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The Affinity Between Ownership Forms and Coordination Mechanisms: The Common Experience of Reform in Socialist Countries

János Kornai

The world is witnessing a great upheaval in socialist countries, where dramatic events have been happening since 1988. The present paper concentrates on evaluating past experience in the hope that a correct understanding of the past will help in devising sound policies for the future. Of course, the number of socialist countries which have engaged in reform in the past is small, and the situation in all socialist or formerly socialist countries is still very unsettled. What can be attempted is nothing more than an outline of a few preliminary conjectures which will have to be tested against future historical developments.

The issues to be discussed in the paper have many political ramifications. Decisions concerning ownership and coordination mechanisms are, of course, strongly linked to the questions concerning power, political institutions and ideology. Apart from a few short hints, this paper does not elaborate on the political aspects of these topics.

Classical versus Reform Socialism, Reform versus Revolution

Some conceptual clarification is needed. In the following, I distinguish two prototypes of socialism. The first one is *classical socialism*: the form of socialism that prevailed under Stalin, Mao Zedong, and their disciples in other countries. The second one is *reform socialism*: the new form of socialism that evolved (in chronological order) under Tito in Yugoslavia, Kádár in Hungary, Deng

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Xiaoping in China, and Gorbachev in the USSR; some further countries could be named as well. The reform socialist countries made some steps toward liberalization in the political sphere, somewhat decentralized the control of their state-owned sector, and allowed a somewhat larger scope for the private sector. At the same time, these countries still maintained the fundamental attributes of a socialist system: the Communist party did not share power with any other political force, the state-owned sector still played a dominant role in the economy, and the main coordinator of economic activities was the centralized bureaucracy, even though coordination was effected with the aid of less rigid instruments.

We should also distinguish *reform* and *revolution*. The former aims at major changes in the existing socialist system, but preserves its basic characteristics. The latter starts a transformation that ultimately shifts the country in question away from socialism. Thus the difference between reform and revolution does not lie in the method of transformation (violent versus non-violent change), nor in the speed (slow process versus sudden explosion). The distinguishing criterion is the following: Does the transformation abolish the power monopoly of the Communist party? In this sense, in 1989, a revolution began (in temporal order) in Hungary, Poland, East Germany, Czechoslovakia, and Rumania.¹ East Germany and Czechoslovakia avoided the reform stage and took a leap, by jumping from classical socialism directly to systemic transformation.

In this paper, I am concerned with reform socialism, and do not discuss the problems of "post-socialist" revolutionary systemic transformation.² At the time of writing the final version of this paper, reform socialism is still the regime ruling over the two largest countries, the USSR and China, and also a few smaller ones like Mongolia and Vietnam. For Eastern Europe reform socialism is history, yet still so close to the present that it has an extremely strong impact not only on the initial economic conditions of the transformation process, but also on political thought and intellectual debates. Therefore, the subject of the paper, common lessons of reform socialism, should be more than timely, as it might provide some orientation in the midst of the breathtaking changes in the socialist world.

Transformation without a Strategy

If we look at the history of the socialist reform countries, we find that without exception, reform blueprints or programs were in circulation before the actual period of the reform. For the first example of such a proposal for reform within socialism one can go back as far as Oscar Lange's famous

¹At the time of submitting this paper, in March 1990, it is not yet clear where Bulgaria and Yugoslavia fit in this classification.

²The author's views on revolutionary transformation are discussed in his recent book (1990).

proposal for market socialism and to the debate to which his idea gave rise in the 1930s. Some blueprints and reform programs were also prepared by the leadership in charge. There also were instances of programs published illegally or semi-legally by dissident politicians and scholars.

While all these reform proposals became interesting historical documents, and while some of them had a certain influence on the course of events, reality in the reforming countries never corresponded to any of the blueprints. Of course, history stands witness to other cases of discrepancies between intent and outcome: the fate of the French Revolution reflected little of the ideas which the *Encyclopédistes* and Rousseau had been discussing in their works, and the Soviet Union in the 1930s turned out to be a country quite different from the one which Marx or the participants of the revolutions of 1917 had imagined.

It is ironic to note, nevertheless, that major changes in centrally planned economies never took place according to a "central plan." There is a Chinese adage which talks of "crossing the river by touching the stones." The reform process in socialist economies conformed exactly to this image: whole societies proceeded to cross the deep water without accurate knowledge about the final destination by a process of moving from one stone to another.

The reality of reform in socialist countries was characterized by historical compromises, by movements backward as well as by movements forward, by periods of euphoria and of optimism alternating with periods of lost illusions and of frustrations. It also often turned out that, in spite of great efforts, some changes could not be preserved.³ People often learned the limits of reformability by, figuratively speaking, running against a stone wall of the limits to changes imposed by the undivided power of the Communist party and the taboos maintained by the official ideology.

Under such circumstances it becomes extremely important to recognize what evolved *spontaneously* in the reform process. Marx used the German term "naturwüchsig" (as grown in nature) to characterize spontaneous historical processes. These are phenomena which appear not as a consequence of governmental orders or of administrative pressure but of the free will of certain social groups. The study of "naturally grown" changes is all the more important since individual freedom of choice typically increased as a consequence of reform. Spontaneous changes thus reflected the voluntary decisions and revealed preferences of various social groups.

Exactly this approach distinguishes the present paper from many other studies. Most of the earlier works on reform in socialist systems discussed the intentions and actions of the leadership and the apparatus. This paper would

³To give just one telling example, early on in the Soviet *perestroika*, it was envisaged to replace plan targets with state orders covering not much more than 30 percent of output. Under conditions of shortage, fixed supplier-customer relations, and bureaucratic intervention, they ended up covering over 90 percent of output. A 1989 amendment to the Soviet enterprise law then stipulated that state orders were no longer allowed to cover 100 percent (sic) of output. (See text of the amendment in *Pravda*, August 11, 1989.)

like to draw attention to another, not less important aspect, namely spontaneous developments in the reform countries, developments that did not occur in response to leadership actions and maybe even contravened their intentions.

The Evolution of a Private Sector

In this endeavor, we should at first focus on the evolution of a private sector. When, for example, the author began to participate in the beginning of Eastern European discussions on reform in 1954–1956, all scholars who took part in the debate were almost exclusively concerned with questions of reform in the state-owned sector. Initially, it was discussed how to give more autonomy and stronger profit-based incentives to state-owned firms and how to decentralize economic administration while, at the same time, maintaining state ownership in all but the most marginal sectors of the economy. As the reformers came to realize the inadequacy of these proposals, they envisaged larger and larger scope for market coordination in the economy. Yet they still clung to the notion of the dominance of state ownership.⁴

History took quite a different course from the one outlined in these blueprints. In all socialist economies where reforms had time to develop, and especially in Hungary, Poland, and China, the emergence of a significant private sector was the most important result of the reform in the economy.⁵

The most important inroad of private activity in socialist economies occurred through private farming.⁶ Private agricultural production took different forms. In some reform socialist countries, the land was reprivatized *de facto* as for example under the Chinese “family responsibility system,” in other private farming was never abolished and survived all kinds of political changes as, for instance, in Yugoslavia and in Poland. Other forms of private or semiprivate agricultural activity also evolved, for instance an increased role of household plots and auxiliary agricultural production in Hungary. A significant legal private sector emerged in various branches of the service, transport and

⁴See for example, the following sample of the earliest papers advocating a decentralization based reform in Eastern Europe: B. Kidric (see his papers from the 1950s in the 1985 volume) for Yugoslavia, Gy. Péter (1954a, b, 1956) and J. Kornai (1959) for Hungary, W. Brus (1972) for Poland, E. Liberman (1972) for the USSR and Sun Yefang (1982) for China.

⁵About the formal and informal private sector see G. Grossman (1977), I. R. Gábor (1985), C. M. Davis (1988), S. Pomorski (1988) and B. Dallago (1989).

⁶The spectacular increase in the size of the private sector is well captured by data on total yearly work-hours spent by the population in the different sectors. In Hungary, total work-time spent in private agricultural activity was more than one-third of that spent in the socialist sector in the mid-1980s. All the data reported here and in Footnotes 7 and 8 to describe the Hungarian private sector are from J. Timár (1988), pp. 225, 229–245.

construction industries; to a lesser extent private business operated in manufacturing as well.⁷

In addition to the formal private sector, various types of informal "moonlighting" appeared; unlicensed, and perhaps illegal, but nonetheless tolerated activities proliferated in the service, commerce, transport and construction sectors.⁸ Reform economies also experienced a significant increase in elaborate do-it-yourself activities, such as the building of one's own house with the help of one or two professionals and that of some friends.⁹ There appeared different forms of income derived from private property, for example, from the renting out of private homes in cities or from privately owned second homes in recreational areas.

During the reform period property owned by the state or by some other social organization was sold or leased to individuals in some countries, and in some sectors, such as housing, services, and agriculture. The idea of genuine privatization in the British way, that is to say, the idea of the sale of stock of state-owned companies to the public, came up in the debates in the reform economies even before the more recent discussions in the context of revolutionary transformation. In practice, however, the larger part of the growth of the private sector took place as a result of entrepreneurial initiative, partly based on private savings but for the most part on the labor input of the individual. Therefore, private firms were usually very small.¹⁰

It must be stressed that the government typically did not have to convince its citizens to enter the private sector by a propaganda campaign. Usually, after certain prohibitions on private activity were lifted, the private sector began to grow quite spontaneously with individual enterprises sprouting up like mushrooms in a forest after rainfall.¹¹ The increase in private activity was all the more notable as it often followed a period of brutal repression of any form of private ventures. People did not have to be cajoled or coerced in order to choose this way of life. In fact, they were immediately attracted by the higher

⁷Taking the example of Hungary, total work-hours in the non-agricultural, formal, i.e., legal, private sector increased 2.4 times from 1967 to 1985, and 1.6 times from 1980 to 1985. Private business partnerships, owned and operated by a group of people belong to the private sector, along with business owned and operated by single individuals or by a family. In the Soviet Union such partnerships are called "cooperative," although everybody knows that they are in fact private business partnerships.

⁸Referring back to the Hungarian example, work-time in this informal private sector increased by 5.6 times from 1977 to 1986. Work-time spent in this sector was 1.5 times higher than that spent in the formal private sector.

⁹For instance, in 1988, 65 percent of new residential construction in Hungary was organized by private owners (Central Statistical Office, 1989, p. 250).

¹⁰For instance, in Poland, before the revolution of 1989, there were one million private enterprises employing two million people. (Source: Lecture by Jeffrey Sachs, Harvard University, February 8, 1990.)

¹¹For instance, from 1987 when the Soviet government first gave its blessing to the small-scale cooperatives to 1989, the number of full-time cooperative members jumped from about 15,000 to over 2,000,000, with a multiple of this number in part-time and employee status.

earnings, by the more direct linkage between effort and reward, and by the greater autonomy and freedom which the private sector offered.¹²

Private activities in reform socialist economies generated relatively high income because they were able to meet demand left unsatisfied by the state-owned sector. A craftsman, the owner of a corner grocery store or of a small restaurant, would typically be in the middle income group of a private enterprise economy. But in the environment of what was still a chronic shortage economy, the same activities catapulted these people into the highest income group, not because they were particularly smart or greedy, but because of the rarity of the service that they provided. The price which they got for their output was just the market clearing price in the small segment of the economy where a genuine market operated. They could be grateful to the state-owned sector and to the fiscal and monetary systems that created supply and demand conditions leading to free market prices significantly higher than the official prices in the state-owned sector.

The dimensions of this growth of private economic activity are even more noteworthy if one takes into account the fact that private business had to adjust to the hostile environment of the half-heartedly reforming socialist economy. Despite some improvements, the daily life of private businesses in reforming countries was still characterized by a multitude of bureaucratic interventions and restrictions. Access to material, credit and foreign exchange was limited, and they often had to be acquired in illegal or semi-legal ways.

A further element in the hostile environment was the jealousy of people who were suspicious of growing income differentials. Envy of individuals who suddenly come to earn more than others, while it occurs in all systems, is likely to be all the more divisive in a society in which people have been brought up to consider equality to be a major social desideratum.

Finally, half-hearted reform caused further difficulties due to the absence of legal institutions for the consistent protection of private property and for the enforcement of private contracts, as well as the repression of political movements and associations devoted to the articulation of the private sector's interests. And that leads to the ideological aspects of the issue.

Can one justifiably assume that this small-scale private activity in reform socialism inevitably leads to capitalism? Many advocates of reform in socialist countries are tempted to simply answer "no." Nevertheless, if we want to be objective, it is not possible to dismiss this question so easily.

Using now the terminology of Marxian political economy, we may classify the overwhelming part of private sector activities in socialist economies as small commodity production. Roughly speaking, the decisive distinction between small commodity production and genuine capitalism in the Marxian sense is

¹²For instance, in Hungary a lawyer in a state-owned enterprise decided to leave his job to open a small private restaurant—so as to no longer have a boss to tell him what to do. The same reason was given by former members of an agricultural cooperative who had chosen to quit and had opened a small regional food-processing plant.

that the former uses only the labor input of one individual, together perhaps with that of his family members, whereas the latter uses hired labor regularly and thus becomes exploitative as it seeks to extract the surplus from the employee. In this context, the ideology and practice of classical socialism suppressing not only full-blown capitalism, but small-scale private production as well, has been very much influenced by Lenin's (1920, p. 8) frequently quoted dictum that "... small production engenders capitalism and the bourgeoisie continuously, daily, hourly, spontaneously, and on a mass scale." In the author's opinion, Lenin was absolutely right. If a society allows for the existence of a large number of small commodity producers, and if it permits them to accumulate capital and to grow over time, a genuine group of capitalists will sooner or later emerge.

To appreciate this fact, the reader is asked to imagine for a moment what would happen if private producers had the same access to credit and to all kinds of inputs as the state-owned enterprise in a socialist economy and, moreover, were to be treated equally by the tax and subsidy system. Without any doubt, the more successful private businesses would begin to accumulate and grow. Thus, the negative answer of some reformers to the question as to whether small commodity production breeds capitalism was already predicated on the assumption that the government would not allow private business to grow beyond a certain critical threshold. Indeed, the growth of the private sector in reform socialist economies was not only hampered by the excessive red tape of an ubiquitous and omnipotent bureaucracy; the sustained growth of private businesses also ran counter to the ideological premises of the system, and was therefore held in check by the ruling Communist party and the government which were not willing to tolerate a significant capitalist sector.

There have been different ways of imposing constraints on the private sector's ability to grow in a socialist economy. Sometimes, these constraints simply took the form of legal restrictions such as, for example, an upper bound on the number of people that a legal private enterprise was allowed to employ, or of a limit on the amount of capital that it was allowed to invest in private business. Obstacles to growth were also incorporated in the tax system. The extent of taxation of a particular activity at a given point in time could vary quite substantially, thus providing the authorities with an additional tool for keeping the private sector under control. Private craftsmen and private traders could point to the exact level of taxation up to which they would be able to uphold the private venture, and beyond which they would have to abandon it and return to work in the state-owned sector. The most powerful upper limit on accumulation was uncertainty and the fear of future nationalization and confiscation. Memories of past repression were alive, and the individual might well have been scared that he and his children might one day be stigmatized as "bourgeois" or "kulak."

In this situation, limits on capital accumulation made it difficult to achieve economies of scale. It might be individually more rational in a given political

and ideological climate to waste one's profits rather than to put them to productive use. In historical accounts of capitalist economies, we are used to reading about the parsimony of the founders of family businesses who endeavor to bequeath their wealth to future generations. In accordance with the picture painted in Thomas Mann's novel *Buddenbrooks*, we begin to associate wastefulness only with the second and subsequent generations of a family line of capitalists. By contrast, wasteful consumption in family businesses in reform socialist countries often began on the very first day of their existence, given that it was quite uncertain whether the venture would have a prolonged existence even within the individual founder's own lifetime.

The social environment of the private sector also resulted in myopic behavior. The private firm was typically not interested in building up a solid goodwill with its customers for its products or services, because its owners felt that they might not even be in business in the following year. On the other hand, they were not forced to treat their buyers well given the sellers' market. The private firms could afford to cheat so as to reap the largest possible amount of one-time profit. To the extent that consumers were used to queues and shortages in the state-owned sector, it was generally easy for the private firm to keep its customers, even though its employees might hardly be more forthcoming and polite than the employees of its counterpart in the state-owned sector. Instead of raising the overall standards of service of the sellers under state ownership in the direction of those of a buyers' market, the standards of a new small private venture sometimes dropped downward to those of sellers in a chronic shortage economy.

In all reform economies, private ventures also had to adapt to the use of bribery in the acquisition of the necessary inputs. Cheating was needed not only to acquire inputs, but also to defend the business against the state. There are many stories about Soviet cooperatives and small private businessmen in other countries having to bribe local officials to be able to obtain a license. Many individuals joining the private sector were not entrepreneurs, but adventurers. Such was the natural selection process under the given conditions.

These circumstances set the trap for the social position of the private sector. Daily experience supplied arguments for "anti-capitalist" demagoguery and for popular slogans against profiteering, greediness and cheating. It is ironic that some politicians and journalists in the reform and even in the "post-socialist" countries (sometimes even in the "new left" circles within opposition groups) argue against high prices and profiteering on *moral* grounds. It is not recognized that it is inconsistent to declare the desirability of a market and at the same time to refuse the legitimacy of a price generated by the very same market mechanism. Such propaganda fuels restrictions and interventions which lead to further deterioration: to capitalism at its worst. We therefore face a vicious cycle.

The contemporary socialist system needs the active contribution of a private sector, otherwise it is not able to deliver the goods to the people. Socialism arrived at a stage in history when it was unable to survive in its pure,

strictly non-capitalist fashion and had to coexist with its self-acknowledged archenemy not only worldwide but within its own borders as well.

The Persistence of Bureaucracy

As far as the state-owned sector was concerned, the central idea of the original reform blueprints had been the abolition of the command economy; that is, the elimination of mandatory output targets and mandatory input quotas. Among the reform socialist countries, Yugoslavia and Hungary were the only countries which more or less consistently implemented these proposals before the recent wave of accelerated changes.

When the reform process began in the 1950s and 1960s, the initial expectation was that, once the administrative system had been abolished, there would be a momentary vacuum which would then be filled by the market mechanism. In other words, bureaucratic commands would be instantaneously replaced by market signals. The underlying assumption of this position was that of a simple complementarity between the two mechanisms of coordination, namely bureaucratic and market coordination.¹³ However, this expectation, which was shared by the author in 1955–56, has turned out to be naive. The vacuum left by the elimination of administrative commands, and thus by the elimination of *direct* bureaucratic coordination, was filled not by the market, but by other, *indirect* tools of bureaucratic coordination.¹⁴ Although the role of the market, of course, increased in the wake of the reform, the role of the bureaucracy continued to remain pervasive: for instance, the role of the bureaucracy was still paramount in the selection and in the promotion of managers, and in the decision-making power with regard to the entry and the exit of firms. And while the bureaucracy had reduced or completely relinquished direct administrative control over the quantities of output and input of state-owned firms, it could still control them through formal state orders and informal requests, administrative price setting as well as through the extremely strong financial dependence of the firm on its superior organs, like the ministries in charge of production, the foreign trade authorities, the price control office, the financial bodies, the police, and so on. Party organizations also frequently intervened in the affairs of the firms. A change took place in the form, but not in the intensity of dependence.

In our description of the private sector, we have used the terms “spontaneous” or “naturally grown.” Here, we shall emphasize that the persistence of a

¹³The term “bureaucratic coordination,” here as in other works of the author, is used in a value-free sense, without any negative connotation as in many Eastern European writings and speeches. It refers to certain types of controlling and coordinating activities. The main characteristics of this mechanism include the multi-level hierarchical organization of control, the dependence of the subordinate on the superior and the mandatory or even coercive character of the instructions of the superior.

¹⁴The notions of direct and indirect control were firstly used by Kálmán Szabó, Tamás Nagy and László Antal.

huge bureaucracy is a spontaneous and natural outgrowth of the socialist economy as well. The Central Committee or the Politburo of the Communist party did not have to decide to maintain as much of the bureaucracy as possible during the process of reform. On the contrary, the bureaucracy grew *despite* sincere attempts to reduce it, and in the face of dramatic campaigns to get rid of it, such as the one which took place during the cultural revolution in China. The Soviet perestroika initially again set as its goal a reduction in the size of the bureaucracy; yet the experience up to 1990 did not provide much ground for maintaining the belief in the possibility of checking the natural growth of the bureaucracy by reform alone.

A self-reproduction of bureaucracy could be observed in the sense that, if it was eliminated at some place, in one particular form, it reappeared at another place in some other form. The bureaucracy ruled the socialist economy, both in its classical and reformed forms. This permanent restoration of bureaucratic control is to a large extent explained by certain strong incentives of the bureaucrats. One is, of course, all the material advantage associated with bureaucratic positions, namely financial benefits, privileges and access to goods and services in short supply. Even more important is the attraction of power. And here we arrive at a highly political issue again. The relative shares of the role played by bureaucratic and market coordination are not simply a matter of finding the most efficient division of labor between two neutral mechanisms. Allowing the genuine functioning of the market means the voluntary surrender of an important part of the power of the bureaucracy.

The most important consequences of this situation were the limits imposed on the reformability of the state-owned sector by the systemic tendency of self-reproduction of the bureaucracy. We might be able to appreciate this point more clearly by considering the question of the *constituency for reform*.

On one hand, in the case of the private sector, this constituency was large and well-defined. It consisted of all citizens of a socialist country who chose to or at least would have liked to have the option to work in the private sector, as entrepreneurs or as employees.

On the other hand, nobody would have been an unqualified winner in the far-reaching decentralization of the state-owned sector. Every person involved in the state-owned sector would have gained as well as lost as a result of decentralization. Each member of the bureaucratic apparatus might have gained autonomy *vis-a-vis* his superiors, but at the same time might have lost power over his subordinates. A reduction in paternalism and a concomitant hardening of the budget constraint¹⁵ would have entitled advantages as well as disadvan-

¹⁵The terms "soft" and "hard budget constraint" are discussed in the author's works (1980, 1986b). Basically, the notion of a hard budget constraint is a synonym of full financial self-reliance of the firm and a real threat of bankruptcy in the case of insolvency. The notion of a soft budget constraint refers to a situation where the state bureaucracy assists the state-owned firm in a variety of ways, through subsidies, tax exemptions, soft credits, negotiable administrative prices, and so on and where the firm is protected from financial failure. Thus survival and growth of the firm depends more on its relation to the bureaucracy than on success on the market.

tages for the managers as well as for the workers of a state-owned firm. They would have gained in autonomy, but at the same time lost in protection. Every individual working in the state-owned sector had schizophrenic feelings with respect to the soft budget constraint, paternalism, and protection. While high taxes were disliked, subsidies (even if the firm was not receiving them) might have come in handy in the future, and could therefore not be opposed quite as firmly. Shortages, while they inconvenienced the firm as a buyer, suited it as a seller.

Thus it turned out that neither the bureaucrats, nor the managers, nor indeed the workers were enthusiastic adherents of competition or of the marketization of the state-owned sector. Some enlightened government officials and intellectuals may have come to the conclusion that a hardening of the budget constraint and a decrease in paternalism was needed so as to improve the performance of the economy. However, there were no strikes or street demonstrations in favor of increasing economic efficiency at the expense of state protection. There did not exist a grass-roots movement for the decentralization of the state-owned sector.

Since on the one hand there was a strong inducement to maintain the bureaucratic positions, and on the other hand there was no unambiguous constituency against their maintenance, the final result was the permanent reproduction of bureaucratic coordination.

Strong and Weak Linkages: The Weakness of Market Socialism

Let us now approach the theme of this paper from a somewhat more general point of view. Two strong linkages exist between the ownership form and the coordination mechanism.¹⁶ Thus, classical, pre-reform socialist economies combine state ownership with bureaucratic coordination and classical capitalist economies combine private ownership with market coordination. These two simple cases might be looked upon as historical benchmark models.

By contrast, we can observe that in the reform socialist economies, the private sector, while mainly controlled by the market, was also subject to bureaucratic control. Yet this attempt to impose bureaucratic control on private activities does not and cannot work smoothly due to the basic incongruity of this pair. In addition, there exist other, generally also inconsistent, attempts to coordinate the state-owned sector via market coordination. This idea was the center of the blueprint of market socialism. However, it turned out not to be possible to decrease the dominant influence of the bureaucracy.

¹⁶The train of thought of this section was influenced by the literature on the theory of property rights in general—see, for instance, A. A. Alchian and H. Demsetz (1973), H. Demsetz (1967), E. G. Furubotn and S. Pejovich (1974)—and especially by those writings that discuss the question of property rights as regards the socialist system. Among the latter I would like to single out the classical work by L. von Mises (1935), as well as among the more recent works D. Lavoie (1985), and G. Schroeder (1988).

To sum up: the relationships between the latter two pairs, namely the relationship between state ownership and market coordination, and between private ownership and bureaucratic coordination can be characterized as *weak* linkages.

The notion of "strong" and "weak" linkages does not imply a value judgement, but is purely descriptive. In accordance with the general philosophy of the paper, a linkage between an ownership form and a type of coordination is strong if it emerges spontaneously and prevails in spite of resistance and countermeasures. It is based on a natural affinity and cohesion between certain types of ownership and certain types of coordination mechanisms. The adjective "weak" refers to linkages that are to some extent artificial and not sufficiently strong to resist the impact of the stronger linkage. Weak linkages are pushed aside by the strong ones time and again, whether intellectual and political leaders like it or not.¹⁷

The observation that the linkage between state ownership and market is weak should be seriously taken into account in the ongoing debate on whether it is possible to find a "third way" between old-style Stalinist, classical socialism and contemporary capitalism.¹⁸ There is a large number of visions of such a third way, market socialism being just one of this vast array of blueprints and system engineering proposals. It is an appealing ideology in the eyes of people who attach intrinsic value to the abolition of private property mainly on political and moral grounds, but who at the same time recognize the inefficiency of bureaucratic coordination. This paper does not argue against the desirability of a market socialist system, but is concerned with its feasibility. Indeed, its weakness and inner inconsistency is sufficient reason to reject this idea.

The Weakness of Other "Third Forms"

Aside from market socialism, other third way doctrines abound in socialist (and formerly socialist) countries. Without aiming at a complete classification, the following characteristics can be observed.

As for ownership, many adherents of third way ideologies are attracted to configurations of property rights that exclude both strict state ownership and conventional private ownership. Various "third forms" are advocated: cooperative ownership, communes, labor management, and so on.

¹⁷There are many other combinations of state and private ownership, and of market and bureaucratic coordination worth considering. For example, if the private sector of an economy is strong and stable, a certain segment of the economy can be state-owned and can be forced to operate according to the rules of the market.

¹⁸Some politicians and scholars advocate a "third way" in the political sphere, different both from the Stalinist classical socialist political structure and from Western-type parliamentary democracy. According to the objectives of the paper, the discussion here is limited to third way ideas concerning the economic sphere.

As for coordination mechanisms, again the emphasis is on the negative element: exclusion of both bureaucratic control and the market. Let us introduce as a convenient shorthand for all these "third" coordination mechanisms the term *associative coordination*, which includes various patterns of coordination based on self-governance, free association, reciprocity, altruism, and mutual voluntary adjustment.

The early literature on socialism is rich in proposals suggesting that a socialist society should be based on cooperative ownership, and on non-market, non-bureaucratic associative coordination. In referring to this tradition of thought Marx coined the somewhat derogatory term "Utopian Socialism." Early representatives of this line of thinking have been Proudhon, Fourier (to some extent), Owen, and others.

The more recent literature does not always couple genuine cooperatives and labor management with associative coordination. Some authors place the emphasis on cooperatives and labor management, others on associative coordination, while in some cases the two are considered together. Of course, cooperative ownership can be linked not only to associative coordination but to the market as well. Ideas of this kind frequently came up in the reform discussions in socialist countries. For example, Yugoslavia experimented with a coupling of labor management with both market and "associative" coordination. Large segments of the economy were coordinated in the usual way by the market mechanism. At the same time, so-called "social compacts" were arranged to establish direct contacts between the representatives of producers and of consumers; they were expected to make mutual adjustments voluntarily. While the official policy alternated in the emphasis given to the market and associative coordination, in fact bureaucratic coordination prevailed all the time, and was in a latent fashion the dominant force.

The Chinese cultural revolution may be looked upon as another attempt to smash the bureaucracy and to proceed to a non-bureaucratic socialism without the introduction of market elements. But neither the Yugoslav nor the Chinese experiment lead to conclusive results. In both cases the changes were forced upon society by the political leadership. Although at the beginning the initiative from the top had enthusiastic support among at least a part of the population, it was subsequently institutionalized and forced through without countenancing any deviation from the central party line. Therefore, the fact that something resembling cooperative ownership and labor management was and still is the dominant ownership form in Yugoslavia or that the rhetoric of Mao's Cultural Revolution reasserted principles similar to associative coordination does not allow us to reach any conclusions concerning the true strength of these forms.

Let us apply instead the criterion proposed previously and look at whether cooperative ownership and associative coordination grow spontaneously and naturally during the reform process. This question is meaningful, because the establishment of genuine voluntary cooperatives, voluntary adjustments, and other forms of associative coordination are not prohibited in these countries.

Small cooperatives are far better tolerated than more outright private economic activities. And altruism and non-commercialized reciprocity are of course legal in any system. However, we can observe that, while third forms (cooperatives, labor management and associative coordination) existed even at the peak of bureaucratic centralization, these forms did not experience a spectacular growth after the command system had been abolished. When forms other than centralized state-ownership were permitted, private ownership gained ground rapidly. While the elimination of direct bureaucratic control left a momentary vacuum, this vacuum was filled mainly by indirect bureaucratic control, as well as by some form of market coordination. Cooperative ownership, labor management and associative coordination played an auxiliary role at most.¹⁹

Let us sum up our arguments concerning the strengths or weaknesses of the forms of social organization. State ownership and private ownership are both robust, while the various third forms of ownership have relatively few followers. Similarly, while bureaucratic and market coordination both are widely applied, associative coordination operates only in a rather restricted area. There is an affinity between state ownership and market coordination; and between private ownership and market coordination; all other potential linkages between forms of ownership and forms of coordination are weak, and tend to be overridden by the two strong linkages.

With view to the discussions about transformation now going on in socialist and formerly socialist countries, it must be admitted that the observations concerning the weakness of third forms are drawn from a small sample observed over a brief period. Perhaps 20 or 30 years from now, researchers might be able to observe that this tendency was stopped and that history took an alternative route. History is unpredictable. But as long as no contrary evidence is provided by experience, it is worth keeping in mind these preliminary observations concerning the strength and weakness of the alternative ownership forms and coordination mechanisms and linkages between them.

It is fully understandable that various social groups and intellectual currents advocate a wider role of third forms. These efforts may have beneficial effects, but it would be intellectually dishonest to hide the evidence concerning the weakness of third forms.

About Normative Implications

No search for third forms of ownership and coordination mechanism allows one to evade the real tough choices. We really have to decide what the relative importance of the two robust forms of ownership—state versus private

¹⁹Third ownership forms and associative coordination are associated in many writings with certain political ideas such as administrative decentralization of government activities, the increased role of local governments, participatory democracy and self-governance, corporative ideas of various sorts and so on. Again, the discussion of these aspects is beyond the limits of the present paper.

—should be. Closely related to this will be the choice concerning the relative shares of the two robust coordination mechanisms, that is, bureaucratic versus market coordination.

We are not faced with an “either-or” type of binary choice between mutually exclusive forms: either state ownership cum bureaucratic coordination, or private ownership cum market coordination. The ideas presented in the paper, however, entail the following:

First, state and private ownership can coexist within the same society. Yet in the political, social and ideological environment of reform socialist countries this is an uneasy symbiosis, loaded with many grave dysfunctional features.

Second, the decision concerning the actual shares of state and private ownership, and the associated decision concerning the combination of bureaucratic and market coordination are both dependent on the ultimate value judgements of those participating in the choice. The present paper does not comment on these value judgements, nor on the political and ethical criteria underlying the choice. It offers some conditional predictions based on the conjectures about the strengths and weaknesses of various possible linkages between ownership and coordination mechanisms. History warns us not to have illusions and false expectations. Once one arrives at a large share for state ownership, one gets a “package deal” that inevitably contains a large dose of bureaucratic coordination. Another warning is also needed: if one really wants a larger share for market coordination, one must *ipso facto* accept a larger share for private ownership and for individual activities. But a desired coordination mechanism (say market) does not come about without a significant backing of the appropriate ownership form (private ownership). Likewise, one cannot get the desired ownership form (say public) without getting its associated form of coordination (bureaucratic coordination). Such has been the *Realpolitik* of reforms.

The usual slogans dominating the published economic literature in the reform countries demanding state-ownership cum market entailed a misunderstanding or engendered naive, false hopes for a third way that are clearly disproved by the bitter track record of experimentation with half-reforms. But then, must these countries tread the painful path of gradual disenchantment? Is it really hopeless to expect that the latecomers to the reform process might learn from the disappointments of the pioneers in reform?

Third, those who sincerely want a larger role for the market, must allow more room for fully legal private activities, for free entry and for exit, for competition, for individual entrepreneurship and for private property. The author is strongly in favor of this course of action.²⁰ Only a radical extension of the private sector creates favorable conditions for the marketization of the whole economy, including more effective market signals and more powerful profit incentives for state-owned firms. Movement in that direction, namely in

²⁰For more details concerning my policy proposals see Kornai (1990).

the direction of the extension of the private sector, is the most important yardstick of economic transformation.

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References

- Afnas'ev, Iu. N.**, ed., *Inogo ne dano*. (There is No Other Way.) Moscow: Progress, 1988.
- Alchian, Armen A., and Demsetz, Harold**, "The Property Rights Paradigm," *Journal of Economic History*, March 1973, 33:17, 16–27.
- Antal, László, Lajos Bokros, István Csillag, László Lengyel, and György Matolcsy**, "Change and Reform," *Acta Oeconomica*, 1987, 38:3–4, 187–213.
- Brus, Włodzimierz**, *The Market in a Socialist Economy*. London: Routledge and Kegan, [1961], 1972.
- Burkett, John P.**, "The Yugoslav Economy and Market Socialism." In Bornstein, M., ed., *Comparative Economic Systems: Models and Cases*. Homewood, IL and Boston: Irwin, 1989, pp. 234–258.
- Central Statistical Office**, *Statistikai évkönyv 1988*. (Statistical Yearbook 1988.) Budapest: Statistikai Kiadó, 1989.
- Dallago, Bruno**, "The Underground Economy in the West and East: A Comparative Approach." In Bornstein, M., ed., *Comparative Economic Systems: Models and Cases*. Homewood, IL and Boston: Irwin, 1989, pp. 463–484.
- Davis, Christopher M.**, "The Second Economy in Disequilibrium and Shortage Models of Centrally Planned Economies," Berkeley-Duke Occasional Papers on the Second Economy in the USSR, #12, July 1988.
- Demsetz, Harold**, "Toward a Theory of Property Rights," *American Economic Review*, May 1967, 57:2, 347–359.
- Furubotn, Erik G., and Svetozar, Pejovich**, eds., *The Economics of Property Rights*. Cambridge: Ballinger, 1974.
- Gábor, István R.**, "The Major Domains of the Second Economy." In Galasi, P., and Gy. Sziráczky, eds., *Labour Market and Second Economy in Hungary*. Frankfurt and New York: Campus, 1985, pp. 133–178.
- Grossman, Gregory**, "The 'Second Economy' of the USSR," *Problems of Communism*, 1977, 26:5, 25–40.
- Hewett, Ed. A.**, *Reforming the Soviet Economy, Equality versus Efficiency*. Washington, DC: The Brookings Institution, 1988.
- Kidric, Boris, Sabrana Dela**. (Collected Works.) Beograd: Izdavacki Centar Komunist, 1985.
- Kornai, János**, *Overcentralization in Economic Administration*. London: Oxford University Press, [1957], 1959.
- Kornai, János**, *Economics of Shortage*. Amsterdam: North-Holland, 1980.

Kornai, János, "Bureaucratic and Market Coordination," *Osteuropa-Wirtschaft*, 1984, 29:4, 306-319.

Kornai, János, "The Hungarian Reform Process: Visions, Hopes and Reality," *Journal of Economic Literature*, Dec. 1986a, 24:4, 1687-1737.

Kornai, János, "The Soft Budget Constraint," *Kyklos*, 1986b, 39:1, 3-30.

Kornai, János, *The Road to a Free Economy, Shifting from a Socialist System: The Example of Hungary*. New York: W. W. Norton and Company, 1990 (forthcoming).

Lavoie, Don, *Rivalry and Central Planning: The Socialist Calculation Debate Reconsidered*. Cambridge: Cambridge University Press, 1985.

Lieberman, Evsey G., "The Plan, Profits and Bonuses." In Nove, A., and D. M. Nuti, eds., *Socialist Economics: Selected Readings*. Middlesex: Penguin Books, [1962], 1972, pp. 309-318.

Lenin, Vladimir Il'ich, *Left-wing Communism, an Infantile Disorder*. Moscow: Progress Publishers, [1920], 1966.

Mises, Ludwig von, "Economic Calculation in the Socialist Commonwealth." In Hayek, F. A., ed., *Collectivist Economic Planning*. London: Routledge and Kegan, [1920], 1935, pp. 87-130.

Perkins, Dwight Heald, "Reforming China's Economic System," *Journal of Economic Literature*, June 1988, 26:2, 601-645.

Péter, György, "Az egyszemélyi felelős vezetésről," (On Management Based on One-Man Responsibility.), *Társadalmi Szemle*, Aug./Sept. 1954a, 9:8-9, 109-124.

Péter, György, "A gazdaságosság jelentőségéről és szerepéről a népgazdaság tervezői irányításában," (On the Importance and Role of Economic Efficiency in the Planned Control of the National Economy.), *Közgazdasági Szemle*, Dec. 1954b, 1:3, 300-324.

Péter, György, "A gazdaságosság és a jövedelmezőség jelentősége a tervgazdaságban, I-II.," (The Importance of Economic Efficiency and Profitability in Planned Economy I-II.), *Közgazdasági Szemle*, June and July/Aug. 1956, 3:6, 695-711 and 3:7-8, 851-869.

Pomorski, Stanislaw, "Privatization of the Soviet Economy under Gorbachev I: Notes on the 1986 Law on Individual Enterprise," Berkeley-Duke Occasional Papers on the Second Economy in the USSR, 1988, #13, October.

Schroeder, Gertrude E., "Anatomy of Gorbachev's Economic Reform," *Soviet Economy*, July/Sept. 1987, 3:3, 219-241.

Schroeder, Gertrude E., "Property Right Issues in Economic Reforms in Socialist Countries," *Studies in Comparative Communism*, Summer 1988, 21:2, 175-188.

Shmelev, N., "Avansy i Dolgi," (Credits and Debts.), *Novyi Mir*, June 1987, 6, 142-58.

Sun Yefang, "Some Theoretical Issues in Theoretical Issues," originally published in the period 1958-1961. Edited and translated by K. K. Fung under title: *Social Needs versus Economic Efficiency in China*: Armonk: M. E. Sharpe, 1982.

Timár, János, *Idő és munkaidő*. (Time and Working Time.) Budapest: Közgazdasági és Jogi Könyvkiadó, 1988.

