, the political establishment remains cognizant of two meaningful challenges. One is an entrenched orthodox oligarchy inside the country and the other is the Soviet-led fraternity of communist countries. Whatever other challenges might exist, they do not pose the same threat for destabilization.

Domestically the powerful group which nurtures reservations against economic reformism, even though subdued, consists of the managers of several hundred large factories. With few exceptions their failures are well known and their frustrations are recognizable. They feel intellectually orthodox and professionally obsolete, and their inferior performance remains a public issue. Comparisons are embarrassing. That manufacturing lags far behind its potential while agriculture reaches new heights is well recognized. It is also recognized that these two sectors are managed quite differently. In agriculture managerial decisions are delegated to hundreds of thousands of producing units, and the market mechanism is the primary coordinator. In manufacturing the managers tend to avoid making creative decisions; they feel more comfortable executing directions from higher

authority than in shaping decisions based on feedback from the fresh breeze of market competition. The contrast in favor of agriculture is manifest in higher personal income and adaptability in export markets.

The limping manufacturing sector would improve through more reliance on the market mechanism, but the orthodox managers want no more operational discretion. They sparsely use the freedom bestowed on them. Oligarchies prefer to perpetuate the status quo. Of course some medieval monarchs managed to shake up their reluctant barons. For Hungary's present political leaders it could become a crucial matter how to retire thousands of oligarchs whose positions were granted in an earlier period as a reward for loyalty. Attrition may lead toward the solution although it may be slower than affordable. Nevertheless, to ascertain the viability of the ongoing market system in Hungary, and to remove its detractors, might prove more urgent than any immediate tinkering with the mechanism (Horvath 1984).

The international approval of Hungarian economic reforms continues to be a crucial consideration. An authoritative insight was recently offered by Rezso Nyers, a former secretary of the Central Committee of the Communist Party, the highest-ranking official responsible for adopting the reform breakthrough in 1968. Removed from the highest power elite since the early 1970s, he participates again in economic policymaking. Perhaps it is symbolic that he gave an interview to *Mozgo Vilag (Moving World)*, a journal best known for innovative inquiries and, occasionally, for initiating controversies. Nyers, as quoted below, masterfully blends competence, courage, and caution:

Indeed, it would be a significant gain for the Hungarian economy if equivalent reforms were afoot in the CMEA countries [the Soviet bloc economic alliance]. The need for them is real. The possibilities? Well, to some degree they also exist; it is not impossible that the reforms could begin; we see experiments within the economic mechanism even in the Soviet Union. There are signs in Bulgaria. In Poland, they have adopted an economic reform in the political sense for which, however, the economic preconditions are still lacking. Yet, I think that the Hungarian reform policy now enjoys a broader basis . . . or, worded more precisely, encounters definitely less resistance from other countries than after 1968. So the conditions are becoming better, but we cannot anticipate from them similar reforms during the immediate years regarding the interaction of plan and market. . . . This could be viewed as a brake, because the CMEA alliance offers reduced development stimulation to the Hungarian economy as well as to other member countries.

Even the most sensitive matters should not remain taboos. I do believe that first we should wisely broaden the circle of questions which are not sensitive. Then more truthfully, more sensitively, and

very carefully truth must be spoken. Naturally it is a very, very sensitive political question to decide how far to extend independence in the domain of the economic mechanism and economic policy side by side with an alliance. It is my most firm opinion, that side by side with a good alliance relationship, there is still room to advance our independence. In this pursuit the debates must be accepted, even momentary disagreements, hoping that in the longer run even this kind of debate will strengthen the alliance. . . . At the time of each world tension, there will emerge a sense of meditation in communist political thinking . . . even the perception of isolation from the world economy. But I cannot imagine turning our back on the world market. Nor can I imagine the Soviet Union or the whole socialist world doing so. . . . We are open [to reform] in all directions, and the future prospects for its continuation are good.

[Nyers 1984, pp. 16–17]

“From Others’ Misfortune Learn the Wise”¹

The evidence filtering through these pages substantiates the proposition offered at the outset. It is well worth our while in the United States to look at Hungary. That small country in Central Europe existing under adverse circumstances—resource paucity, historical misfortunes, institutional rigidities—has recently been achieving noteworthy results by substituting market for plan. Present-day Hungary wrings a savory livelihood from a bastard political economy by humanizing it through the cleansing breeze of market interactions. Favorable performance vindicates reforms, which deliver improvement, which reinforces calls for reforms, and so on. The circle seems to be self-sustaining through an intellectual-political-populist interaction. After rigorous studies the Hungarian economists recognized the market’s curative potential. They have succeeded in converting the political leaders, who in turn proclaimed the laws of supply and demand a law of the country. Also, economic reform has broad popular support.

It is a recurrent observation nowadays in comparative analysis that Hungary has evolved as the most interesting experimental laboratory in terms of managing a nation’s economy. The road from Stalinist central-plan enforcement to market socialism has been longer than any country traveled in the domain of economic systems. Hungary’s dynamic evolution is particularly remarkable given its constraints on resource ownership, the concentration of management, and governmental involvement. Countries tend to be quite static by these measures; for example, the United States, the Soviet Union, Sweden, and

¹A Hungarian proverb.

other countries remain where they had been throughout several decades. Exceptions occur when revolutionary political turnabouts cause radical changes in the economic sphere. Measurable change in the economic system remains so rare that the currently ongoing Hungarian experiment has no forerunner or prototype, especially not inside the Soviet bloc with its firmly enforced ground rules for emulating the Soviet model of central planning.

Hungary's differentiation from the Soviet bloc economic blueprint draws its driving momentum from theoretical explorations and empirical testings. Hungarian economists and policymakers are fully knowledgeable about the strengths and weaknesses of the market system as well as about the theorems of "market failure." At the same time they are in the position to assess the strengths and weaknesses of the centrally planned system as well as the theorem of "plan failure." Further studies could shed more light on this topic, but the lesson for America from the Hungarian economic reform is clear: *The Hungarian experience serves as a reminder that the inherent planning failures far outweigh the inherent market failures.*²

References

- Agh, Attila. "Ujraolvasva Marxot" ("Re-reading Marx"). *Valóság* 26 (May 1984): 1-13.
- Berend, Ivan T. "Ujabb reformhullám" ("Newer Wave of Reforms"). *Magyar Hírlap* (31 December 1983): 6.
- Brada, Josef C. "Industrial Policy in Hungary: Lessons for America." *Cato Journal* 4 (Fall 1984): 485-505.
- Ehrlich, Eva. "International and Hungarian Development Trends in Infrastructure." Conference Paper for the United States-Hungarian Roundtable on Economics at the Hungarian Academy of Sciences, December 1983.
- Horvath, Janos. "Hungary's Factories Are Fiefdoms." *Wall Street Journal*, 17 February 1984.
- Kadar, Bela. "Industrial Policy in the Eighties." *New Hungarian Quarterly* 92 (Winter 1983): 45-61.
- Kornai, Janos. "Hatekonyság és szocialista erkölcs" ("Efficiency and Socialist Ethics"). *Valóság* 23 (May 1980): 15-21.
- Kovacs, Janos Matyas. "A reformalku surujeben" ("In the Density of Reform Arbitration"). *Valóság* 27 (March 1984): 30-55.
- Marosan, Gyorgy. "Versenyképesség és iparpolitika" ("Competitiveness and Industrial Policy"). *Valóság* 26 (March 1983): 14-21.
- Nyers, Rezso. "A reformhoz kötöttem sorsomat" ("I Tied My Fate to Reforms"). *Mozgó Világ (Moving World)*, Vol. 10, No. 1-2 (1984): 5-17.
- Vamos, Tibor. "A muszaki fejlesztési politikáról" ("On the Policy of Technological Development"). *Gazdaság* 19 (Spring 1983): 76-92.

²Perhaps the time is now right for market advocates to fund economic study tours to send planning advocates to Hungary.