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Institutional Aspects of Economic Reform: The Transaction Cost Economics Perspective

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Transaction cost economics goes beyond the orthodox prescription for a reformed economy -- which emphasizes the use of macroeconomic instruments to control inflation, the removal of price controls, currency convertibility, and the removal of trade restraints -- and urges that the institutions of economic organization play a vital role in determining the success or failure of reform. Especially important are institutions to support high powered incentives. The difference between genuine and simulated privatization are examined in this connection. Also crucial are credible commitments by the state to forestall hazards of expropriation. The design of constitutions and of the judiciary are pertinent. Reform efforts can and have been defeated by over-managing the process. The "costs of good intentions" (of both benign and insidious kinds) need to be expressly taken into account.

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Institutional Aspects of Economic Reform:

The Transaction Cost Economics Perspective

Oliver E. Williamson*

Early optimism that the path to economic reform was obvious and that economic performance in the reformed economics would improve quickly has vanished. The road is rocky; many parts are obscure; the journey will take a long time.

Economic reform is an ambitious and complex enterprise. As developed herein, economics, law, and organization theory, individually and in combination, are all implicated. Among these three, the relevance of law and organization theory to economic reform has been relatively slighted. Within economics, moreover, the tendency has been to rely on orthodox macroeconomic instruments budget balancing, price stabilization, convertibility, price liberalization--to the neglect of the microeconomics of institutions. The Polish experience is illustrative (Frydman and Rapaczynski, 1990; Iwanek, 1991).

The "Balcerowicz Plan" principally consisted of macroeconomic measures "such as credit restrictions, wage restraints, and reductions of subsidies, designed to arrest inflationary pressures in the economy" (Frydman and Rapaczynski, 1990, p. 5). The measures undertaken in January 1990 were expected to create (Frydman and Rapaczynski, 1990, p. 5):

> ...the basic conditions of a market economy. The lifting of subsidies, together with other monetary measures, was expected to result in a readjustment of prices. By bringing out a more realistic assessment of costs and revenues of each particular enterprise, this...was supposed to provide the proper incentives for the management and put the state enterprises on a sound footing. Privatization...would merely complete the process.

Alas, "the orthodox prescription for a market economy brought limited results" (Iwanek, 1991, p. 4). The merits of and needs for institutions and a growing appreciation for the limits of "third forms"--workers' management, holding companies, and other attenuated property rights structures--have taken shape. Often, however, the concessions are limited; and the search for third forms continues (Kornai, 1990, p. 144).

My purpose in this paper is to bring the transaction cost economics lens to bear on decentralization. Section 1 sets out what I believe to be the key lessons of transaction cost economics that are pertinent to reform. A series of applications to reform issues are then addressed in Section 2. Concluding remarks follow.

1. Transaction Cost Economics

Issues to which transaction cost economics distinctively speaks that have a crucial bearing on reform and are omitted or elided by most of the orthodox reform literature include the following: (1) "human nature as we know it"; (2) first-order economizing; (3) contracting; (4) credibility; (5) role design; and (6) industrial monopoly.

1.1 human nature as we know it

What Frank Knight has referred to as "human nature as we know it" (1965, p. 270) and Ronald Coase describes a "man as he is" (1984, p. 231) are prominently featured by transaction cost economics. Behavioral assumptions that differ from orthodoxy result.

The two key behavioral assumptions on which transaction cost economics relies are bounded rationality and opportunism. All complex contracts are unavoidably incomplete by reason of bounded rationality, which is to say that comprehensive contracting is a fiction. Moral hazard, adverse selection, and other forms of hidden action and information are subsumed by opportunism. Because of opportunism, contract as promise is not reliably self-enforcing.

The incompleteness of contracts (by reason of bounded rationality) in combination with the inadequacy of promise (by reason of opportunism) greatly complicate the problem of economic organization. It forces the analysis of contract to go beyond that of ex ante incentive alignment, which is the agency theory tradition, to include ex post governance. The institutions of ex post governance are where the main transaction cost economics action resides.

Of special importance to ex post governance are institutional supports for credibility and the design of roles that infuse confidence in dispute settlement and serve to attenuate opportunism in other respects. These are developed in 1.3 and 1.4, below. Suffice it to observe here that, absent bounded rationality or opportunism, most of the interesting problems of economic organization would vanish.[1]

1.2 first-order economizing

In comparison with orthodoxy, transaction cost economics is much more concerned with the mechanisms of adaptation and with problems of bureaucracy and waste.

(a) adaptation[2]

Friedrich Hayek insistently argued that "economic problems arise always and only in consequence of change" and that this truth was obscured by those who held that "technological knowledge" is of foremost importance (1945, p. 523). He disputed the latter and argued that "the economic problem of society is mainly one of rapid adaptation in the particular circumstances of time and place" (Hayek, 1945, p. 524). Of special importance to Hayek was the proposition that the price system, as compared with central planning, is an extraordinarily efficient mechanism for communicating information and inducing change (Hayek, 1945, p. 524-27).

Interestingly, Chester Barnard also held that the main purpose of organization was that of adaptation to changing circumstances. What concerned Barnard, however, was adaptation by internal organization. Confronted with a continuously fluctuating environment, the "survival of an organization depends upon the maintenance of an equilibrium of complex character.... [This] calls for readjustment of processes internal to the organization..., [whence] the <u>center of our interest</u> is the processes by which [adaptation] is accomplished" (1938, p. 6; emphasis added).

The marvel to which Hayek referred had spontaneous origins: "The price system is...one of those formulations which man has learned to use...after he stumbled on it without understanding it" (Hayek, 1945, p. 528). The importance of such spontaneous cooperation notwithstanding, it was Barnard's experience that intended cooperation was important and undervalued. The latter was defined as "that kind of cooperation among men that is conscious, deliberate, purposeful" (Barnard, 1938, p. 4) and was realized through formal organization--especially hierarchy.

That is very curious. Both Hayek and Barnard hold that the central problem of economic organization is adaption. But whereas Hayek located this adaptive capacity in the market, it was the adaptive capacity of internal organization on which Barnard focused attention. If the "marvel of the market" (Hayek) is matched by the "marvel of internal organization" (Barnard), then wherein does one outperform the other?

Interestingly, this strain creeps into the current reform dialogue. Thus one involved participant observed that whereas decentralization was currently being urged upon the reform economies because of prospective efficiency gains, efficiency arguments in favor of centralization had been advanced forty years earlier. Since plausible efficiency arguments could evidently be made both ways, he concluded that the main benefits of decentralization were political rather than economic.[3]

Transaction cost economics concurs with the argument that adaptation is the central economic problem. The strain is resolved by arguing (1) that a high performance economy will display adaptive capacities of <u>both</u> autonomous and cooperative kinds, and (2) that alternative forms of governance--market, hybrid, and hierarchy--are able to implement autonomous and cooperative forms of adaptation in differential degree (Williamson, 1991a).

(b) waste and bureaucracy

Frank Knight's views of fifty years ago on the importance of waste and Oskar Lange's remarks on bureaucracy have been persistently neglected. Regarding the first, Knight observed that (1941, p. 252):

> ...men in general, and within limits, wish to behave economically, to make their activities and their organization "efficient" rather than wasteful. This fact does deserve the utmost emphasis; and an adequate definition of the science of economics...might well make it explicit that the main relevance of the discussion is found in its relation to social policy, assumed to be directed toward the end indicated, of increasing economic efficiency, of reducing waste.

Late in his famous essay on the theory of economic socialism, which mainly appealed to welfare economics to derive rules for efficient resource allocation in the socialist state, Lange introduced the issue of bureaucracy (1938, pp. 109-110; emphasis in original):

> There is also the argument which might be raised against socialism with regard to the efficiency of public officials as compared with private entrepreneurs as managers of production. Strictly speaking, these public officials must be compared with corporation officials

under capitalism, and not with private small-scale entrepreneurs. The argument thus loses much of its force. The discussion of this argument belongs to the field of sociology rather than of economic theory and must therefore be dispensed with here. By doing so we do not mean, however, to deny its great importance. It seems to us, indeed, that the real danger of socialism is that of a bureaucratization of economic life, and not the impossibility of coping with the problem of allocation of resources. Unfortunately, we do not see how the same, or even greater, danger can be averted under monopolistic capitalism. Officials subject to democratic control seem preferable to private corporation executives who practically are responsible to nobody.

Orthodoxy was unpersuaded and neither waste nor bureaucracy has been prominently featured on the economics research agenda since. Transaction cost economics argues that that is a lapse and attempts to make provision for both.

Waste can take a variety of forms. One would be to use the wrong form of organization to effect adaptation. Ubiquitous reliance on bureaucracy, to the neglect of markets, or on markets, to the neglect of hierarchy, are examples.

Choice within, as well as between, alternative generic forms of organization can also have waste ramifications. Thus firms are sometimes run in a slack (wasteful) fashion because of an inferior choice of internal organizational form. A matter that is pertinent to reform is the widespread propensity to over-manage the reform, thereby to accommodate managerial/ bureaucratic preferences. Role design (see below) is important in this connection.

1.3 contracting

Transaction cost economics holds that any issue that can be posed directly or indirectly as a contracting problem can be addressed to advantage in transaction cost economizing terms. Many issues, such as the vertical integration problem (make-or-buy), have transparent contracting structures. Other problems, such as the oligopoly problem, need to be reformulated (for example, by posing the oligopoly problem as one of contracting among members of a cartel). This emphasis on contracting serves to highlight the importance of governance, as compared with technology, for studying economic organization.

There is another aspect to contracting, however, to which I would call attention. Transaction cost economics maintains that every generic form of organization is defined and supported by a distinctive form of contract law. Whereas the economics of property rights plays an important role in the institutional economics literature (Coase, 1959; Alchian, 1962; Demsetz, 1967), the economics of contract law has received much less attention. If, however, governance structures rest crucially on their contract law supports (Williamson, 1990, 1991a), then poorly conceived contract law can undermine the viability of particular governance forms. That is relevant both in general and, perhaps especially, in the context of economic reform.

As developed elsewhere, classical contract law supports spot markets, neoclassical contract (with excuse doctrine) supports long-term contracting, and forbearance law supports hierarchy (Williamson, 1991a). The economic logic that joins these pairings of law and organization needs to be respected, if as I contend, mismatches and/or excesses of intrusiveness (by the judiciary or by the government) are the source of avoidable costs.

1.4 credibility

Transaction cost economics has mainly emphasized the importance of credible commitments in the context of private ordering. That is to be contrasted with Machiavelli, who advised his prince that "a prudent ruler ought not to keep faith when by so doing it would be against his interest, and when the reasons which made him bind himself no longer exist....[L]egitimate grounds [have never] failed a prince who wished to show colourable excuse for the promise" (Gauss, 1952, pp. 92-93). Reciprocal or preemptive opportunism is a very primitive response, however, to the awareness that human agents are not fully trustworthy.

The more important lesson, for the purposes of studying economic organization, is this: Transactions that are subject to ex post opportunism will benefit if appropriate safeguards can be devised ex ante. Rather than reply to opportunism in kind, the wise prince is one who seeks both to give and to receive credible commitments.

Although the giving and receiving of credible commitments is mainly an exercise in private ordering (Galanter, 1981), the laws of both property and contract and the institutional supports for each are important. Karl Llewellyn's concept of contract as framework is pertinent. Rather than employ a strictly legalistic approach to contract, Llewellyn advised that (1931, pp. 736-737):

> ...the major importance of legal contract is to provide a framework for well-nigh every type of group organization and for well-nigh every type of passing or permanent relation between individuals and groups...--a framework highly adjustable, a framework which almost never accurately indicates real working relations, but which affords a rough indication around which such relations vary, an occasional

guide in cases of doubt, and a norm of ultimate appeal when the relations cease in fact to work.

A purposive rather than legal rules approach to contract is proposed. Treating contract as an adjustable rather than rigid framework facilitates the adaptation of neoclassical transactions. Recourse to the formal contract for purposes of ultimate appeal nevertheless has a role to play: it serves to delimit threat positions. Assuming that the judiciary reliably enforces the law in a responsible manner, such a truncation of the distribution of possible outcomes has confidence-infusing features. (Reliable enforcement implicates issues of role design, to which I return below.)

Frank Michelman examines the willful or arbitrary expropriation of property rights in relation to the "security of expectations." Upon observing that it would be prohibitively costly to compensate for every "taking" of property rights by the state, Michelman inquires whether it is possible to devise a set of criteria that would be cost-effective for purposes of judging when compensation should be paid and when compensation can (and should) be denied. He argues that if compensation is costly and if the "demoralization costs" experienced by disadvantaged individuals and interested observers are slight, then compensation is not needed. Where, however, demoralization costs can be expected to be great and if losses can be easily ascertained, compensation is warranted. Michelman proposes a series of criteria by which to judge how this calculus works out. Suppose, arguendo, that the government adopts these criteria.

The matter of de jure versus de facto application then needs to be faced. Will these criteria be reliably enforced? The importance of the judiciary to the economics of organization evidently requires express attention. The issue of role design referred to above is again posed.

1.5 role design

Role design has previously been treated in only a limited and selective way by transaction cost economics. That is a lapse and needs to be rectified.

The general argument is this: although all agents are given to opportunism, (1) not all agents are given to opportunism in equal degree and (2) roles can often be designed in ways which significantly delimit the degree to which an occupant of a role will behave opportunistically.

(a) the modern corporation

Excesses of managerial discretion in the modern capitalist corporation can be checked in a variety of ways. Competition in the product market is an obvious check against waste and mismanagement. Competition in the capital market also performs those functions. In principle, organization form would serve as a check against excesses of managerial discretion. If, however, managers are the problem--in that they are knowledgeable, strategically situated, and actively involved in discretionary choice--how can managers also be expected to be the solution, by reorganizing the firm so as to restrain managerial discretion?

At least three different factors contribute to such a result: the top managers of the firm derive greater satisfaction from global goals (like profitability) than do the managers of the operating parts; not all managers are equally given to easy-life pursuits; and firms that are faced with survival threats may need to take drastic action. All three of these factors applied to the General Motors Corporation in the 1920s, when the multidivisional structure was introduced. Thus Alfred P. Sloan, Donaldson Brown, and others perceived the need for a new organizational structure that would infuse integrity into the organization, Sloan has been described as a relentless profit maximizer, and General Motors was faced with viability crisis under the prevailing organization form.

The M-form structure fashioned by du Pont and Sloan involved the creation of semiautonomous operating divisions (mainly profit centers) organized along product, brand, or geographic lines. The operating affairs of each were managed separately. More than a change in decomposition rules was needed, however, for the M-form to be fully effective. Du Pont and Sloan also created a general office "consisting of a number of powerful general executives and large advisory and financial staffs" (Chandler, 1977, p. 460) to monitor divisional performance, allocate resources among divisions, and engage in strategic planning. The reasons for the success of the M-form innovation are summarized by Chandler (1966, pp. 382-383):

> The basic reason for its success was simply that it clearly removed the executives responsible for the destiny of the entire enterprise from the more routine operational activities, and so gave them the time, information, and even psychological commitment for long-term planning and appraisal....
>
> [The] new structure left the broad strategic decisions as to the allocation of existing resources and the acquisition of new ones in the hands of a top team of generalists. Relieved of operating duties and tactical decisions, a general executive was less likely to reflect the position of just one part of the whole.

(b) banks

It has been argued that Japanese (Sheard, 1989; Aoki, 1990) and German (Cable, 1985) banks play important roles in checking excesses of managerial discretion in Japanese and German firms, respectively. The "main bank" system in Japan permits groups of banks to acquire substantial ownership stakes in individual firms. And German banks combine ownership with a considerable degree of control over proxies to exercise a high degree of effective control.

It has also been observed, however, that bank control of many (by no means all) German and Japanese corporations merely pushes the ownership and control issue one stage back. Who owns the banks?

Albeit important, that is not a fateful query. To assume that ownership is dispositive ignores the importance of role design. Note that banks, like Chandler's general management, bear a specialized relation to the firm that favors profits over subgoal pursuit in the management of the corporation. Even more than the general management, the banks are removed from operating activities. Unable to engage in subgoal pursuit through the operating side of the enterprise, the banks relate instead to an assessment of the investment and other strategic features of the firm.

To be sure, the bank does not have the same depth of knowledge as the general office. In the degree, however, to which the bank has a continuing relation to the firm, learns its business, knows its managers, and has a hand in the appointment of the most senior managers. all of which commonly obtain (Aoki, 1990; Cable, 1985), the bank can and arguably does serve to infuse greater integrity into the corporate control process.[4]

(c) the judiciary

Surprisingly, the role of the judiciary in economic reform receives little attention in the reform literature. Possibly that is because of the tradition within economics of taking the courts as given. There is no need to introduce the courts if disputes are presented to and are costlessly and correctly decided by the legal system.

Albeit convenient to assume that the courts function in this fashion, what is the justification? If all parties to a transaction are given to opportunism, wherein are the courts an exception?

One way of putting the problem is that of N-1 opportunism. The basic proposition is this: if there are N parties of which all are opportunistic but one, and if that one is made the final arbiter of disputes, then contractual integrity can be ascribed to the system. The crucial question then becomes how to provide the institutional supports that would yield confidence in the judiciary.[5]

That is a subject to which many others--philosophers, political scientists, constitutional law specialists, politicians, jurists, etc.--have addressed at length and to which I have no special expertise. Factors, however, that would help to infuse confidence in the judiciary would include the following: (1) creating the judiciary as a separate branch of government; (2) creating constitutional guarantees for property and contract; (3) assigning ultimate appeal for disputes over property and contract to the courts; (4) giving long tenure to judges; (5) requiring nominees to be screened, to make their wealth known, and to disengage from conflicting activities; (6) compensating judges well and elevating them to places of honor; and (7) requiring judges to explain their decisions in writing. This last will be buttressed by subjecting legal decisions to scrutiny by academics and by public criticism of these decisions by a free press.

To be sure, court decisions are never final--in the sense that constitutions can be changed by supermajority rules and new laws can be passed by legislatures. But legislatures cannot be bothered with day-to-day dispute resolution; and major legislative changes can be effected only with broad consensus. An independent judiciary has a great deal to recommend it in the overall scheme of economic organization (Landes and Posner, 1975).[6]

Interestingly, but perhaps not surprisingly, Adam Smith earlier remarked on the greater degree of confidence to be ascribed to judiciaries in which roles are carefully defined (1776, pp. 731-732):

> ...In the republics of ancient Greece, particularly in Athens, the ordinary courts of justice consisted of numerous, and therefore

disorderly, bodies of people, who frequently decided almost at random, or as clamor, faction and party spirit happened to determine. The ignominy of an unjust decision, when it was divided among five hundred, a thousand, or fifteen hundred people (for some of their courts were so very numerous), could not fall very heavy upon any individual. At Rome, on the contrary, the principal courts of justice consisted either of a single judge, or a small number of judges, whose characters, especially as they deliberated always in public, could not fail to be very much affected by any rash or unjust decision. In doubtful cases, such courts, from their anxiety to avoid blame, would naturally endeavor to shelter themselves under the example, or precedent, of the judges who had sat before them, either in the same, or in some other court. This attention to practice and precedent, necessarily formed the Roman law into that regular and orderly system in which it has been delivered down to us; and the like attention has had the like effects upon the laws of every other country where such attention has taken place.

(d) the bureaucracy

Recall that Oskar Lange introduced but then dismissed the possibility that bureaucratization posed the main danger to socialism. Partly the matter was dismissed because bureaucracy was the domain of sociology rather than economics, which is no reason at all. But Lange also observed, correctly, that bureaucratization needed to be judged comparatively. In his view, large and monopolistic capitalist firms were even more beset by bureaucracy than socialism. Is Lange correct in this assessment?

Bureaucracy is plainly a problem in large organizations of all kinds. In markets that are not buttressed by contrived (including especially political) barriers to entry, however, monopoly invites its own demise. As discussed in

1.6, below, entrants find niches and chip away at monopoly margins. Furthermore, competition in the capital market poses a threat to excesses of bureaucracy--as such excesses invite takeover, reorganization, and the capitalization of the associated rents.

Socialism is at a disadvantage in both respects: competition in product markets is strictly limited; and financial takeover is impossible.[7] The compound hierarchy through which the centralized socialist state operates, moreover, dwarfs that of any capitalist firm (Hewett, 1988).

Recent history confirms that Lange was correct in labeling bureaucracy as the main danger to socialism. The low-powered incentives, managerial discretion, and related distortions and corruption in the centralized socialist state have been chiefly responsible for its demise.

1.6 Industrial monopoly

Transaction cost economics differs from orthodox treatments of monopoly in two respects. Fist, rather than regard nonstandard and unfamiliar business practices as presumptively anticompetitive, which was once the ruling tradition,[8] transaction cost economics entertains the possibility that such practices have an efficiency rationale. Indeed, a rebuttable presumption in favor of efficiency is proposed. Secondly, rather than regard monopoly power as durable and lasting, transaction cost economics emphasizes the Schumpeterian concept of "handing-on." Nonstandard contracting having been addressed elsewhere (Williamson, 1985, Chapters 7-8), I focus here on the latter.[9]

Superior products, superior production techniques, and superior management can all be thought of as cost advantages that distinguish the monopolist from extant and potential rivals. Such advantages can rarely be sustained for long in the face of handing-on--where the process of handing-on always works "through a fall in the price of the product to the new level of costs" (Schumpeter, 1947, p. 155) whenever rivals are alert to new opportunities and are not prevented by purposive restrictions from adopting them.

Support for the efficacy of handing-on can be found at both anecdotal and statistical levels. The statistical evidence is this: once-dominant firms are ordinarily subject to undoing. Once-dominant firms in steel, tobacco, automobiles, aluminum, computers, petroleum, photographic film, cameras, chemicals, meat packing, etc. have simply had to share their markets as aggressive domestic and foreign rivals have responded to profit opportunities and found a way to sell at comparable, if not lower, costs.[10]

Although Joel Mokyr's recent book on technological creativity and economic progress does not feature handing-on, the proposition that monopoly power is eroded by imitators and/or by evasive measures is a recurrent theme. For example, manufacturing moved to the countryside when "the tight corporate structure of craft guilds, which restricted entry and imposed strict rules on the quality and price of output" were imposed within cities (Mokyr, 1990, p. 77). Successive <u>political efforts to defeat</u> innovation were mainly successful only in effecting <u>delay</u> (Mokyr, 1990, p. 179):

> The ribbon loom was invented in Danzig in 1579, but its inventor was reportedly secretly drowned by orders of the city council. Twenty-five years later the ribbon loom was reinvented in the Netherlands--though resistance there, too, was stiff--and thus became known as the Dutch loom. A century and a half later, John Kay, the inventor of the flying shuttle, was harassed by weavers. He eventually settled in France, where he refused to show his shuttle to weavers out of fear. But the prolonged opposition of vested interest against the flying shuttle in Britain was

> ineffectual. Resistance to new technology was traditionally strongest in the textile trade, but appeared in less expected places as well. In 1299, an edict was issued in Florence forbidding bankers to use Arabic numbers (Stern, 1937, p. 48). In the fifteenth century, the scribes guild of Paris succeeded in delaying the introduction of printing into Paris by 20 years.

Multiple political units are among the advantages that Mokyr ascribes to Europe as compared with the unified administration of China. "Europe always consisted of many nations.... Europe always eventually settled in the best-practice technique in use regardless of where it had been invented" (1990, p. 207). In Britain, moreover, where, "to a far greater extent than on the Continent, good transportation allowed competition to work,...the new technologies superseded the old sooner and faster than elsewhere" (Mokyr, 1990, p. 246).

Gustavus Swift prevailed with the refrigerated transport of meat in the face of resistance both from rivals and the railroad interests. Thus Swift believed that the practice of shipping Western cattle to Eastern markets alive rather than slaughtered and dressed was unnecessarily expensive. He proposed to realize economies by butchering the animals in the west and shipping the meat east in refrigerated cars, where it would be received and distributed from a network of refrigerated storage houses. Not only did this involve investments in specialized assets, the value of which would be limited should Swift's strategy fail, but it met determined opposition (Chandler, 1977, p. 300):

> Railroads startled by the prospect of losing their livestock business, which was an even greater producer of revenue than grain on the west to east routes, refused to build refrigerated cars. When Swift began to construct his own, the Eastern Trunk Line

> Association refused to carry them. Only by using the Grand Trunk, then outside of the Association, was Swift able to bring his cars east. At the same time he had to combat boycotts by local wholesalers, who in 1886 formed the National Butchers' Protective Association to fight "the trust." These butchers attempted to exploit a prejudice against eating fresh meat that had been killed days or even weeks before, more than a thousand miles away.

Despite the opposition from the railroads and butchers, Swift's "high quality and low prices" combined with "careful scheduling" prevailed (Chandler, 1977, p. 300). Other packers soon thereafter realized that "if they were to compete with Swift in the national market they must follow his lead" (Chandler, 1977, p. 300).

As discussed below, the lessons of handing-on apply at least as much to reform economies as they do to advanced capitalist economies. The widespread reluctance to concede the merits of handing-on is needlessly and harmfully debilitating.

2. Applications

Transaction cost economics has a bearing on the institutions of economic reform in the following respects: (1) privatization, (2) credibility, (3) simulated capital markets, (4) bureaucracy, (5) the legal system, (6) antitrust, and (7) joint ventures.

2.1 privatization

Although the need for privatization is widely conceded, there is much less agreement on the means. Weak and/or highly managed forms of privatization tend to be favored. Transaction cost economics counsels that the urgent need is to engage high-powered incentives and that this should proceed more vigorously.

(a) workers' management

It was early hoped, and even expected, in Poland and elsewhere, that the substitution of workers' management for state-management (by the nomenklatura) would infuse the state-owned enterprise with vitality. That was not realized: "except among advocates of workers' management, nobody believes that the present governance scheme of state-owned enterprises [by workers' management] creates strong incentives" (Iwanek, 1991, p. 12). To the contrary, "absenteeism, shirking and lack of initiative are pervasive in the self-managed enterprise" (Hinds, 1990, p. 28). As Janos Kornai concludes, "it would be intellectually dishonest to hide the evidence concerning the weakness of third forms" (1990, p. 144).

To be sure, third forms are not uniformly weak. To the contrary, peer group forms of organization can and do operate well in small enterprises where the membership has been carefully screened and is committed to democratic ideals (Williamson, 1975, Chapter 3). Moreover, the partnership form of organization works well in professional organizations, such as law and accounting firms, where the need for firm-specific physical capital is small. There being little need for equity capital to support investment in such firms, the control of these firms naturally accrues to those who supply specialized human assets (Williamson, 1989, pp. 24-26). Professional partnerships and small agricultural and manufacturing firms aside, the comparative disabilities of third forms for organizing large enterprises with variegated membership are severe in both theory (Williamson, 1975; 1989; Hansmann, 1988) and in fact (Hinds, 1990; Kornai, 1990).

Initial predilections to the contrary notwithstanding, a growing appreciation for the limits of third forms has been evident within the reform economies more recently.

(b) over-management

Although Manuel Hinds concedes the need for an effective "advocate for capital" (1990, p. 21), he proposes to accomplish privatization by having the Government first "renationalize" firms (1990, p. 42), after which it would "establish a centralized system to manage the allocation of resources among these enterprises" (Hinds, 1990, p. 42).

Two levels of management are proposed for firms that are passing through this transition: "One kind of managers is needed at the enterprise level.... The other level, which could be organized as a holding company, would be needed to provide mobility of resources across the socialized sector and between it and the private sector" (Hinds, 1990, p. 44). Inasmuch, moreover, as there are "considerable opportunities for fraud and other crimes...[by] the employees of a holding company, a supervisory agency is also needed. Such agency...should report directly to the Prime Minister" (Hinds, 1990, p. 44).

Jean Tirole also proposes that holding companies be created to help effect the transition between what he refers to as the (early) noisy phase and the (later) mature phase (1991, p. 23). "Holding companies restructure firms; they make sure that labor hoarding is eliminated and that insolvent firms are shut down. They reallocate capital and eliminate inefficient vertical integration. They monitor the firms' managers in their attempt to organize production efficiently" (Tirole, 1991, p. 42). That approach is favored by Romand Frydman and Andrezej Rapaczynski (1990, pp. 36-58) as well.

A prominent part of the Czechoslovakian law "concerning the conditions for transfer of state assets to other persons" involves the creation of a Federal Fund of National Assets.[11] The Fund is intended to promote privatization. The organs of the Fund are the Presidium, the Executive Council, and the Supervisory Council (p. 14).

The highest organ of the Fund is the Presidium, which consists of nine members who are elected by the Federal Assembly for a term of five years (p. 15). The Presidium names and sets the remuneration for the Executive Council and supervises its activities (p. 15). The activities of the Fund are to be directed by the Executive Committee (p. 16). It consists of nine members who are appointed for a period of five years (p. 17). The Supervisory Council of the Fund oversees the activities of the Fund, the Presidium and the Committee (p. 17). Members of the Presidium, Committee, and Council and employees of the Fund are prohibited from being members of organs of joint-stock companies in whose activities the Fund has property interests (p. 18).

I submit that the managers of these transitional forms have much weaker incentives to behave as effective "advocates for capital" than can be expected of either the executives in the general office of the M-form enterprise or of the management of corporations that are subject to bank controls (as in Germany and Japan). The relation of the managers of holding companies to the firms under their (temporary) jurisdiction is limited in both time and ownership respects. In view of the bureaucratic and political oversight to which these holding companies are prospectively subject--from presidiums, committees, councils, and the like--weak incentive intensity prospectively obtains. If, however, the pressing need is to create high-powered incentives and infuse these with credibility, then bureaucratic and political oversight need to be delimited. Janos Kornai concludes similarly (1990, pp. 137-141). The good intentions of these oversight mechanisms need not be questioned if the costs are unacceptably great.

(c) foreign investment

One of the lurking suspicions about privatization is that some of the benefits will accrue to foreign investors, who will acquire valuable state plant and equipment cheaply. Politicians face the threat of being accused of "having given away the national wealth to foreigners" (Frydman and Rapaczynski, 1990, p. 24). Part of that concern has been relieved by a realization that much of the plant and equipment in the reform economies is obsolete and/or in a state of disrepair. Many of the physical assets are not so valuable. (The human assets are where the real values reside.)

Beyond that, however, is the need to view privatization not as a one-shot event but as a continuing process of which the initial disposition of state-owned enterprise is merely the first step. Among other things, a hesitant or tentative (easily reversible) first step signals a lack of credibility. If the need is to get on with the process, then to temporize and agonize is contra-indicated. Is it so bad, after all, if someone makes money--especially if pecuniary gain invites others to enter into that or related activities and creates new opportunities? Alexander Hamilton's sanguine assessment is pertinent: "Rather than treating the foreign investor as a rival, we should consider him a valuable helper, for he increases our production and the efficiency of our business."

Complex voucher and auction schemes have nevertheless been designed to preserve domestic ownership of enterprises in Poland, Hungary, and Czechoslovakia (Lutz, 1991, p. 12):

> The exact formula for stock distribution has been a matter of prolonged parliamentary debates in all of the countries, but it appears that the most recent Polish plan can be taken as indicative of what is ahead:
>
> - 10 percent of the shares to workers
> - 30 percent of the shares to citizens by means of vouchers
> - 20 percent of the shares to pension funds

- 10 percent of the shares to commercial banks
- 30 percent of the shares to be retained by the government

Czechoslovakia has a similar plan, where 20 percent of the shares are to be given to citizens in the form of vouchers, with another large portion either to be sold (at a discount) to workers and former owners, or (at full price) to institutional holders. Once again, the government will hold onto a significant proportion of the shares, at least for the foreseeable future. In Hungary, on the other hand, the government will, for a time, retain most shares in the hopes of selling controlling blocks of stock to private owners through low interest loans.

These formulaic approaches to privatization are the product of protracted debates within ministries of finance and by parliaments. Neither the costs of delayed reform nor the disincentive effects of formulaic allocations seem to have figure prominently in the exercise. Here as elsewhere, however, over-management is a hazard to the speed and efficacy of reform. (That such programs are excessively cautious and/or costly appears more recently to have registered. The Czech Republic has just announced plans to sell more than 50 of its larger state-owned enterprises to foreign investors (Prokesch, 1991).)

The lessons of transaction cost economics to all of the above are that (1) there is a logic to economic organization that applies to the assessment of both governance structures (such as third forms) and role design, (2) economic performance turns crucially on the creation of effective advocates for capital, and (3) over-managing is an insidious way to defeat reform.

2.2 credibility[12]

Promises are easy to make. Credible promises are quite another thing. The history of economic reform is replete with examples of noncredible commitments.

(a) Hungarian craftsmen and Polish entrepreneurs

Janos Kornai's observation that craftsmen and small shopkeepers fear expropriation in Hungary despite "repeated official declarations that their activity is regarded as a permanent feature of Hungarian socialism" is pertinent (1986, pp. 1705-06). That many craftsmen and shopkeepers appear to be "myopic profit maximizers, not much interested in building up lasting goodwill...or by investing in long-lived fixed assets" (1986, p. 1706) is partly explained by the fact that "These individuals or their parents lived through the era of confiscations in the forties" (1986, p. 1705).

I submit, however, that there is more to it than that. Not only is there a history of expropriation, but, as of 1986, the structure of the government had not changed in such a way as to assuredly forestall subsequent expropriations. Official declarations will be more credible only with long experience or if accompanied by a <u>credible</u> (not easily reversible) <u>reorganization of politics</u>. Investors are wary. As one Polish entrepreneur recently remarked, "I don't want expensive machines. If the situation changes, I'll get stuck with them."[13]

(b) Yugoslav computer center

Branko Horvat reports the following incident (1982, p. 256):

> ...there was a Computer Center that could not cover its costs. We decided to introduce an incentive scheme whereby the members of the center would share in all positive and negative differences in business results compared with those of previous years. Improvement did not appear very likely and, in any case, the incentive

differences were very modest. The new manager of the center turned out to be an exceptionally capable man, however, and at the time of the annual business debate, the center could boast of phenomenal improvements. Instead of giving full recognition to what had been achieved, the council decided to ignore its own decision of a year earlier, proclaimed the incentive scheme inapplicable, and distributed the surplus in an arbitrary fashion.... We did not know they could do so well, was the [explanation], and it cannot be tolerated that they should earn more than others. The center lapsed into losses again.

(c) Polish law

The 1990 Polish law on joint ventures reads in part as follows: "A Partner may transfer its shares of the Company's capital only in accordance with the applicable Polish laws, decrees, and regulations in force on the date of such transfer."[14] That is a very problematic way of assuring value.

(d) Soviet practice

John Litwack observes that the most common critique of Soviet reform is "the reluctance of the leadership to decree large-scale nongovernment property rights" (1989, p. 2). He urges, however, that the inability of the Soviet leadership to infuse reform proposals with credible commitments is the more serious lapse: "Soviet leaders in the USSR today would be well advised to reallocate their energies somewhat away from the question of what to commit to and toward the question of how to lay the institutional groundwork for enforcing commitments" (1989, p. 35). Lacking confidence that rule changes will persist, parties will respond to rule changes in a tentative or myopic way: get all that you can immediately, because long-run investments will be expropriated. The reluctance of peasants to accept long-term lease arrangements in agriculture, for example is explained by the fact that "there is a widespread belief that one fine day the attitude [of the leadership] toward leasing will move 180 degrees, and then it is goodbye to everything that was earned through blood and guts" (Litwack, 1989, p. 11).

Litwack examines reneging on incentive reforms both at the level of the individual firm (1989, p. 15) and at a systemwide level (1989, pp. 17-18). The recent 1988 Law on Cooperation is an example. As Litwack describes it, "This law begins with a declaration of cooperative property rights, giving cooperative property the same legal status as state property. Furthermore, according to this law, the taxation of cooperatives must be based on stable rates that cannot be changed for at least a five-year period" (1989, p. 25). Problems--some in the form of "unanticipated consequences"--quickly thereafter set in.

One unanticipated consequence was that several cooperatives recognized that repressed inflation in the market for consumers' goods presented large arbitrage opportunities (Litwack, 1989, p. 25). Arbitrage gains became the source of popular and political resentment, however; cooperatives were accused of "'speculating' at the expense of society" (Litwack, 1989, p. 25). Restraints on speculation were therefore introduced. Also, tax increases, which expressly violated the new law, were approved--although these were subsequently repealed in the face of protest. But there is more than one way to skin/tax/expropriate a cooperative. Strategic price setting is one possibility: "the prices at which cooperatives...purchase inputs in the government sector have been officially raised significantly above those for government enterprises" (Litwack, 1989, p. 27).

So unused is the Soviet leadership to the importance of credibility that it "invites" investment by issuing threats. Thus Mikhail Gorbachev advises U.S. firms to invest quickly in the Soviet Union rather than wait: "Those [companies] whoa re with us now have good prospects of participating in our great country...[whereas those who wait] will remain observers for years to come--we will see to it.[15] That the leadership of the Soviet Union "will see to it" that early and late movers will be rewarded and punished, respectively, reflects conventional carrot-and-stick incentive reasoning. What it misses is that ready access to administrative discretion is the source of contractual hazard. The paradox is that fewer degrees of freedom can have advantages over more because added credible commitments can obtain by substituting rules for discretion. Effective economic reform requires that reneging options be foreclosed if investor confidence is to be realized.

The need for property rights, contract law, and a judiciary that is committed to the responsible application of the law to property and contract law disputes is needed to overcome noncredibility problems of the above-described kinds.[16] Insecure expectations invite investments in short-run projects and in mobile assets (such as human capital) that can flee.

2.3 simulated capital markets

Competition in the capital market is one of the remarkable but little remarked features of capitalism. D. M. Nuti observes that "the role of financial markets and their possible features under a socialist system have been conspicuously neglected" from the time of Enrico Barone (1908) through such modern treatises as Alex Nove (1984) (Nuti, 1989, p. 87). His paper on "Feasible Financial Innovation Under Market Socialism" (1989) proposes to relieve this disparity.

Nuti advances a three-part program of financial innovation. Stage I is designed to revalue assets to reflect true economic values. Stage II introduces "a kind of 'slow motion' stock market" in which state agencies, but not individuals, can buy and trade shares (Nuti, 1989, p. 98). An options market is created in Stage III, the object being to permit individuals "to benefit from their ability to identify above- or below-average performing enterprises in spite of being excluded from ownership and control" (Nuti, 1989, p. 102).

Interestingly, the efficacy of these financial innovations rests on what Nuti refers to as a "successfully reformed" socialist economy, the entire discussion of which is covered in two sentences of text (Nuti, 1989, pp. 94-95; emphasis added):

> [E]nterprises are engaged in production and trade through contractual relations with other state agencies, while planning is confined to macroeconomic policies and <u>truly parametric</u> (that is, non-enterprise specific) instruments for the <u>central manipulation</u> of market signals. Sectoral policies can be undertaken by the government, but sector-specific subsidy on tax differentials must be applied by the government <u>consistently and predictably</u>.

My discussion of the Nuti program focuses on Stage I and on the above-described conditions for successful reform. Consider the latter.

Two things are noteworthy about the successfully reformed socialist economy described by Nuti: (1) the description is very brief and (2) Nuti is evidently very sanguine as to its efficacy. Lacking institutional supports, the prescription appears to assume the abolition of opportunism by agencies of the state. As Leonid Hurwicz (1973) has shown, efficient exchange can be realized if one of the parties to an exchange behaves in a rule-bound way that is reliably free of opportunism.

Nuti's reliance on parametric instruments that are manipulated by a central authority in a consistent and predictable way is tantamount to <u>credible selective intervention</u>. Unless, however, the absence of opportunism can be credibly ascribed to central authorities, that is implausible: the "impossibility of selective intervention" applies to firms and governments alike.[17]

But assume otherwise, since to introduce feasible financial innovations into an infeasible system is without purpose. Suppose, arguendo, that the central authority behaves as Nuti prescribes, whence opportunism is concentrated entirely in the enterprise sector. Will Nuti's asset revaluation scheme work even in these idealized circumstances?

The capital revaluation scheme proposed by Nuti has the purpose of bidding assets up to their full valuations. It invites the managers of a state enterprise or interested outsiders (mainly other state enterprises) to announce a valuation of the assets of the enterprise different from book value. The announcement of a higher value by an outside enterprise must either be met by a revaluation by the incumbent management or the assets must be sold to the high bidder. In either event, the added value is treated as a profit and is taxed at a rate that exceeds that on operating profit. "Alternatively, or at the same time, any profit-linked bonus for managers and staff is calculated at a lower rate for that part of the enterprise profit which is due to the revaluation of existing assets" (Nuti, 1989, p. 95). Nuti contends that Stage I provides both "a continuous, nonbureaucratic, decentralized, and automatic evaluation of enterprise capital" and "an incentive for enterprises to use their capital equipment in the way that maximizes their valuation" (1989, p. 96).

But is it really so? Thus suppose that assets have been revalued in the manner described and that managers discover that the revaluation is excessive. What will happen? One possibility is that managers will be held to these values by the state and current profits will suffer. But that is not the only possibility. For one thing, current profits could be restored if some expenses--maintenance, research, product promotion--could be deferred without detection.[18] The problems of excess valuation could thereby be pushed onto a later generation of managers. Or accounting relief could be effected (through a change in inventory accounting, for example). Also, middle managers and workers whose bonuses are adversely effected could complain, with cause, that they ought not to be penalized for the valuation excesses of their superiors. Turn the leaders out and start anew with a more objective valuation of the assets. And if that appeal does not succeed, then declare bankruptcy and let the state liquidate the assets for whatever they will bring. The problem is that if mistakes can be externalized, by pushing them off onto others, or socialized, by pushing them onto the state, then Nuti's valuation mechanism is seriously lacking in credibility respects--even with a benign state.

A related (nonbenign state) problem with the mechanism is that tax payments are made at the outset while the benefits (in the form of added future net receipts) are delayed. How does the state convince asset valuators that it will not tax now and tax later?

If, moreover, enterprises are subject to "mutual recrimination"--I respond to your bid for my assets by bidding for your assets--and if that is obvious to the parties, then why won't tacit collusion set in? But then if bids are fanciful or hazardous (for the reasons given above) and/or if threats are responded to in kind, why bother?

Here as elsewhere, the propensity to focus on incentives and to suppress or ignore the problems of governance leads to an excess of sanguinity. Economic reform ignores the details of organization only at peril.

2.4 bureaucracy

In effect, the bureaucracy crowds out court ordering in centrally planned economies. Administration being implicated everywhere, the courts are unneeded and unwanted. But where everything is negotiable, nothing is secure.

Incentive intensity is sacrificed as the political authorities get "entangled in conflict without [the prospect]...of acquiring unbiased information about the situation" (Hausner and Wojtyna, 1991, p. 3). Compromise and accommodation rather than conflict resolution typically result (Hausner and Wojtyna, 1991, p. 2).

But it is worse than that. If bureaucracy is ubiquitous, then the only objective performance measures are at an economy-wide level. The likelihood is that massive politicking, posturing, deal-making, cross-subsidization, and inefficiency will result. If bureaucracy is the problem, then de-bureaucratization needs to be prominently featured in the reform effort.

The above-described propensity to "over-manage" privatization is merely one illustration of this bureaucratization condition. Another is the speed of reform. Whereas some counsel that reform proceed gradually (Murrell, 1991), others urge that reform should proceed rapidly (Lipton and Sachs, 1990, p. 298). Although bureaucratic considerations do not figure into either of these proposals, such considerations favor speed. That is because a successfully reformed economy is a threat to bureaucracy. Unless many groups and individuals develop an early stake in the success of reform, the bureaucracy is strategically positioned and is often able to defeat reforms. As Jan Winiecki observes, this can be done through delay, obfuscation, selective application of rules, and the like. But the guise of "further perfectioning" is also employed to undermine reform (Winiecki, 1990, p. 209). "Ironically, counterreformers use the perverse results arising from their interference as evidence of the failure of the reforms" (Winiecki, 1990, p. 123). Even in the face of good intentions, Robert Michel's Iron Law of Oligarchy applies: "It is organization which gives birth to the dominion of the elected over the electors, of the mandatories over the mandators, of the delegates over the delegators" (1962, p. 365). Extensive decentralization and competition limit the oligarchical result.

2.5 the legal system

Maciej Iwanek observes that "there are no limits to freedom of contract" in Poland other than those specified in the Commercial Code. Accordingly, he describes "present-day Poland as a country with the same economic freedoms as in the West" (Iwanek, 1991, p. 4). I would caution, however, that there is a difference between de jure and de facto changes in the law. Legal changes that are not attended by credible commitments will be variously ignored, suppressed, violated, and otherwise distorted. Infusing legal changes with credibility is therefore vital to their efficacy. This issue has not received the concerted attention that it deserves in the reform literature and in reform programs. Designing a secure role for the judiciary (see 1.5(c), above) is vital if legal rules are to be more than mere form and taken on substance.

2.6 antitrust

Antitrust figures prominently in many of the discussions of economic reform (Stiglitz, 1991; Tirole, 1991; Willig, 1991), as well it should. Although private monopolies have stronger incentives than public monopolies to reduce costs and innovate, many of the benefits of reform would be lost if all that happened was that durable private monopolies were substituted for durable public monopolies.

But whereas public monopolies commonly enjoy legal protection against entry (e.g., private postal delivery is prohibited by law), that is less often true and is more patently objectionable for private monopolies. Accordingly, the shift from public to private monopoly is not only attended by stronger incentives to economize, thereupon to appropriate the resulting increase in net receipts (which gains would accrue mainly to the public in a public monopoly), but easier entry by rival suppliers becomes feasible. Accordingly, potential competition under private monopoly is enhanced.

Related to the latter is the Schumpeterian argument that monopoly gains are usually transferred to the public through the earlier described process of handing-on. To be sure, that process takes time and does not work uniformly well across all sectors. Antitrust efforts to accelerate the process are sometimes warranted.

Antitrust efforts to control monopoly through structural means--dissolution, divorce, divestiture--have been highly problematic, however. The process takes a long time and absorbs huge amounts of legal and managerial resources, the realized structural changes are usually negligible, and the quality of economic performance commonly suffers while the suit is in progress. Much better that the emphasis be placed on promoting competition by reducing protectionism.[19]

Transaction cost economics thus counsels that reform programs should regard monopoly as a transitional condition that will normally be self-correcting. Persistent monopoly, should it develop, can be dealt with as a special case. The profit carrot should be used, however, to promote reform. A greater tolerance for and sanguinity towards "transitory monopoly" is therefore recommended.

2.7 joint ventures

Although there is a great deal of enthusiasm for joint ventures as being the governance structure through which to effect reform, transaction cost economics asks that the merits of these be displayed. Vague claims that joint ventures are a new and friendly type of third form relationship invite disappointment.[20] If most joint ventures are efforts to deal with transitional problems of real-time participation and/or weak property rights, then that is as they should be described.

(a) real-time participation

Timing can be crucial if a party expects to be a "player" when events are fast-moving. I submit that many joint ventures should be regarded as temporary forms of organization that support quick responsiveness. If that is their primary purpose, then both successful and unsuccessful joint ventures will commonly be terminated when contracts expire. Successful joint ventures will be terminated because success will often mean that each of the parties, who chose not to merge but instead decided to combine their respective strengths in a timely and selective way, will have learned enough to go it alone. Unsuccessful joint ventures will be terminated because the opportunity to participate will have passed them by.

That successful joint ventures are not renewed is because such forms of organization are difficult to govern. If the degree of dependency and respective contribution of each party routinely undergo change, then the relation will need periodically to be tuned up. Failing to do that, the contributions of the parties will be disputed, participation will become strategic, and regrets supplant romance.

(b) property rights hazards

Legal regimes in which property and contract are insecure are ones in which a special burden is placed on private ordering. If court ordering does not reliably delimit threat positions, and/or if the expropriation of foreign ownership is perceived to be a problem, then private safeguards become paramount.

One way in which a joint venture could relieve expropriation hazards would be to earmark assets. For example, the domestic partner could be mainly responsible for providing durable physical assets and the foreign partner could provide human capital, technological knowhow, feedstocks, and the like. As between otherwise identical joint ventures, the hypothesis would be that asset financing would vary among political regimes to reflect differential expropriability hazards.

3. Conclusions

The orthodox prescription for reform entails the use of macroeconomic instruments to control inflation, the removal of price controls, currency convertibility, and the removal of trade restraints. There is nothing in that prescription with which transaction cost economics takes exception. Transaction cost economics goes beyond this prescription, however, and urges that the institutions of economic organization play a vital role in the success or failure of reform. I emphasize here some of the main differences between transaction cost economics and the usual prescriptions.

(1) the judiciary

It does not suffice to change the laws. It is also vital to create a judiciary the role design of which reliably elicits merit enforcement of the laws of property and contract. The neglect of the judiciary in the reform literature is surprising. Even if the appropriate laws are or quickly can be put in place, the assumption that these will thereafter be self-enforcing is mistaken. Attention to ex post governance by the judiciary is vital.

(2) privatization

Workers' management and related third form ways of managing the state-owned enterprise are weak responses to the need to create an effective "advocate for capital." That applies also to over-management schemes that allocate share ownership to "worthy groups," thereafter relying on quasi-regulatory oversight of the affairs of the firm (through holding companies and mutual funds). An effective advocate for capital needs--indeed, can be defined in terms of--high-powered incentives. Over-management plays into the hands of the bureaucracy and diminishes incentive intensity.

(3) simulated capital markets

Banks can be made to play a useful role in the corporate control arena. It is unrealistic, however, to expect simulated capital markets (Nuti, 1989) to do the job. Suggestions that "state banks...be required to act like profit-making institutions"[21] recall earlier views that "all would be well in a communist state if only it reproduced the results of a competitive system and prices were set equal to marginal cost."[22] Such sanguinity, then and now, is unwarranted and deflects attention from the truly difficult institutional problems of supporting economic reform.

(4) adaptation and bureaucracy

Adaptation is the central problem of economic organization. Bureaucratic management of economic organization by state ministries is comparatively sluggish and maladaptive. What were earlier described as the stability virtues of socialism turned out to be immobility burdens in the end.[23] The inability of bureaucracy to provide credible, high-powered incentives is a crucial contributing factor.

(5) monopoly

The mistakes of the "inhospitality tradition" in U.S. antitrust enforcement of the 1960s ought not to be repeated in the reform economies. An intertemporal view of the monopoly problem in which emphasis is placed on preserving ease of entry and of the attendant benefits of "handing-on" is the transaction cost economics prescription for the monopoly problem.

Footnotes

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1. As Herbert Simon puts it (with reference to bounded rationality), "it is only because individuals are limited in knowledge, foresight, skill, and time that organizations are useful instruments for the achievement of human purpose" (1957, p. 199).
2. This subsection is based on Williamson (1991a).
3. These views were expressed by Dusan Triska, the Czechoslovakian Vice Minister for Finance, at the conference on "The Transition to a Market Economy--Institutional Aspects," March 24-29, 1991, Prague.
4. To be sure, there can be problems with bank control as well. Alfred Steinherr and Christian Haveneers argue (1990) that banks distort firm decisions in their favor. That, however, needs to be examined in a systems context (Williamson, 1991c).
5. Courts must be capable of receiving and evaluating evidence. Some scientific disputes may test the competence of the courts, in which event special forums may be needed. The N-1 opportunism argument is in the spirit of Benjamin Hermalin and Michael Katz (1991).
6. Courts in Continental Europe are more bureaucratically organized. Infusing integrity in bureaucracy poses issues akin to those discussed above in connection with the M-form corporation. Ethical training and peer group sanctions are arguably important.

7. D. M. Nuti's arguments that socialism can simulate capital markets rely on benign state assumptions and are otherwise problematic (see 2.3, below).

8. For an earlier discussion of the inhospitality tradition in antitrust, see Coase (1972).

9. Handing-on is expressly discussed in Williamson (1985, p. 129), in Williamson and Ouchi (1981), and is captured by the phrase "efficiency annihilates power."

10. See F. M. Scherer (1980) for more extensive discussions of dominant firm industries.

11. The page cites that follow are from "The LAW of February 26, 1991, concerning the conditions for transfer of state assets to other persons," Czechoslovakia.

12. This subsection is based on Williamson (1991b).

13. Quoted by Barry Newman, "Poland's Farmers Put the Screws to Leaders by Holding Back Crops," Wall Street Journal, October 25, 1989, p. A10.

14. Article 5, Agreement of Association.

15. International Herald Tribune, June 5, 1990, p. 5 (emphasis added).

16. Chinese experience is corrobative (Nee and Young, 1991).

17. It could be argued that central authorities have less incentive to manipulate strategically because they cannot participate as directly as can managers of firms in the disposition of net receipts. As the history of central controls records, however, indirect ways for central authorities to participate are numerous, convoluted, and important.

Suppose, for example, that the strategic manipulation of price signals by planners could somehow be annihilated. There are many other ways to favor and disfavor clients. For example, unless the government sector is very small in relation to the economy, planners can influence outcomes through their procurement decisions. Also, the administration of justice--in disputes between firms or disputes between firms and the government--can be tilted. And the administration of controls--priorities, quotas, exemptions, audits, etc.--are subject to manipulation.

18. It might be objected that managers have incentives to defer expenses in periods prior to asset revaluations. That is true. If, however, deferred expenses that yield greater profits in an already "adequate profit" regime invite ratcheting up profit targets in subsequent periods, while they merely recover profits under the Nuti regime, then incentives to defer expenses are stronger under the latter. (To be sure, ratcheting would violate Nuti's strictures against nonparametric adjustments. But even if the strictures are assumed to hold, the equity and bankruptcy arguments in the text still apply.)

19. Ann Krueger notes that not only does protectionism support cost excesses, but it is uneven-handed in application: "Corruption and favoritism surrounded bureaucratic allocations of investment licenses, import licenses, and the awarding of government contracts" (1990, p. 14). Furthermore, protectionism "was conferred in ways which gave virtual monopoly power to domestic entrepreneurs" (Krueger, 1990, p. 14). Once awarded, protectionism becomes a trough from which weaning is "met with great resistance" (Krueger, 1990, p. 14).

20. Experience with joint ventures--in China, the Soviet Union, and Eastern Europe--has been disappointing. There is growing awareness that joint ventures pose organizational problems and contractual hazards--both of which have transaction cost origins.

21. Peter Passell (1991, p. 12) ascribes these views to the "Harvard group" advising on economic reform in the USSR.

22. Ronald Coase (1991, p. 39) reports that this was Abba Lerner's advice to Trotsky.

23. Oral remarks of Andras Nagy, Institute of Economics, Hungarian Academy of Sciences at the conference on "The Transition to a Market Economy--Institutional Aspects," March 24-29, 1991, Prague, Czechoslovakia.

References

Aoki, Masahiko. 1990. "Toward an Economic Model of the Japanese Firm," Journal of Economic Literature, 28 (March): 1-27.

Armour, Henry, and David Teece. 1978. "Organizational Structure and Economic Performance," Bell Journal of Economics, 9: 106-22.

Ashby, W. Ross. 1960. Design for a Brain. New York: John Wiley & Sons.

Barnard, Chester. 1938. The Functions of the Executive. Cambridge: Harvard University Press (fifteenth printing, 1962).

Baums, Theodor. 1991. "Banks and Corporate Control," Working Paper No. 91-1, Program in Law and Economics, University of California, Berkeley.

Berglof, Erik. 1990. Corporate Control and Capital Structure. Stockholm, Sweden: Institute of International Business.

Cable, John. 1985. "Capital Market Information and Industrial Performance: The Role of West German Banks," Economic Journal, 95 (March): 118-132.

Chandler, Alfred D., Jr. 1966. Strategy and Structure. New York: Doubleday & Co.

____________________. 1977. The Visible Hand: The Managerial Revolution in American Business. Cambridge, MA: Harvard University Press.

____________________, and H. Daems. "Administrative Coordination, Allocation and Monitoring: Concepts and Comparisons," in N. Horn and J. Kocka, eds., Law and the Formation of the Big Enterprises in the 19th and Early 20th Centuries. Gottingen: Vandenhoeck & Ruprecht, pp. 28-54.

Coase, Ronald. 1972. "Industrial Organization: A Proposal for Research," in V. R. Fuchs, ed., Policy Issues and Research Opportunities in Industrial Organization. New York: National Bureau of Economic Research, pp. 59-75.

__________. 1984. "The New Institutional Economics," Journal of Institutional and Theoretical Economics, 140 (March): 229-231.

__________. 1991. "The Nature of the Firm: Origin," in Oliver Williamson and Sidney Winter, eds., The Nature of the Firm. New York: Oxford University Press, pp. 34-47.

Frydman, Romand, and Andrzej Rapaczynski. 1990. "Markets and Institutions in Large Scale Privatization," C. V. Starr Center for Applied Economics, New York University, RR# 90-42, September.

Galanter, Marc. 1981. "Justice in Many Rooms: Courts, Private Ordering, and Indigenous Law," Journal of Legal Pluralism, 19: 1-47.

Goldberg, Carey. 1991. "Moscow Loses Faith in Joint Ventures With West," International Herald Tribune, May 27, p. 7.

Grossman, Sanford, and Oliver Hart. 1980. "Takeover Bids, the Free Rider Problem, and the Theory of the Corporation," Bell Journal of Economics, 11 (Spring): 42-64.

Hansmann, Henry. 1988. "The Ownership of the Firm," Journal of Law, Economics, and Organization, 4 (Fall): 267-303.

Hausner, Jerzy, and Andrzej Wojtyna. 1991. "Evolution of Interest Representation in Poland," unpublished manuscript.

Hayek, Friedrich. 1945. "The Use of Knowledge in Society," American Economic Review, 35 (September): 519-30.

Hermalin, Benjamin, and Michael Katz. 1991. "Moral Hazard and Verifiability: The Effects of Renegotiation in Agency," Econometrica, forthcoming.

Hewett, Ed. 1988.

Hinds, Manuel. 1990. "Issues in the Introduction of Market Forces in Eastern European Socialist Economies," The World Bank. Report No. IDP-0057.

Hobbes, Thomas. 1928. Leviathan, or the Matter, Forme, and Power of Commonwealth Ecclesiastical and Civil. Oxford, England: Basil Blackwell.

Holmstrom, Bengt. 1988. "Agency Costs and Innovation," Journal of Economic Behavior and Organization, 12 (December): 305-327.

Horvat, Branko. 1982. The Political Economy of Socialism. New York: M. E. Sharpe.

Hurwicz, Leonid. 1973. "The Design of Mechanisms for Resource Allocation," American Economic Review, 63 (May): 1-30.

Knight, Frank. 1941. "Review of Melville J. Herskovits' 'Economic Anthology,'" Journal of Political Economy, 49 (April): 247-58.

____________. 1965. Risk, Uncertainty, and Profit. New York: Harper & Row, Publishers, Inc.

Kornai, Janos. 1986. "The Hungarian Reform Process," Journal of Economic Literature, 24 (December): 1687-1737.

____________. 1990. "The Affinity Between Ownership Forms and Coordination Mechanisms: The Common Experience of Reform in Socialist Countries," Journal of Economic Perspectives, 4 (Summer): 131-147.

Krueger, Ann. 1990. "Government Failures in Development," Journal of Economic Perspectives, 4 (Spring): 9-24.

Landes, William, and Richard Posner. 1975. "The Independent Judiciary in an Interest-Group Perspective," Journal of Law and Economics, 18 (October): 375-397.

Lange, Oskar. 1938. "On the Theory of Economic Socialism," in Benjamin Lippincott, ed., On the Economic Theory of Socialism. Minneapolis: University of Minnesota Press, pp. 55-143.

Lipton, David, and Jeffrey Sachs. 1990. "Privatization in Eastern Europe: The Case of Poland," Brookings Papers on Economic Activity, 2: 293-333.

Litwack, John. 1989. "Discretionary Behavior and Soviet Economic Reform," unpublished manuscript.

Llewellyn, Karl N. 1931. "What Price Contract? An Essay in Perspective," Yale Law Journal, 40 (May): 704-51.

Lutz, Mark A. 1991. "Eastern European Reforms and Transformations: Progressions and Progressiveness," paper presented at the 3rd International Conference on Socioeconomics, Stockholm, June 16-19, 1991.

Macaulay, Stewart. 1963. "Non-Contractual Relations in Business," American Sociological Review, 28: 55-70.

Machiavelli, Niccolò. 1952. The Prince. New York: New American Library.

Macneil, Ian R. 1974. "The Many Futures of Contracts," Southern California Law Review, 47 (May): 691-816.

Matthews, R. C. O. 1986. "The Economics of Institutions and the Sources of Economic Growth," Economic Journal, 96 (December): 903-918.

Michels, Robert. 1962. Political Parties. Glencoe, IL: Free Press.

Mokyr, Joel. 1990. The Lever of Riches. New York: Oxford University Press.

Murrell, Peter. 1991. "Evolution in Economics and in the Economic Reform of Centrally Planned Economies," unpublished manuscript.

Nee, Victor, and Frank Young. "Peasant Entrepreneurship in China's 'Second Economy': An Institutional Analysis," Economic Development and Cultural Change, pp. 293-310.

Newberg, David. 1991. "The Safety Net During Transformation: Hungary," unpublished manuscript.

Nuti, D. M. 1989. "Feasible Financial Innovation Under Market Socialism," Journal of Comparative Economics, 1: 85-104.

Passell, Peter. 1991. "The 'Grand Bargain' Would Convert Soviet Union to Capitalism--for a Price," International Herald Tribune, June 15-16, 1991, p. 12.

Prokesch, Steven. 1991. "Czechs Hope To Reap $1 Billion in Sell-Off," International Herald Tribune, June 14, p. 11.

Rausser, Gordon, and Leo Simon. 1991. "The Political Economy of Transition in Eastern Europe: Packaging Enterprises for Privatization," unpublished manuscript.

Scherer, F. M. 1980. Industrial Market Structure and Economic Performance. Chicago: Rand McNally.

Schumpeter, Joseph. 1942. Capitalism, Socialism, and Democracy. New York: Harper & Row.

Simon, Herbert A. 1962. "The Architecture of Complexity," Proceedings of the American Philosophical Society, 106 (December): 467-82.

Smith, Adam. 1776. The Wealth of Nations.

Steer, P. S., and John Cable. 1978. "Internal Organization and Profit: An Empirical Analysis of Large U.K. Companies," Journal of Industrial Economics (February): 13-30.

Stein, Jeremy. 1988. "Takeover Threats and Managerial Myopia," Journal of Political Economy, 96 (February): 61-80.

Steinherr, Alfred, and Christian Haveneers. 1990. "Universal Banks," Working Paper No. 9001. Louvain-la-Neuve.

Thompson, R. S. 1981. "Internal Organization and Profit: A Note," Journal of Industrial Economics, 30: 201-211.

Tirole, Jean. 1991. "Privatization in Eastern Europe: Incentives and the Economics of Transition," unpublished manuscript.

Tomforde, Anna. 1991. "Stasi Revelations Put Judiciary on Edge of Collapse," International Herald Tribune, April 10, p. 17.

Williamson, Oliver E. 1975. Markets and Hierarchies: Analysis and Antitrust Implications. New York: Free Press.

__________. 1985. The Economics of Capitalism. New York: Free Press.

__________. 1991a. "Comparative Economic Organization: The Analysis of Discrete Structural Alternatives," Administrative Science Quarterly, 36 (June): 269-296.

__________. 1991b. "Economic Institutions: Spontaneous and Intentional Governance," Journal of Law, Economics, and Organization, forthcoming.

__________. 1991c. "Strategizing, Economizing, and Economic Organization," Strategic Management Journal, forthcoming.

__________. 1991d. "Private Ownership and the Capital Market," unpublished manuscript.

Willig, Robert. 1991. "Antitrust and Economic Reform," unpublished manuscript.

Winiecki, Jan. 1990. "Why Economic Reforms Fail in the Soviet System," Economic Inquiry, 28 (April): 195-221.