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THE ECONOMICS OF INSTITUTIONS AND THE TRANSITION IN EASTERN EUROPE AND THE FORMER SOVIET REPUBLICS*

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I. INTRODUCTION

The recent political changes in Eastern Europe and the former Soviet Union pose a serious challenge to economics. The new authorities of the region, having abolished the Soviet model in its diverse manifestations and expressing a will to introduce a market economy of some form, urgently need advice on how to build the necessary institutions. The present paper is a survey of the new economics of institutions with an emphasis on its potential contribution to institutional change in the former Soviet economies. The purpose of the paper is twofold: to provide persons who are directly or indirectly involved with institutional change in the region with new tools and concepts that may help in their work, and also to encourage people in the field to provide the empirical insights that are much needed for the further development of the economics of institutions.

Reformers of the former socialist economies, who turn to economics to guide the transition from plan to market, find sophisticated theories designed to explain economic relationships and results in full-fledged market economies, particularly in terms of prices and quantities at the micro and macro levels. In some instances, the strength of the theory is not seriously affected by substantial variation in the institutional structure; for example, the long-run relationship between money and inflation has been established in diverse economic systems. In other cases, application of standard theory may produce disastrous results, when the appropriate institutions are not in place: witness the debate over the proper sequencing of reform measures. However, the main point is the following: the reformers need a theory of organization, institutions, and institutional change, unless the lifting of price controls and the liberalization of trade automatically and swiftly call forth the required economic and social institutions — in other words, unless the demand for efficient institutions creates its own supply.

The modern economic theory of institutions is in its infancy, although in the last two decades important contributions have accumulated and turned the field into a viable research program.[1] The new approach is slowly transforming economic theory by explicitly introducing the notion of costly information and the related concept of transaction costs. In the new theory, it is the encounter between rational, non-altruistic individuals and information problems that makes organizations and institutions critically important for explaining economic results. The study of transaction costs and their implications has found an outlet in a vigorous new field, the economics of law (or law and economics); it has also brought new life to the theory of economic history and transformed the field of industrial organization.[2] In the area of economic development and Soviet studies the influence of the new approach has been somewhat limited.[3] Furthermore, in its current stage the strength of the new theory is the study of outcomes and structures at the market or micro level, and the studies of life within organizations at the so-called micro-micro level. There have been few attempts to merge macroeconomics and the economics of institutions and develop a theory of macroeconomic relationships centered on transaction costs and allowing for variations in institutional arrangements. Such a theory would be useful for understanding the macroeconomics of the transition and macroeconomic problems of third-world economies.[4]

The remainder of the paper consists of five sections. The next section introduces the basic tools and concepts of the economics of institutions and summarizes the strengths and weaknesses of the approach. The third section looks at a world of positive transaction costs and examines how die institutional framework affects economic results. The fourth section examines the influence of transaction costs on the choice of economic have a propensity to cheat under the cover of high monitoring and enforcement costs.

In sum, the institutional framework of society determines the cost of controlling assets, which influences both how resources are used and the willingness of individuals to acquire and invest in assets.

We have talked only about the relationship between institutions and transaction costs, but the costs of transacting are affected by several other factors, such as the technology of measurement and monitoring, the physical characteristics of assets, and the nature of the exchange. Other things being equal, transactions costs are relatively high when:

- assets with complex attributes are exchanged, as in the sale of a large commercial aircraft or an ocean freighter;

- the exchange involves time, as when the owners of a coal mine make a long-term agreement with a railway company to carry the coal to market;

- the exchange is between unrelated individuals and is not expected to be repeated, as when street vendors in Hong Kong sell watches to passing tourists;

- assets depreciate in a way that is hard to measure, and the transfer is not permanent, as when certain pieces of machinery are leased and it is costly to establish whether a breakdown of the equipment is due to an original mechanical fault, natural wear and tear, or abusive treatment;

- assets are specific and depend on particular uses, as in the case of a pipeline that an oil refinery leases to move its output or the plant that makes body parts for an unrelated car maker. Specific assets and dependence invite hold-ups, attempts to capture the return on the specific assets of the dependent party.

Contracts

Individuals have an incentive to seek ways to lower their transaction costs. Contracts are perhaps the most important empirical manifestation of investments undertaken by traders to protect their property rights in exchange. Contracts include, in addition to the usual provisions for price and quantity, various stipulations that are intended to protect the rights of the traders.[11] These stipulations either make no sense or seem to be wasteful unless we allow for information problems and transaction costs. Consider a landowner who contracts with her tenants to provide them with fertilizer at a price below the market price. Such a contract clause may appear senseless or irrational until it is realized that the landlord fears that the tenants will otherwise use less fertilizers than is required to maximize the value of the land, and, further, that the subsidy is less costly than other methods such as direct monitoring of the tenants.[12]

Traders do not fully control the structure of their contracts, as the structure is partly determined by the institutional framework: the community restricts the set of legitimate contracts. Formerly in the Soviet economies, private entrepreneurs could contract with only a small number of employees, often only 10-15; they were compelled to restrict their activities to particular economic sectors, such as certain services, and various other contractual terms were mandatory. Likewise in these economies, contracting over residential housing tended to be illegal. Contracts between central planners and enterprises dominated the economy.

By severely restricting contractual choice for political reasons, the state is likely to exclude efficient arrangements from the choice set. On the other hand, the state can make vital contributions toward efficient contracts, for instance, with an efficient commercial code and a fair and effective court system, because of economies of scale in designing and enforcing (and disrupting) contracts.

The economics of transaction costs give important insights into the logic of contracting as the following observations suggest:

- High transaction costs can prevent contracting among individuals, for instance over the right to pass a railway line across a region over thousands of individual properties, or the right to fly airplanes across a continent over privately owned land. In these instances, resources may not find their most valuable use unless the state intervenes and directly allocates rights. However, when exclusive rights are clearly defined, the exchange of rights is legitimate, and transaction costs are low, resources tend to find their most valued use through decentralized contracting. In these cases the initial allocation of rights is important for the distribution of wealth but not for efficient use of the resources.

- All contracts are incomplete, as it is costly to contract over all potential states of the world and fully enforce agreements at all margins. Incomplete contracts are unavoidable in a world of costly information and consistent with economic rationality. According to contract theory, each step in contracting is evaluated in terms of marginal costs and benefits, and frequently valuable margins are left in the public domain. A movie theater that has one price for all seats and leaves the extra value of good seats in the public domain is a common, if trivial, example of incomplete contracts. When assets are left in the public domain, people make costly and wasteful efforts to capture these free values. To get a good seat, moviegoers may waste time by coming either early or at an inconvenient time of day or week.

- In an economic system, where the choice set for contractual arrangements is relatively unrestricted, competition among contractual arrangements gradually weeds out arrangements that involve high transaction costs. In systems where the set of legitimate contracts is narrowly prescribed by the state, there is less scope for competition among contracts. In the U.S.S.R. contractual arrangements between planners and enterprises remained relatively stationary for decades in spite of high transaction costs, vast resources entering the public domain, and wasteful behavior by enterprise managers.[13]

Organizations

Whether formal or informal, all organizations are groups of individuals who pool their assets in production. There are economic, political, and social organizations with boundaries and structures defined by networks of contracts, and with output ranging from commodities, to political rules, to the satisfaction of spiritual needs.[14] Why do people sometimes operate individually and sometimes join in organizations of varying sizes? Why do individuals at times contract within an organization, often in a hierarchal setting, and at other times contract across markets? The answer has to do with costs: the theory assumes that, given the institutional setting, people seek arrangements that minimize all costs, including transaction costs.

It has been assumed, so far, that the players in organizations are unable to influence institutions and take them for granted, but that assumption only holds in the short run. In the long run, the causation between institutions and organizations runs both ways, as players in the various organizations strive to reach their goals not only within the existing set of institutions but also by investing in institutional change. North (1989) has emphasized how the stock of institutions casts a long shadow on the future by defining in the present which investments are gainful for organizations to undertake.[15] In that way, institutions influence the long-run direction of all forms of investments in a community, including investment in knowledge and investment in institutional change.

One of the great questions in social science concerns the autonomy of political and social organizations and the rules they generate: whether these phenomena merely reflect economic forces or have a life of their own and independently influence economic development. The new theory of institutions makes it clear that information costs give at least partial independence to political and social institutions. For instance, information costs make direct democracy impractical and give rise to representative democracy; they isolate and enable representative political bodies to go against the interests of a large majority of their constituency (at least in the short run) and influence lie way political organizations reach their conclusions.

In fact, the full implications of costly information for economic and social studies have not been worked out. With costly information, the choice set and preferences of the consumer and the production function of the producer are endogenous and depend on the diffusion of information, even if we assume a constant objective stock of knowledge. In other words, the consumer does not know what is available, and what she prefers, and the producer does not know all the available methods for transforming outputs into inputs and enforcing contracts. Further, we do not have a theory that explains how people with incomplete information model reality and process information. Yet models of reality are likely to affect informal rules, such as norms and customs, which play an important role in enforcement of property rights and in the demand for institutional change. These issues are briefly considered in the fifth section of the paper.

III. ECONOMIC CONSEQUENCES OF ALTERNATIVE INSTITUTIONAL ARRANGEMENTS

The Theory

Wealth and Ideal Institutions

Institutions influence outcomes in an economic system by specifying the basic structure of incentives for the players. In the short run, the line of causation passes from institutions, through organizations, to economic outcomes. Although the new theory of institutions cannot precisely spell out the details of optimal institutional arrangements for maximizing wealth, the theory offers important insights.

We begin with a definition of ideal institutions for maximizing wealth (given the initial distribution of resources): institutions are said to be ideal, when all individuals have an incentive to account for the full (or social) marginal costs and benefits of their actions. With ideal institutions owners of factories consider the full cost of pollution to the consumers of clean air before they decide to release waste into the atmosphere. Similarly, a farmer who drains the village meadows allows for all benefits accruing to neighboring farmers when deciding the scope of his efforts. In short, with ideal institutions, so called technical externalities, both positive and negative, disappear as they are allowed for or internalized by each decision maker.

Unfortunately, ideal institutions are only a theoretical benchmark. The perfect outcome just described requires not only free trade in property rights, but also perfect delineation and enforcement of property rights to all valuable resources, which only occur in a world of zero transaction costs. With positive transaction costs, marginal costs would exceed marginal benefits before complete property rights are achieved on all margins.[16]

Dissipation of Wealth and Institutions

Institutions dissipate wealth in various ways. First, weak institutions fail to provide economic agents with strong exogenous property rights. When exogenous property rights are weak, it is costly for individuals to protect and exchange rights, and, other things being equal, high transaction costs limit the incentive to invest, specialize, exchange, and expand the market.

Weak institutions are usually associated with a weak state. In some circumstances various decentralized groups (trading companies, guilds) have taken over the role of the state and succeeded in providing stable property rights, but a system based entirely on decentralized property rights is unlikely to provide a foundation for a modern industrial economy.[17]

Second, dissipation of wealth also occurs when a strong state explicitly decides not to permit exclusive rights in certain activities and thus introduces open access and the classic tragedy of the commons.[18] For instance, U.S. federal and state governments have created and enforced institutions for maintaining open access in the country's ocean fisheries. Attempts by individuals and their organizations to control entry or effort by other citizens are judged to be in violation of the country's antitrust legislation.[19]

Third, the state can create open access indirectly through regulations that leave values in the public domain, even as an unintended side effect. Rent controls, involving a ceiling on rents, leave in the public domain the differential value between the maximum price that prospective renters are willing to pay and the price ceiling. Value left in the public domain creates incentives for capture, which is an unproductive and wasteful activity. Technically, the authorities can prevent wasteful investments in capture by substituting new forms of rationing for price rationing, for instance by using a lottery to allocate inexpensive housing directly to specific individuals. Note that wasteful behavior is not avoided, if valuable rights are allocated on the basis of individual characteristics (location, education, rank in an organization) which people can often acquire by investing.

Finally, the state can create institutions that dissipate wealth by supplying individual actors with overly detailed exogenous rights, rather than presenting them with a general framework for guiding economic behavior. Although excessively detailed exogenous rights are associated with centrally managed systems, they are found also in relatively decentralized economies, for instance in Ethiopia after the revolution of 1975, and even to some extent in many western economies.

When the state specifies in detail the structure of property rights, such as contractual relations within economic organizations, the outcome is likely to be relatively inefficient for several reasons. First, those who control the state may prefer arrangements that give them a large slice from a small pie, rather than a smaller slice from a large pie. Second, the center may be preoccupied with survival and (even correctly) see efficient structures as threatening their position. Third, the rulers may hold irrational ideologies and entertain incorrect models of economic relationships, but, unlike decentralized agents, decision makers at the center receive weak feedback from erroneous decisions: information is often garbled after filtering through several levels of authority, and wrong decisions usually do not strongly affect the welfare of the central decision makers. Therefore, the cost of indulging in ideological fantasies or political games is relatively low.

Second-Best Institutions

By second-best institutions we refer to arrangements that fail to generate complete (ideal) property rights, but maximize the value of output subject to information (and other) constraints. The term second-best is not fully a satisfactory term because first-best institutions are solely a theoretical ideal. The common practice of referring to institutions as inefficient, if they fail to provide results that only exist in a theoretical world of full information, is a source of serious confusion as Demsetz has convincingly argued.[20] Information costs are real costs that cannot be avoided, and the introduction of information problems has caused an unresolved dilemma for welfare economics.

The impossibility of wholesale institutional change is an important obstacle in the path of economic reforms. Historical evidence suggests that institutional change can only be marginal, because various institutions, especially norms and customs, resist rapid change. Therefore, the reformer is constrained by the past in making recommendations for institutional change, which suggests, for instance, that in the transition to markets the second-best path in China need not be the same as the second-best path in the former socialist economies of Europe.

To reach the goal of wealth maximization, given all the constraints, the influence of the state on the formation of property rights must be direct in some instances and indirect in other cases. In situations where transaction costs are low, trade flows smoothly, and the state's second best policy is to provide the players with a general framework for supporting property rights. If A has a garage that is coveted by his neighbor, B, who uninvited parks his car in A's garage, the state should (take advantage of scale economics in enforcement and) provide A with a general mechanism for protecting his rights, because the exchange of rights to a garage generally does not involve high transaction costs. If B values the garage more than A, he can contract with A to rent or buy it.

In other instances, high transaction costs may block or limit trade, even when the state provides a general framework of property rights. We have already mentioned the high cost for individuals to negotiate the right of passage for trains and aircraft. With high transaction costs, resources may not find their most valuable uses, and the state can contribute to the creation of wealth by assigning rights directly to a specific category of users.[21]

Direct Assignment of Property Rights

In general, political organizations are not well placed to assign property rights directly to individual users, which suggests that the practice should be used sparingly.[22] A major reason for leaving the assignment of property rights to economic organizations, whenever possible, is that the information requirements may overtax the capacity of political organizations. For instance, in order to maximize the value of a resource, property rights may have to be subtly partitioned, and an efficient partitioning of rights is information intensive. Alchian (1965) uses the example of land to illustrate the multidimensional nature of efficient property rights:

> "By this [partitioning] I refer to the fact that at the same time several people may each possess some portion of the rights to use the land. A may possess the right to grow wheat on it. B may possess the right to walk across it. C may possess the right to dump ashes and smoke on it. D may possess the right to fly an airplane over it. E may have the right to subject it to vibrations consequent to the use of some neighboring equipment. And each of these rights may be transferable. In sum, private property rights to various partitioned uses of land are "owned" by different persons."[23]

The problem of finding an efficient solution to conflicting uses of airspace is another example of the multiple dimensions involved. Consider a case where the interests of owners of residential units and owners of an airport conflict. The noise from low-flying airplanes imposes costs on people living nearby, and restrictions of flights will impose costs on the airport. The joint maximization of the value of the airport and the resources in the neighborhood may require a sophisticated balance on several margins. The adjustments could include a ban on evening and night flights, but permitting particularly valuable night flights (for instance, allowing planes to land and take off at night in emergencies), the installation of noise-abatement equipment on airplanes, limits on the type of aircraft allowed, the installation of double windows and other forms of soundproofing in the residential units, the transformation of the residential units into office space, the use of the land around the airport for agriculture rather than housing, and so on. In our particular case, the owners of the surrounding land and buildings and the owners of the airport may not be able to negotiate an efficient solution because of high transaction costs. In that event it is up to political organizations to assign efficient property rights, but they are seriously constrained by a lack of information.

Political organizations usually do not partition rights in a subtle manner when they assign property rights directly to specific categories of users, and they are often slow to adjust the rules to major changes in the economic environment.[24] Judge-made law or Common Law, which evolves over time with the judges arbitrating between conflicting uses of resources, appears to be more flexible, presumably partly because the judges are supplied with abundance of relevant information at low cost, and important changes in the environment are constantly brought to their attention. The rules emerging in the common law process tend to be subtle and sophisticated; some scholars in the field of law and economics have argued that Anglo-Saxon Common Law tends to be efficient in the sense of neoclassical economics, but that assertion has been contested.[25]

In a world of incomplete information, the state can choose between establishing a general framework that lowers the cost to individuals of exchanging rights or attempting to assign specific rights directly to various categories of users, and then discouraging attempts to exchange these rights. Both approaches are plagued by information and transaction problems, and a choice must be based on the nature of individual cases.

Implication for Policy

Ideal Institutions and Policy

The notions of ideal institutions, perfect property rights, and first-best economic outcomes have profoundly influenced both critics and supporters of decentralized market economies and centrally managed economic systems. Only recently has it been recognized that much of the discussion has been based implicitly or explicitly on models of reality that assume free information or underestimate the information constraint. For instance, it has been common to argue that the centrally-managed economies would eventually be able to use computers to mimic the economic outcomes associated with perfect competition. In welfare economics, it has been customary to use outcomes from models that assume zero transaction costs to judge the efficiency of outcomes from models that (often implicitly) allow for information and transaction costs, for instance in studies of so-called market imperfections or failures.[26] However, comparative institutional analysis is concerned with contrasting outcomes associated with alternative practical institutional arrangements.

The Legacy of the Soviet System

The transition to markets in Eastern Europe and in the former Soviet Union is constrained by the initial stock of institutions: institutional change tends to be incremental. In order to gain some understanding of how the past shapes the future, we now briefly analyze the structure of the former Soviet system in terms of the economics of institutions.

The Soviet system was distinguished by an attempt by political organizations to directly control **not** only the general institutional framework, but also the structure of economic organizations and the composition and nature of the output of the economy. In its most austere form, the Soviet system treated general living standards as a constraint rather than a goal — the workers' productive consumption was an investment required to maintain the quality of the labor input — but instead the system was geared to meet various objectives of the rulers.

Attempts to control an entire economy from the center invite gigantic problems of organization, monitoring, and enforcement. The response by Soviet rulers to these information problems created structures that today haunt the transition to market.

Essentially, there were two types of responses. One involved the selection of production technology, economic organization, and outputs that minimized the monitoring and enforcement problem. As it was more effective for the center to control one large production unit than several small ones, the size of enterprises tended to be large. In some instances, one enterprise was the sole supplier of a basic commodity. Similarly, the variety of commodities and qualitative margins were kept to a minimum.[27]

The other response to the information problem was a major innovation in organization, namely the introduction of the communist party as a monitoring organization. The classic Soviet system has a unique feature: branching from the center are two organizational trees populated by party apparatchiks and agents of the multilevel management bureaucracy. In this scheme, party agents monitor agents of the management bureaucracy and report back to the center. The party functionaries also have the important role of selecting managers at all levels. As the system's overriding concern is with monitoring and enforcement, the primary criterion for selection is loyalty to the principals and the party rather than entrepreneurial skills.[28]

Therefore, the human capital of mid-level agents of the two bureaucracies is system specific, which implies that the agents suffer a major capital loss when the Soviet system is abandoned. The state relies also on two other agencies, the police and the military, but these functionaries have general skills that would fit relatively comfortably in a market-oriented dictatorship or even a democracy.

The Institutional Economics of Decline

The system, which originated in the Soviet Union in the late 1920s and the early 1930s, initially functioned rather well both for improving the quality of the labor input and meeting various goals of the state. However, the early success was partly due to the limited information intensity of the production technology and the input-output relationships of the first stages of industrialization, which made these processes relatively well suited for central management: there were substantial economies of scale at the enterprise level, which coincided with the planners' preferences for large units; the vertical phases of processing commodities were few; the final output was not complex with many quality dimensions; and the technology did not require extensive horizontal linkages between enterprises with each unit acting both as a supplier and purchaser of inputs.[29] Another reason for the early success was that agency problems had not yet accumulated.[30]

The decline of the Soviet economies was due to mounting transaction costs and agency problems. An important cause of the decline is associated with new technology and new input-output relationships. The production process in the new growth industries, such as electrical and other engineering, instrument making, and fine chemicals, was more costly to monitor than steel, cement, and bulk chemicals, and the new industries involved complicated intra- and inter-industry linkages. Effects of decades of building an inferior infrastructure and a capital stock were increasingly felt, and so were agency problems between planners and managers, and managers and workers. Also, adverse selection eventually spread to the pinnacle of the regime.[31] The original leaders of the Soviet Union (and the other Soviet states of the region) relied heavily on a loyalty criterion in selecting mid-level leadership for the party, the economic bureaucracy, and the state. It has been argued that these individuals were less qualified as innovative leaders than their predecessors, but with the passage of time they rose to the top of the Soviet system.

Why **the Reforms** Failed

The structural flaws of the Soviet system were evident to the rulers early in the post-World War II period, and in the Soviet Union attempts to reform the economy began early in the 1950s. Although the reforms differed in nature, they had a common core: the replacement of commands with parameters of the market, which threatened to devalue the system-specific human capital of the mid-level functionaries of the system. Winiecki (1990) has documented how the functionaries successfully used subtle means for thirty years to sabotage a series of reforms that originated with the top leadership.[32]

The Transition to Markets **and the Soviet Legacy**

The past constrains the transition to markets in the region in several ways. First, it is not clear for all the countries in the region whether mid-level agents of the old system still have the inclination and the power to derail the reforms. For instance, Shatalov (1991) reports how the ministerial apparatus in Moscow thwarted attempts to abolish Agroprom, the huge and inefficient State Committee for Agriculture, by setting up Agrokhim that exerted the same level of control over fertilizer, pesticides, and other enterprises as had its predecessor.[33] Second, even if resistance from system-specific agents is overcome, the systems are path-dependent, and possibly it may take decades to transform the economies in the region. Consider four intermediate goals that are frequently put forward:

- Macroeconomic stability;
- Provision of suitable property rights;
- Privatization of capital assets; and
- Effective social safety net.

These goals are difficult to reach rapidly and simultaneously. Macroeconomic stability requires both new rules and new political organizations, and effective operations by inexperienced operators in an exceptionally fluid situation with random supply shocks. Further, macroeconomic stability implies a reasonably full employment, which is an unrealistic goal during a period of a drastic structural change.

The provision of exogenous property rights for market organizations is not easy to accomplish in the short-run, as we discuss in some detail in the following section. Little is know about the dynamics of institutional change, such as the optimal path from one regime to another or the necessary time element, but our limited knowledge does indicate that rapid changes (measured in years rather than decades) are not feasible. Rapid transfer of the means of production to private owners is difficult, not only because the former socialist countries lack mature financial systems, but also because of their obsolete structure of industry and organization. The existing structure of economic organizations was rational in the Soviet context, as it was designed to minimize transaction costs associated with central management, but, generally, the structure is unsuitable for minimizing costs in a modern market economy. The structure of industry, the product mix, and quality only vaguely reflects consumer demand and the relative advantage of the former Soviet economies, but mirrors instead the preferences and constraints of the previous rulers. One such preference was the emphasis on self-sufficiency rather than specialization, which was intended to protect the regimes from outside pressures. Therefore, in many instances the transfer of ownership of existing state enterprises to private individuals may be a poor strategy. New owners of industrial dinosaurs **of** the past are likely to use their political influence to preserve their newly acquired but outmoded assets. However, a clean break with the past requires an unprecedented renewal of the capital stock and the building of new industries. In the meantime, the region must find employment for a large industrial labor force.

Most programs of reform include the rapid introduction of an extensive system of social services or a social safety net. There is also a dilemma here. In the past, the countries of the region provided more extensive social services than did the Western market economies when they were at a comparable level of development, but a lower level of general consumption goods (which is consistent with a policy aimed at protecting the quality of the labor input). In the transition the public is likely to demand from the state social services at least comparable to those it is used to, and a much more generous supply of general consumption goods. However, the immediate exposure of the former socialist economies to international competition, the collapse of inter-regional trade, and obsolete industrial structure is unlikely to give rise to rapid economic growth in the near future. Initially, national output levels have fallen sharply, although official figures may exaggerate the plunge. It is also clear that it will take considerable time to install effective systems of money and banking, and public finance.

All of these factors suggest that rapid transition to a fully functioning market systems is impractical and that the transition is likely to be painful.

IV. EXPLAINING ECONOMIC ORGANIZATION

The Theory

The Dependence of Organizations on Institutions

The structure of organizations is determined jointly by institutions (external property rights) and by internal contractual arrangements and private enforcement. Therefore, the logic of organization must be explained in terms of the relevant institutional framework. We have already seen how the institutional framework of the Soviet system was designed to specify the structure of economic organization in great detail. However, the center was only partly able to enforce its property rights over economic resources, which gave various agents of the state an opportunity to capture valuable rights and establish informal or underground networks of contractual relations. It fact, the notion of a centrally planned economy was a persistent myth, and the system depended on a complex network of informal exchanges that are not well understood.[34]

The informal firm, for instance in Lima, Peru, is another instance of the dependence of organizations on institutions.[35] In many countries, especially in the Third World, entrepreneurs must make costly investments in a tortuous bureaucratic process, which may take months or years, and sometimes pay bribes, in order to acquire the rights to establish a legitimate firm. In the informal economy the enforcement of exclusive property rights is largely internal, and the transaction costs of the informal firm are high. As property rights are not subsidized by the state, they tend to be relatively incomplete, and, when entrepreneurs have insecure control of their assets, it is reflected in the choice of assets, technologies, and organization.

However, it is conceivable that the enforcement of property rights by individual entrepreneurs and informal groups of entrepreneurs may be more effective than property rights supplied by a corrupt and inefficient state. The question is essentially empirical, and of considerable practical interest both for developing countries and the former Soviet economies.

The Modern Theory of Organization

The transaction-cost theory of organizations mainly originated in North America, and the theory is set against the backdrop of the modem industrial state.[36] Only a small number of studies have applied the approach to economic organization in history, in the socialist countries, or in the developing countries but fortunately many of the theoretical insights have general application.

The modern practice of explaining the logic of organization in terms of transaction costs originates with Coase (1937).[37] Coase was stimulated by the notion, popular in the period following the Bolshevik revolution in Russia, that a national economy could be run as a single firm. He also contemplated why the firm, which essentially is a coalition of resource owners, survives in the market place and does not come apart when tested by the forces of competition. Coase's (1937) answer was that the firm emerges and survives because it is costly to use the price mechanism, and the size of the firm is curtailed because it is costly to use the firm's internal allocation mechanism. Competition selects the combination of firms and markets that minimizes costs. In equilibrium, the cost of allocating resources in the firm and across markets is balanced at the margin.

Incentive Contracts

Recent studies have explored the logic of diverse mechanisms, found in the market economy, for facilitating transactions both inside firms and across markets.[38] Particular attention has been given to the use of contracts for aligning incentives. The incentive problem arises because people's interests do not coincide, and persons who cheat are protected because it is costly to establish their intentions and actions. For instance, while employees are fully aware of their behavior, their employer usually is not. The situation is one of information asymmetry, and the opportunity to cheat often is reinforced by the high cost of extensive monitoring.

If high costs make careful monitoring impractical, parties to a contract are likely to take advantage of asymmetric information and incomplete contracts to capture value — for instance, a person who has hired his services to a firm may use his time and the assets of the firm for private purposes. Such attempts to capture value are wasteful activities and produce inefficient results, because the gains of the cheating party are less than the overall loss of value he causes.[39]

We now turn to two kinds of incentive problems that have a central role in the theory of institutions: adverse selection that arises prior to contracting and moral hazard that occurs in the course of contractual relationships.[40]

Adverse Selection

Adverse selection occurs when a party to a contract is unable to measure accurately certain valued human qualities or attributes of non-human resources that he or she seeks to acquire. The situation is likely to attract disproportionate offers of assets and service of low quality or of undesirable attributes, which cannot be measured by the buyer. The anticipation of adverse selection may reduce the volume of trade or eliminate it altogether and restrict potential gains from specialization. In big cities, used cars of high quality are rarely sold on informal markets that operate through advertisements in newspapers, and, in the insurance industry of the United States, adverse selection has eliminated the market for individual health insurance coverage for the cost of pregnancy and delivery.[41]

Adverse selection can sometimes be reduced by signaling. With signaling, those who offer attributes of high quality that cannot be directly measured are evaluated on their signals, which are proxies for quality. The proxies can be measured at relatively low cost, and ideally should be uniquely related to the valued attributes. For instance, it is difficult for patients to measure directly the quality of physicians, but a degree from a good medical school is a fairly reliable signal that an individual is qualified.[42]

Moreover, contracts and regulations can be used to compensate people for receiving lower quality than they anticipated, and government standards and inspection are used to guarantee (minimum) quality, for instance in the drug industry. Competition can constrain cheating, when firms have invested in reputation, which will be lost if the firms deliver inferior quality.

Moral Hazard

The problem of moral hazard is also due to high costs of measurement but the term refers to opportunistic behavior during the contract period: a person who has taken insurance against fire may become less cautious than before. Moral hazard is found in virtually all types of contractual relations, the contract between Soviet planners and enterprise managers being a classic example. The propensity of individuals to cheat when unobserved can be decreased by changing their incentives. When output is measured more easily than inputs, incentives can sometimes be aligned by basing rewards on results rather than inputs — for instance, by linking the pay of top managers to the price of shares in their company or giving workers a piece-rate contract.

In addition to contracts that align incentives, various other measures have evolved to reduce moral hazard in economic organizations. The type of expertise that is employed on boards of directors is varied systematically depending on monitoring problems in each field, and sophisticated accounting and monitoring systems deal with opportunistic behavior.[43] In addition, various forms of competition constrain agents and provide monitors with inexpensive information. Competition among managers, even within an organization, may reveal information about the quality of their service, and competition in the market for financial assets such as bonds and shares provides inexpensive information to outsiders about the performance of economic organizations. Alchian (1950) has argued that competition will select contracts and structures that maximize the joint value of cooperating assets — or, more accurately, select arrangements that yield more value than any other known arrangement.[44]

Residual Claims

We noted above that sometimes it is easier to measure output than inputs, but there are also situations where it is unpractical to use output to judge the quality of an input. In particular it is difficult to measure the quality of entrepreneurial activities, such as selecting a team, a product, and dealing with outsiders because the outcome depends both on performance and exogenous random effects that often cannot be measured separately. In the case of a farmer, it may be impossible to measure whether a bad crop was due to an unavoidable plant disease, effects of a drought, or poor performance by the farmer.

When measurement is impractical, the potential for moral hazard can often be reduced by making individuals the residual claimants of an economic organization. As residual claimants receive what is left when others have received their fixed payments or shares, their rewards depend on the joint value of the assets of the organization. Studies have revealed how the structure of residual ownership in a market economy differs systematically with the measurement problems in each line of activity. Forms of organization, such as partnerships, the corporate form, and non-profit organization, are appropriate in specific circumstances.[45]

Risk Sharing

In contract theory it is frequently assumed that contracts are used not only to solve transaction problems but also to allocate risk in order to reduce the cost of risk bearing.[46] It is customary to assume that wealthy individuals and legal entities such as firms are risk neutral, but workers and ordinary households are said to be risk averse and ready to pay for avoiding risk. A risk averse individual may prefer a fixed monthly salary to a somewhat higher but variable income that depends on the fortunes of the firm. However, a fixed-income contract may give the individual an incentive to shirk and be costly for the firm. The equilibrium contract minimizes costs by balancing the gains of less shirking against a higher wage bill.[47]

Efficient Suppression of Information

The measurement of quality is a costly activity. Ideally, attributes of commodities should be measured only once and by the party that is in a position to measure them most cheaply, but the ideal solution is impractical if the parties do not trust the measurements. Trust is established when the other side expects that the party that measures would lose more than it gains from reporting false measurements, for instance because valuable reputation is at stake or deception is severely punished by the state. When the parties can trust measurements by others, it can be efficient to suppress information and discourage further measurement. Barzel (1982) cites several market practices that involve the suppression of information, such as sealing commodities before the transaction takes place.[48]

Credible Commitments

The capacity of individuals to make credible commitments is essential for building a decentralized, capital-intensive economy. All advanced economies rely extensively on specific investments, which are made for a particular use and have less value in alternative uses.[49] An economic organization that possesses specific assets, which depend on continued exchange with an outside party, is vulnerable to attempts by that party to appropriate the difference in value of the assets between their first-best and second-best use (which may be their scrap value). Think of a firm that makes an intermediate product that is used as an input by another firm. The threat of a hold-up reduces the expected return on specific capital and obstructs economic development.

In the literature, credible commitments have been examined extensively by Oliver Williamson and others. It is now recognized that vertical mergers can in some instances be justified as an efficient solution to the hold-up problem. Long-term contracts is another solution to the problem, especially if the state provides reliable third-party enforcement through the courts. In an uncertain world it is impossible to specify all future contingencies in detail, and the chief role of long-term contracts is often to provide processes and procedures for dealing with future developments. The phenomenon is referred to as relational contracting.[50]

Implications for Policy

We have reviewed briefly diverse theoretical contributions concerned with the logic of contracts and organizations in an exchange economy. Although the array of insights may look bewildering, there is a common theme: all the arrangements are designed to cope with opportunism and costly information. The economics of organization explores ways to lower the cost of contracting and offers useful lessons for what the transformation of former socialist economies would involve, rather than a blueprint for a new system. Below we consider seven such lessons.

Static versus Dynamic Theory

The modern theory of organization is mostly static: the usual approach is to compare equilibrium organizations before and after a marginal change in technologies or the institutional framework. Although a few studies have a historical perspective and consider a fundamental change in institutions and organizations, they are concerned with the slow evolution from an initial point that is very different from the starting point of the former socialist economies. The transformation of the economies in Eastern Europe and Central Asia is a unique event, and economists can offer only indirect lessons and have much to learn from future developments.

Country-Specific Economic Organizations

In the advanced industrial countries, trial and error and competition have produced an intricate web of relatively efficient economic organizations. The former socialist countries can benefit from the accumulated knowledge in the outside world: the transaction technology for designing (incentive) contracts, monitoring agents, and coordinating activities might be imported to the region just as production technology is imported. However, there is an important difference. Unlike production technologies, transaction technologies are often strongly complementary to a country's "culture" and stock of institutions.[51] For instance, there is a distinct difference in the way the United States, Japan, and Germany limit agency problems in their large-scale corporations. As organizations are partly country specific. In a way that is little understood), it is not possible to import techniques of organization as easily as production technology.

Endogenous Organizations

Economic organization in the socialist countries was designed to solve transaction problems in a system of central management. Specific features of the Soviet system include not only large production units but various subtle business practices that have not been extensively reported and analyzed. The new system that is being built is partly constrained by previous practices. Path dependence is one more reason why outside experts are not able to design in detail successful new forms of organization for the region. To believe otherwise reflects a failure to recognize the nature of the information problem, which is a lack of comprehension comparable to the old notion that the outcomes of the model of perfect competition could be simulated by government bureaucrats.

Entry and Exit

In an uncertain changing world, the evolution of satisfactory economic organization depends on an unceasing search, and trial and error. The most important contribution of the states in the region to encourage the search process is to rigorously ensure free entry and exit in all industries. In the long run, large firms are seldom able to contain the forces of competition without relying on the coercive power of the state. The greatest barriers to entry are not private monopolies operating alone, but government laws, regulations and other measures. Similarly, it is the state that usually obstructs exit by providing subsidies to firms that are unable to make profits. The state can make its greatest contribution toward efficient industrial organization by guaranteeing free entry, refraining from subsidizing failing firms and industries, and providing efficient bankruptcy laws and procedures.

Openness

It is generally recognized that the most effective way of rapidly introducing modern production technology in the region is by opening it to international trade and direct foreign investment. The economics of institutions adds another reason for openness: it is also the most effective way of introducing new methods of organization. The introduction of new organization at the grassroots, jointly by foreign and domestic entrepreneurs, is a sound way to adjust new forms to the existing institutional framework, and also to initiate a creative interaction between economic organizations for making required marginal changes in the institutional framework.

Subsidies for Innovations in Organization

New forms of organization are essentially a public good. Once discovered, new arrangements can be used by any interested party at no additional social cost. As forms of organization cannot easily be sold, private individuals are likely to undersupply organizational innovations, and governments in the region and international agencies should subsidize education and experiments with alternative forms of organization.

V. THE POSITIVE THEORY OF INSTITUTIONS AND INSTITUTIONAL CHANGE

The Theory

Frontiers of the Economic System

The current section deals with theories that explain the behavior and the structure of political organizations, and various elements of the institutional framework. The relationship between the current and the previous sections is explained in Figure 1, using a well-known concept, the production frontier of an economy. The figure portrays the capacity of an imaginary economy that produces two commodities. The production frontier shows the maximum capacity of the economy on the assumption that production takes place without any friction in a world of full information.

The transaction frontier corresponds to the common assumption in the literature on economics of organization that political organizations provide an ideal institutional framework for maximizing output. Economic organizations, for their part, use incentive contracts, monitoring, and other methods for ameliorating various information problems.

Finally, there is the social frontier that is located below the two other curves. The paper's current section is concerned with the determinants of the social frontier. In the real world all economic systems are on the social frontier below the transaction frontier, because political and social organizations, like economic organizations, are constrained by transaction costs. Cultural factors and the struggle over the distribution of wealth prompt political organizations to provide a set of rules that are sub-optimal in terms of the wealth criterion.[52] The former Soviet system is a prominent case of such sub-optimality, but so is every known economic system.

Non-Democratic Institutions

The modern analyses of political organizations and institutions in terms of information problems have a common theme: the puzzle is how actions of rational individuals seeking their self-interest can give rise to outcomes that are collectively irrational. We report briefly on five lines of investigation and begin with studies of the non-democratic state.

The pre-democratic state can be analyzed in terms of the modern theory of the firm.[53] The ruler of the regime is a monopolist who maximizes her net revenue but is constrained by transaction costs and potential competition. The ruler contracts with the subjects to provide protection (property rights) in return for taxes. Although the power lies with the ruler, the price she can charge for property rights is constrained by the expectation that very high taxes may invite entry by competitors for power. Therefore, it is rational for the ruler to practice price discrimination and tax members of powerful groups (the nobility or the army) less than politically weak and scattered subjects (fanners).

A network of agents is employed to provide government services and collect taxes, but the ruler is plagued by agency problems, which she

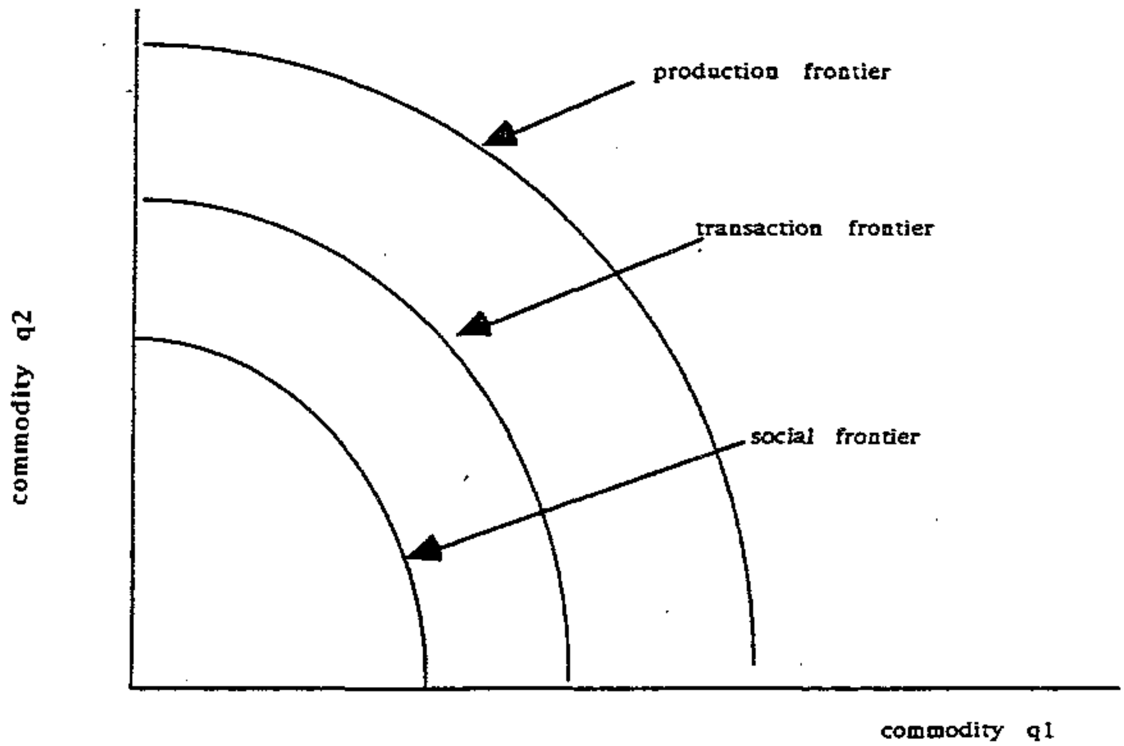

FIGURE 1

Figure shows the maximum production capacity of an imaginary economy with two commodites. The *production frontier* is the traditional concept from the economics text that assumes transactions without any frictions. The *transaction frontier* is a concept from the economics of organization literature where it is assumed that the state has provided an ideal institutional framework, and economic organizations have used incentive contracts and other means to minimize costs, subject to the constraint of transaction costs. Finally, on the *social frontier*, where an actual economy would be found, information problems, widely defined, cultural factors and the struggle over the distribution of wealth lead political organization to provide an insitutional framework that is less than optimal in terms of the maximization of output.

tries to mediate with incentive contracts, monitoring, and other means. The ruler is also limited in her ability to measure the tax base and control evasive actions by the subjects.

The model helps explain various practices in non-democratic (and semi-democratic) states that appear to be irrational, such as forms of taxation (tax farming, the sale of monopoly rights, predatory public finance) that eventually shrink the tax base. The model can also be used to explain the overall logic of the former Soviet system and its inherent resistance to reforms.[54]

Rent-Seeking in Democratic Societies

Another conflict between individual rationality and collective rationality is found in democratic societies where small groups have been able to obtain rules, such as import restrictions, that benefit small special interests but hurt the majority of voters. Usually the gains of the minority are smaller than the aggregate loss of the majority.

The main lines of the explanation of this phenomenon are widely known and point to asymmetries in information and in costs and benefits between small interest groups and the general public.[55] Further, the special interest groups (for example, local manufacturers of some product) may already be organized, whereas the general public (consumers) usually are not organized and are hit relatively hard by the problems of collective action, such as free riding and rational ignorance. The final part of the story are politicians who maximize their wealth (or votes) and whose support can be bought directly or indirectly.[56]

Voting and Structure-Induced Equilibrium

Theories of outcomes in voting contain some of the most pessimistic findings on the conflict between individual and collective rationality. In the wake of a classic study by Arrow (1951) and his impossibility theorem, a large number of studies in the field of Public Choice demonstrated logically that the outcomes of majority-rule voting depend not on the preferences of voters but on the sequence of votes: how and in what order the alternatives are compared.[57] These studies show that almost any outcome is possible. In other words, there are no equilibrium outcomes of the electoral system if the agents are free to manipulate the sequence of votes.

These discouraging findings of formal political theory are at odds with empirical studies which do not reveal evidence of the massive disequilibrium that the theory associates with majority rule. Recently, attempts have been made to solve the voting paradox by introducing institutions that constrain the voters and yield stable outcomes. Structure-induced equilibrium is a term that has been used in this context.

In reality, the operation of political organizations is guided by a maze of rules, such as the rules that form the committee system of the U.S. congress, which create equilibrium and reflect power relationships. Very much like economic organizations, the whole range of democratic organizations is shaped by various contractual arrangements and monitoring systems that help lower the cost of transacting. The study of the structure of political organizations has reached beyond legislatures to examine contractual arrangements, along with monitoring and enforcement mechanisms in a whole range of democratic political organizations.[58] However, so far most of this work looks only at the U.S. system of government.

Studies applying the theory of institutions to political organizations have revealed the general applicability of the transaction costs approach. Agents both in economic and political organizations create structures intended to overcome information and transaction problems and make credible commitments possible. In both instances, institutional rigidity and path dependence may give rise to decisions and outcomes that appear irrational for the collectivity. In the political sphere, it is common in many countries that the shape of electoral districts adjusts slowly to population changes, and that procedures in legislatures, such as the rules of the committee system, outlive their general usefulness. Slow adjustments in the institutional structure can give much power to small groups and produce results that do not reflect the will of the majority, as Alston and Ferrie (1993) have shown in a study of the former control by Southern legislators of the committee system in the U.S. Congress.[59]

Informal Institutions

The widely observed phenomenon that the transfer of the legal system of one country to another may bring different results in the new country is attributed to differences in acceptance and enforcement. The acceptance and enforcement of formal rules is closely related to informal institutions, such as norms, customs, and conventions.

The existence of cooperation that is not reinforced by coercion has puzzled rational choice theorists, somewhat like the existence of political equilibrium in spite of the impossibility theorem.[60] For instance, various studies of stateless societies reveal that these communities are able to rely entirely on informal rules, such as norms and customs, and private enforcement to prevent anarchy, achieve cooperation, and make small-scale investments.

In theories employing rational choice, and assuming that the players are non-altruistic, cooperation emerges only if the individuals in question decide it is in their private interest to cooperate. However, when the problem of cooperation is formulated, for instance as a prisoners' dilemma, it appears that non-cooperation is the best alternative (dominant strategy) for the rational individual.

The dilemma of how rational selfish individuals manage to overcome inefficient social situations has been intensely studied recently, but no general and recognized solution has emerged. One approach is simply to bypass the problem and assume that (some groups of) individuals are endowed with altruistic norms. The existence of altruistic norms is then explained in terms of evolutionary theory: group competition selects groups with altruistic individuals.[61] Other solutions have involved: (i) modeling exchange not as a single-shot but as a repeated game or as games that produce cooperation more easily than the prisoners' dilemma; (ii) assuming that individuals switch between an opportunistic and non-opportunistic mode; and (iii) having groups that are formed around the joint production of private goods and which enforce the provision of public goods.[62]

In this line of investigation each study introduces some device for overcoming the fundamental dilemma, but we have no obvious criteria for ranking alternative solutions. So far the work has yielded few testable hypotheses, and many of the models are based on restrictive assumptions that make the findings relevant only to a narrow range of social situations.

Mental Models

The introduction of information problems to economic theory is not complete. We still do not understand how individuals, who both lack information and have limited capacity to retain and process data, model their environment and create various social conventions (institutions) that economize on the information cost of making sense of the world around them.[63] A positive theory of social value is one of the great unresolved tasks in the theory of institutions and critical for a better understanding of institutional change, such as the transition to markets of the former socialist economies.

Application to Policy

In sections **III** and IV, wealth (or economic growth) and the structure of economic organizations were the dependent variables, and institutions and transaction costs the main explanatory variables. In the current section we examine theories that explain various aspects of institutions. The theory of institutions seeks not to explain simultaneously the entire framework of institutions but consider isolated aspects of institutions and marginal institutional change. Below we discuss three topics that are of great importance for the transition to markets: commercial morality, the structure of political organizations, and the dynamics of economic policy.

Commercial Morality

There is no doubt that appropriate norms are of great importance for supporting exchange between unrelated individuals. According to Arrow (1990):

> "there has to be some kind of commercial morality for the contracts to be executed. ...[A] theory that depends merely on reputation is not enough because there will always be circumstances where it pays to violate the rule. The workings of the whole system depend on the fact that contracts indeed will be executed."[64]

We have already emphasized the lack of a general theory of informal institutions. However, most scholars agree that informal rules are path dependent and evolve slowly over time, which suggests, in view of the urgency of transition in the former socialist economies, that changes in informal institutions cannot be an important intermediate policy goal for the reformers. However, as a long-run project it is reasonable for the state to promote "commercial values," although such values seem to emerge in part spontaneously rather than in response to government propaganda.

There is another side to the rigidity of informal institutions. The argument above suggests that informal institutions that existed prior to the establishment of the socialist regimes in Eastern Europe and Central Asia may be an important determinant of success in the transition. Such a hypothesis can be used to predict the relative success of the various countries in the attempted transition to markets.

A final note of warning concerns not overplaying the role of value systems. The possibility of substitution creates difficulties for the empirical detection of changes in social values. In short, it may be impossible to distinguish a shift in constraints (relative prices, police protection) from changes in individual value systems. The problem arises because people substitute one valued object for another when their constraints change, which may wrongly suggest that they have adopted new norms and a new system of values. For instance, as the relative price of time increases (with economic growth) there may be a decline in home cooking, and more eating out in restaurants. It is easy to conclude that tastes have changed: now people value home cooking less and have developed a taste for ethnic restaurants. However, nothing more profound may have happened than the substitution of one valued object for another because relative evaluation has changed within an unchanged value system.

Critics may argue that the way that the public rapidly turned against many of the former socialist regimes and deprived them of legitimacy suggests that social values do indeed change rapidly. However, Kuran (1991) has argued that the rapid withdrawal of support from the regimes and their ideologies did not reflect a change in values but the phenomenon of preference falsification. His argument is that people do not express their preferences when the expected cost of doing so is high enough relative to the expected benefits. When the cost of expression falls for some reason, individuals express their true preferences.[65]

The Structure of Political Organizations

To complete a successful transition to markets, the former socialist countries must restructure their government organizations at all levels. The task is monumental. The old organizations are dysfunctional because they were designed to cope with central management, as can been seen clearly by examining the vital systems of public finance or money and banking, which were entirely system specific.[66]

As the capacity to successfully generate a simultaneous change in a whole range of political institutions and organisations is limited, it is vital to economize and find a feasible time-path for step-wise reforms that do not totally unhinge the macroeconomic balance in the region. The appropriate measures must be both country specific and based on a theory (which barely exists) of macroeconomic relationships in economic systems that are at various stages of evolution between central management and a fully-developed market system. Recommendations in this area are beyond the scope of the present paper.[67]

Fortunately, the former socialist countries need not invent new government structures from scratch. They can learn from the experience of other countries and in some instances draw on their own experience prior to the Soviet system. Various international agencies are particularly well placed to provide assistance with the organization of public finance and other government activities.

However, institutional theory again warns against uncritical importation of forms of organization, whether they are economic or political organizations. In each country, new organizations must be adjusted both to the stock of productive resources and the stock of institutions. The danger is present that institutions appropriate for one level of economic development be applied indiscriminately at another level. Consider the adaption of a foreign system of taxation. The measurement of the tax base and the collection of taxes involves measurement, monitoring, and enforcement problems that may be more complex than any activity undertaken by a government. However, the measurement and enforcement problems vary from Country to country, both with the general level of technical and economic development, and with the prevailing commercial morality. These factors must be considered in designing an effective system of public finance, but frequently they are forgotten.

The Dynamics of Economic Policy

Institutional change in the region will be brought about primarily by changes in formal institutions (laws and regulations) and their enforcement, which is the domain of players in political organizations. Recommendations for institutional change and the transition to markets involve two separate considerations. One is the normative or factual question concerning the formal institutions that are most likely to maximize the height of the transaction frontier (in Figure 1) — or, in plain language, maximize wealth (subject to reasonable constraints on distribution) — if political considerations are ignored. The other question relates to institutions and institutional change which are politically sustainable, or the search for a reform strategy that will maximize the height of the social frontier (in Figure 1).

The two questions are clearly related, but economics and the theory of institutions do not have ready answers. The answer depends on the influence of politics on economic policy, and on the economic and political response to policy. Krueger (1992) discusses how policy that distorts economic incentives in a vital sector, for instance in agriculture or the export sector, can create a series of economic and political disequilibria and give rise to a vicious circle of falling real consumption.[68]

According to Krueger (1992), the political equilibrium depends both on the relative strength of various groups and on the system's overall economic performance, particularly the trend in real consumption per capita. A new political equilibrium often leads to changes in economic policy, and a new economic equilibrium. A change in economic policy always creates both winners and losers, and once all changes and effects have exhausted themselves there is a new economic equilibrium, which feeds back to the political system and upsets the political equilibrium which again gives rise to economic policy measures that upset the economic equilibrium. Krueger considers, in terms of the wealth criterion, under what circumstances the circle of political-economic-political interaction is vicious and when it is virtuous. She concludes informally that government interference with an efficient structure of incentives in a vital industry (of a developing country), such as the export industry or agriculture, may create a vicious circle. The initial restrictions create continuously new groups that have strong economic interest in more restrictions. The downward spiral is likely to be stopped and turned around, when real consumption has fallen to a point where the general population rebels. It is at that point that the advice of (sound) economists is most likely to be heeded. Krueger (1992) also argues that the elimination of restrictions on efficient incentives in vital industries is likely to create a cumulative political support by interest groups for more such measures and the rising levels of consumption will reinforce the tendency.

Recently, a number of analysts have tried to capture various aspects of policy dynamics in formal models.[69] Many of these scholars have been motivated by the ups and downs of economic policy in various Latin American countries. The behavior of policy makers (and their constituency) often appears as collectively irrational: countries wait for years to introduce policies that seem to benefit the vast majority of the public; populist, restrictive policies alternate with liberalization; and the delayed liberalization of macroeconomic policies is often accompanied, when it finally comes, with full-scale liberalization of microeconomic policies.

No one solution to these dilemmas has emerged from formal theory, but a number of seemingly irrational outcomes are consistent with various information constraints, such as a general uncertainty about who are the prospective winners and prospective losers of an economic policy that increases wealth in the aggregate but hurts some segment of society. Relatively rich explanations emerge from models that specifically introduce groups which, in the short run, gain or lose from economic reforms, but these early efforts suggest that the diversity of political behavior will not be captured by a single model.

Finally, a dilemma emerges when we endogenize the behavior of policy makers. If the players of the political game merely react to the political and economic forces in their environment, what role is left for economists and other advisers? The answer is that such theories are never complete; they always leave out certain variables that still can be manipulated, such as the exact nature of particular measures or the sequence in which they are introduced. However, the question is legitimate and of great intellectual interest: how many degrees of freedom do we have?

VI. CONCLUDING THOUGHTS

In this paper we have reviewed a new theoretical perspective for the study of economic systems, a perspective that combines the basic economic approach and an explicit concern with institutions, information, and transaction costs. The approach is of a relatively recent origin and has hardly been applied to Soviet-type economies and their transition to a market system. We conclude by laying out five important lessons suggested by the theory and relating the lessons to various problems of the transition. Rather than suggest answers, we ask questions for reformers to ponder and scholars to research.

Specifying the Relevant. Institutional and Informational Constraints

The economics of institutions creates an awareness of constraints that often are ignored. The theory emphasizes the vital importance of specifying major information and institutional constraints that individual decision makers confront, particularly when they operate in a changing environment.

Consider the case of the Soviet enterprise. Prior to the current reforms, Soviet enterprises were constrained to pass their 'surplus' to the state budget. In the transition these constraints were in effect removed and replaced with new institutions without properly exploring how the managers and the employees would behave under the new constraints. Their response, it has been suggested, was to appropriate the surplus and use it to raise wages and hoard intermediate goods, thus depriving the state of a major source of revenue and, in the former Soviet Union and elsewhere, initiate serious inflation.[70]

In general there is an urgent need to model the behavior of micro units (and micro-micro units) under a new and changing institutional framework. There are many important questions that require answers. Can state enterprises be made efficient, or must they all be liquidated? Is it possible to break the old links between government officials and managers of state enterprises, to find new ways to control their performance and harden their budget constraints?[71]

There are other critical questions. Is it possible to create a culture of ownership by giving state-owned assets to private individuals? Are such heirs to state property likely to behave in the same way, or differently, than individuals who buy capital assets — perhaps on credit and offering their personal property as collateral?

Finally, the information perspective suggests to reformers that they should seek institutional arrangements that economize on the limited administrative and political capacity of the former socialist countries (and indeed all countries). Vaclav Klaus goes so far as to suggest that the most crucial reforms must be taken in proper sequence, even without knowing the proper sequence a priori and the outcome in detail: "When we play chess we have to know the opening strategies. But it is impossible to foresee the situation on the chessboard after the 25th move."[72]

Competition Among Organizational Forms and Evolutionary Selection

The economics of institutions, with its emphasis on costly information, suggests that the knowledge of how to design efficient organizations cannot be pooled or centralized and used in a massive way to restructure the economic and political organization of a whole country. The most realistic alternative for the reformer is to create a favorable setting for experiments with alternative forms at the grass roots. As we discussed in section IV, it is also essential to establish an efficient selection process where the winners in the race between organizations are selected on an economic criterion: those who minimize costs win.

In addition, the success in promoting the evolution of a centralized, capital-intensive organization depends on the state's ability to make a credible commitment to potential investors that it will not prey on their assets once they are in place.

The Weight of the Past

The collapse of the socialist regimes did not create an institutional vacuum in Eastern Europe and Central Asia, as we discussed in section III. The stock of institutions changes only at the margin. Path dependence in the region involves not only the stock of institutions but also the stocks of physical and human capital. It is not clear how rapidly these three stocks can be changed.

A successful transition to markets requires the establishment of a legal framework for market activities. The former socialist economies must modify or recreate their laws in virtually all 'fields, including constitutional, real property, intellectual property, contract, company, foreign investment, bankruptcy, and competition laws. In most cases, the task is simplified because the country has a pre-socialist legal tradition. Poland, for instance, can draw on its pre-World War II legal system, but as Gray (1991) reports, the laws are general and it will take considerable time to build up cases and refine and adjust the law to current needs. Further, the courts have little experience with economic cases.[73] In section V, we discussed the critical role of commercial morality in the self-enforcement of contracts.

The weight of the past also affects the stock of physical capital. Some estimates for the countries of Eastern Europe suggest that in one-third of the industrial sector the value added at world market prices is negative, and another one-third of the industrial sector is so backward that it is uneconomical to try to make it competitive.[74] The estimates may be pessimistic, but the problem is large and the vast labor force employed by inefficient enterprises limits the options open to the reformer.

The human capital stock of some of the former socialist countries is not well suited for a modem market economy. For instance, entrepreneurial skills are said not to exist outside small-scale services and the craft sector, as it is common to discount the skills and motivation of managers of the state enterprises.

The reformers must seek all conceivable ways to reduce the weight of the past, and constantly reevaluate their strategies. For instance, how adaptable is the human capital stock to a new market environment—will hidden entrepreneurial talent spring forward? Can informal arrangements and private enforcement in an important way substitute for the formal legal system during the transition? How malleable is the physical capital stock in the hands of skillful entrepreneurs?

The System as a Whole and Tragic Choices

The economics of institutions is concerned with practicable social arrangements and considers the system as a whole rather than single margins. Coase (1960) illustrates this point with the example of an individual who decides to drive through a red traffic light at a deserted intersection late at night and gets fined for doing so. As the driver does not harm anyone, fining him may appear as an inefficient punishment, but does that imply that we should leave it to the judgment of each individual whether to stop on a red light? Coase's answer is that "the problem is to devise practical arrangements which will correct defects in one part of the system without causing more serious harm in other parts."

The transition in the former socialist countries demands that the system be viewed as a whole rather than individual margins be examined in isolation, but the trade-off between various margins will continuously force tragic choices on the reformer. The liberalization of trade, that is an invigorating tonic for the fledgling private sector, spells disaster for the massive state sector and its work force. On the other hand, attempts to isolate the state sector and temporarily keep at least select enterprises going until new jobs are available for their work force, may contaminate the selection process in the private sector. With subsidies and protection provided in the state sector, the private sector may demand similar treatment. In view of the discussion in section V, the reformer must show particular caution not to initiate a vicious circle of subsidies and restrictions on efficient incentives.

The Political Constraint

The economics of institutions reminds us not to consider institutional change or reforms in isolation from, political factors. All institutional change creates winners and losers, and the losers, operating through economic and political organizations, will work to prevent changes that harm them.

In the former socialist countries there are two categories of persons who lose from the reforms, at least in the short run. First, the poor and needy and the newly unemployed will be hurt by inflation and the upheaval associated with major structural changes. Special emergency measures can improve their situations and limit their opposition, but a viable sequence of institutional change must consider its impact on these individuals. The second category of losers from the transition to markets are agents of the old state system, individuals with human capital specific to the socialist system, who in many instances are still in strategic locations to undermine the reforms, as we discussed in section H

The final consideration we mention is the vast potential for gains open to select individuals when the restrictions of the old system are lifted. In some instances these gains are perceived as legitimate and their pursuance contributes to the national wealth. Other cases are instances of rent-seeking or windfall gains that the public perceives as being unfair or illegitimate. Strong general perception of unfairness and illegitimacy can undermine the transition.

* * * * *

Notes

1. The founding fathers of the new economics of institutions are Ronald H. Coase, the winner of the 1991 Nobel Prize for Economics, and Armen A. Alchian. Many of Coase's most important essays are found in Coase, Ronald H. (1989), *The Firm, the Market and the Law* (Chicago: Chicago University Press). Several of Alchian's best papers are found in Alchian, Armen A. (1977), *Economic Forces at Work* (Indianapolis: Liberty Press).

2. For surveys of the economics of law, see Posner, Richard A. (1986), *Economic Analysis of Law,* 3rd edition (Boston: Little, Brown), and Cooter, Robert D. & Ulen, Thomas (1988), *Law and Economics* (Harper, Collins). For applications to economic history, see North, Douglass C. (1981), *Structure and Change in Economic History* (Cambridge: Cambridge University Press), and Libecap, Gary D. (1989), *Contracting for Property Rights* (Cambridge: Cambridge University Press). Greif, Avner (1989), "Reputation and Coalitions in Medieval Trade: Evidence on the Maghribi Traders," *Journal of Economic History* 49:857-852. For applications to industrial organization see Williamson, Oliver E. (1985), *Economic Institutions of Capitalism: Firms, Markets and Relational Contracting* (New York: The Free Press); Demsetz, Harold (1980), *Economic, Legal, and Political Dimensions of Competition* (Amsterdam: North Holland); and Milgrom, Paul and Roberts, John (1992), *Economics, Organization and Management* (New Jersey: Prentice Hall).

3. For applications to economic development see Nabli, M.K. and Nugent, J.B. (eds.), *The New Institutional Economics and Development: Theory and Application to Tunisia* (Amsterdam: North-Holland). In various studies, that initially were controversial, Eirik Furubotn used the theory of property rights to analyze the nature of socialist firms with remarkable accuracy. The early work on the theory of property rights is surveyed in Furubotn, Eirik G., and Pejovich, Svetozar (1972), "Property Rights and Economic Theory: A Survey of Recent Literature," *Journal of Economic Literature 10* (December): 1137-1162. Jan Wlnieckd has used the modern theory of institutions to show in a new light the problems of reforms and transition in Eastern Europe. For instance, see Winiecki, Jan (1991), *Resistance to Change in the Soviet Economic System —A Property Rights Approach* (London: Routledge Press). The reconstruction problems of Eastern Europe are examined in terms of the economics of institutions by several authors in a special issue of the *Journal of Theoretical and Institutional Economics 148* (1992), No. 1.

4. Ronald I. McKinnon has made pioneering contributions to the study of macroeconomic relationships in diverse institutional settings, ranging from developing economies to the former socialist economies. For instance, see McKinnon, Ronald I. (1991), *The Order of Economic Liberalization: Flnancial Control in the Transition to a Market Economy* (Baltimore: Johns Hopkins University Press). Although the first generation of so-called rational expectations models swept information problems under the rug, macro theorists routinely include transaction costs in their theories, for instance to explain the existence of unemployment. However, their theories usually refer to advanced market economies and the macroeconomics of institutions is not an active field. It is to be hoped that the vast unfolding experience of the former socialist economies will lay the foundation of such a research program.

5. Biberaj, Elez (1991), "Albania's Bumpy Road to Markets," Transition 2 (No. 2, February): 9-10.

6. The discussion is based in part on my 1990 survey of the economics of institutions, but the framework presented there has been extended and clarified. Eggertsson, Thr£inn (1990), *Economic Behavior and Institutions* (Cambridge: Cambridge University Press).

7. See North, Douglass C. (1991), "Institutions," *Journal of Economic Perspectives 5,* No. 1: 97-112.

8. Wealth can be defined to include ideological values.

9. Our definition of property rights is more comprehensive than both the usual legal definition and definitions used by some writers on the economics of institutions. For a comparable definition see Barzel, Yoram (1989), *Economic Analysis of Property Rights* (Cambridge: Cambridge University Press).

10. From the viewpoint of an economy as a whole, the distinction between internal and external property rights disappears, except in the case of international property rights.

11- Note that for our purposes a contract is essentially a theoretical fiction. We assume that exchange is ordered by a contract, even in situations where no written contract exists. The literature on contracts is extensive and often highly technical, but an excellent and accessible survey is found in Migrom, Paul, and Roberts, John (1992), *Economics, Organization and Management* (Englewood Cliffs: Prentice Hall). Pioneering contributions to the theory of contracts were made by Cheung. See Cheung, Steven N.S. (1979), "Transaction Costs, Risk Aversion, and the Choice of Contractual Arrangements," *Journal of Law and Economics 12,* 23-42. Also see Werin, Lars, and Wijkander, Hans, eds. (1992), *Contract Economics* (Oxford: Basil Blackwell).

12. This example is due to Barzel (1989).

13. When the state constrains competition among contractual forms, change in economic organization may be brought about by competition between economic systems.

14. This definition of institutions and organizations is due to North. See North, Douglass C. (1989), *Institutions, Institutional Change, and Economic Performance* (Cambridge: Cambridge University Press).

15. North (1989).

16. This insight is due to Coase's famous 1960 article on social cost. The conclusion is valid if there are no costs to bargaining. Also note that, when we say that joint value is maximized, the initial distribution of exogenous rights (or wealth) is held constant. A new initial distribution of rights would change both the distribution of wealth and the structure of demand, and give rise to aggregate output that also represents maximum value but has a different composition than before. See Coase, Ronald H. (1960), "The Problem of Social Cost," *Journal of Law and Economics 3* (October), 1-44.

17. Migrom, Paul, North, Douglass, Weingast, Barry (1990), "The Role of Institutions in the Revival of Medieval Trade: The Law Merchant, Private Judges, and the Campagne Fairs," *Economics and Politics 2:* 1-23.

18. Note that exclusive rights include individual property, state property, and communal property.

19. Johnson, Ronald N., and Libecap, Gary D. (1982), "Contracting Problems and Regulation: The Case of the Fishery," *American Economic Review 72* (No. 5): 1005-1022.

20. Demsetz, Harold (1969), "Information and Efficiency. Another Viewpoint," *Journal of Law and Economics 12,* (No.l): 1-22.

21. Again we simplify by ignoring the distribution of wealth, which affects the valuation of property rights.

22. For an accessible introduction to the literature on the economics of law, see Cooter, Robert, and Ulen, Thomas (1988), *Law and Economics* (Harper Collins).

23. In Alchian, Armen (1965), "Some Economics of Property Rights," *U Politico 30* (No. 4), 816-829. (Originally published in 1961 by the Rand Corporation). Reprinted in idem (1977), *Economic Forces at Work* (see pp. 132-133) for the quote) (Indianapolis: Liberty Press).

24. The relatively slow adaption of formal rules to fundamental changes in relative prices is due to information problems and to the nature of the decision-making process in political organizations. The information for an efficient reallocation of rights is usually available more cheaply to the relevant economic organizations than to political organizations, and in the market decisions tend to be taken more swiftly than in political organizations. In legislatures, for instance, committees can delay the voting on an issue for years or even decades. Finally, we still assume here that political organizations attempt to maximize aggregate value, but in real life political organizations may be preoccupied with the redistribution of wealth.

25. Posner (1977) is the classic reference and provides an excellent survey of this work. Posner, Richard A. (1977), *Economic Analysis of Law,* 2nd ed. (Boston: Little, Brown).

26. See Demsetz, Harold (1969), "Information and Efficiency. Another Viewpoint," *Journal of Law and Economics 12,* (No.l): 1-22.

27. In other words, the low quality and limited variety of commodities was not only due to shirking by managers and workers in state enterprises, it was also designed by the center.

28. This analysis of the Soviet system is based. on Winiecki, Jan (1990), "Why Economic Reforms Fail in the Soviet System - A Property Rights-Based Approach," *Economic Inquiry* 28 (April), 195-221.

29. See Winiecki (1990).

30. Other factors helped make the system function relatively well in the early phases, such as the opportunity to borrow new technology from the advanced industrial countries. The central command system was not well suited for technological

innovations because of moral hazard and coordination problems. A temporary slowdown in the rate of production because of the introduction of innovations could not easily be distinguished from shirking. Also, a temporary dislocation in one sector or even in one large firm, for whatever reason, could cause serious disequilibria and problems for the central management system. Initially, the Soviet Union was technologically backward in all industries, and could important technology in big waves at long intervals. Later, when the country attempted to compete with other industrial countries using the latest technology, the system's anti-innovation bias became a serious handicap.

31. The concept of moral hazard is discussed in some detail in the following section.

32. See note 28.

33. Shatalov, Sergei (1991), "Ownership Changes in the Soviet Union — Opinion from Moscow," *Transition 2* (No. 4): 4-6.

34. The limited attention that economists have paid to the structure of contracts and informal exchange in the Soviet economies is comparable to the failure until recently of students of market economies to explore contractual arrangements both within firms and across markets.

35. The informal sector in Peru has been studied extensively by de Soto and his colleagues. De Soto, Hemando (1989), *The Other Path: The Invisible Revolution in the Third World* (New York: Harper and Row).

36. In many instances, the theory of organization implicitly takes the institutional structure of the U.S. economy as given. There is much need for comparative studies of organizations in diverse institutional settings. For an outstanding survey of the modern economics of organization, see Milgrom, Roberts, and Roberts, John (1992), *Economics, Organization and Management* (Prentice Hall).

37. Coase, Ronald H. (1937), "The Nature of the Firm," *Economica,* n.s. (November): 386-405. Reprinted in Coase, Ronald H. (1988), *The Firm, the Market, and the Law* (Chicago: Chicago University Press).

38. The approach has also been used to explain how members of political organizations, such as the U.S. Congress, design organization structures that lower their costs of transacting. An excellent selection of such studies is found in McCubbins, Matthew D., and Sullivan, Terry (eds.) (1987), *Congress: Structure and Policy* (Cambridge: Cambridge University Press). See our discussion of these issues in Section V.

39. The results are inefficient in the sense that no one would be worse off and at least one person better off with an alternative outcome which could be reached if the information constraint were not there. The analysis is often stated in terms of the theory of agency, where a principal hires an agent to advance his or her interests, but problems with disparate interests can also arise in various types of exchanges where the two sides are on equal footing in the sense that one side is not obviously an agent of the other side.

40. Both concepts are taken from the insurance literature, but they have been given a more general interpretation in the theory of contracts.

41. Migrom and Roberts (1992), p. 149.

42. Screening is another solution to the problem of adverse selection. With screening the buyer designs a selection process where sellers have an opportunity to indirectly demonstrate their level of quality, again using proxies.

43. For references and further elaboration, see Eggertsson (1990), Chapters 5 and 6.

44. Alchian, Armen A. (1950), "Uncertainty, Evolution, and Economic Theory," *Journal of Political Economy 58* (No. 3): 211-221.

45. See footnote 43.

46. See Chapter 7, "Risk Sharing and Incentive Contracts," in Milgrom and Roberts (1992).

47. Some economists object to this approach, as no theory exists for explaining who is risk averse and who is not. They prefer to explain the structure of contracts on the assumption that all individuals and organizations are risk neutral. See Barzel (1989), 30-31.

48. Barzel, Yoram (1982), "Measurement Cost and the Organization of Markets," *Journal of Law and Economics 25,* (No. 1): 27-48.

49. The concept of specific assets is associated with Oliver Williamson. See Williamson, Oliver E. (1971), "The Vertical Integration of Production: Market Failure Considerations,"*American Economic Review 61* (May: 112-123, and by the same author (1985), *The*

Economic Institutions of Capitalism **(New York: The** Free Press). Another classic reference is Klein, Benjamin, Crawford, Robert G., and Alchian, Armen A. (1978), "Vertical Integration, Appropriable Rents, and the Competitive Contracting Process," *Journal of* ***Law and Economics 21*** **(No. 2): 297-326.**

50. Goldberg, Victor (1980), "Relational Exchange: Economics and Complex Contracts," *American Behavioral Scientist 23* (January-February): 337-352.

51. Our statement oversimplifies, as the techniques of production and organization are related. Modern methods of organization depend on recent advances in measurement and communication technologies, and advanced methods of production often require new forms of organization before they become economically viable.

52. Although cultural values and other informal institutions also affect what we call the social frontier, scholars should be careful when they appeal to cultural factors. For instance, the Japanese have strict limits on imported rice, although the price of domestic rice is several times the world market price. If it were true, as some scholars argue, that the Japanese limit foreign rice because domestic rice has an enormous religious and national value, then the reliance on domestic rice is consistent with the maximization of value. However, it also follows that the costly enforcement of trade obstacles against foreign rice is irrational as presumably the Japanese would not buy foreign rice, even though it is inexpensive, because they have little value for it Still there is no doubt that cultural values affect the output of all economic systems — even in the most successful industrial countries, an appropriate shift in cultural values could raise the rate of economic growth.

53. North, Douglass C. (1979), "A Framework for Analyzing the State in Economic History," ***Explorations in Economic History*** **(July), 249-259, and** Findley, Ronald, and Wilson, John D. (1987), "The Political Economy of the Leviathan." In Razin, A., **and Sadka, E., eds.,** ***Economic Policy in Theory and*** *Practice* (New York: Macmillan). Abo see Findley, Ronald (1992), "The New Political Economy: Its Explanatory Power for LDCs." In Meier, Gerald M., e**d.,** ***Politics and Policy Making in Developing Countries. Perspectives on the New Political Economy*** (San Francisco: ICS Press).

54. **Winiccki, Jan (1991),** ***Resistance to Change in the Soviet Economic System—A Property Rights Approach*** (London: Routledgc Press).

55. The fundamental insight is associated with Stigler. See Stigler, George J. (1961), "The Economics of **Information,"** ***Journal of Political Economy 69*** **(No.3):** 213-225; and Stigler, George J. (1971), "The Economic Theory of Regulation," *Bell Journal of* ***Economics and Management Science 2*** **(No. 3): 3-21.**

56. Mancur Olson has theorized that, with the passage of time in a stable political environment, various groups gradually overcome the problem of free-riding and organize to change the institutional structure of the economy to transfer wealth to themselves. In the language of game theory, the practice is a negative-sum game as rent-seeking uses up resources and reduces the communities' aggregate wealth, and also the winners usually gain less than the losers loose. Olson, Mancur (1982), *The Rise and Decline of Nations* (New Haven: Yale University Press).

The rent-seeking model of regulation has been criticized justly for claiming too much. Critics have pointed out that in most countries the "rent-seeking industry" is smaller than the theory suggests. In defense of the theory of regulation it must be admitted that only the simplest versions of the theory imply a "corner solution" with almost no free trade. In more sophisticated versions, equilibrium outcomes balance the forces of competing special interest groups and the interests of the general public, which generally leads to some form of compromise. Peltzman, S. (1976), "Towards a More General Theory of Regulation," ***Journal of Law and Economics 19,*** **211-240.**

57. Arrow, Kenneth J. (1951), *Social Choice and Individual Values* (New York: Wiley).

58. For instance, see Weingast, Barry R. (1984), "The Congressional-Bureaucratic System: A Principal-Agent Perspective," *Public Choice 44* (No.l): 147-192.

We use the term political organization to refer to all organizations that are involved in designing and enforcing the rules that form the institutional framework for households and economic organizations.

59. In an unpublished study, Alston and Ferrie (1992) argue that Southern legislators in the U.S. Congress, through their control of the relevant committees of the legislature, blocked for decades the passage of welfare legislation in order to protect the social order in Southern agriculture. The authors maintain that concern about an adequate supply of labor following the Civil War and demand for protection by black workers with their uncertain rights, gave rise to a system of *paternalism* where owners of plantations provided a certain amount of social services in return

for reliable labor services. Competition from social services provided by the state would have undermined Southern paternalism. The mechanization of Southern agriculture displaced millions of agricultural workers who migrated out of the South, especially to the cities of the North. Only then did Southern legislators, who were still in control of the relevant committees, yield and allow Lyndon Johnson's Great Society legislation, which was aimed at the urban poor and stimulated migration of unemployed black workers out of the South. The example illustrates the persistence of structures in political organizations that may outlive the fundamental power relationships which originally gave rise to the structures. (The committee system of the U.S. Congress was "reformed" in the early 1970s.) Alston, Lee J., and Ferrie, Joseph P. (1992), "Paternalism in Agricultural Labor Contracts in the U.S. South: Implications for the Growth of the **Welfare State,"** ***American Economic Review,*** forthcoming.

60. See Eggertsson (1990), Chapter 9, "Property Rights in Stateless Societies."

61. Samuelson, Paul A. (1993), "Altruism as a Problem Involving Groups versus Individual Selection in Economics and Biology." A paper prepared for the annual meeting of the American Economic Association, January 5-7, 1993.

62. For instance, see Hechter, Michael; Opp, Karl-Dieter; and Wippler, Reinhard (eds.) (1990), *Social* ***Institutions: Their Emergence, Maintenance, and*** *Effects* (New York: Walter de Gruyter).

63. The point has been recognized, for instance, in the work of Douglass North, but progress so far has been limited. North, Douglass C. (1993), "Institutions and **Credible Commitment,"** ***Journal of Theoretical and Institutional Economics,*** **forthcoming.**

64. Page 139 in Arrow, Kenneth J. (1990) in Sweberg, **Richard (ed.),** ***Economics and Sociology. Redefining their Boundaries: Conversations with Economists and*** *Sociologist* (Princeton: Princeton University Press).

65. See Kuran, Timur (1991), "Now Out of Never: The Element of Surprise in the East European Revolution **of 1989,"** ***World Politics 44:*** **7-48.**

66. McKinnon (1992) provides an excellent analysis of the system-specific nature of public finance and money and banking in the socialist countries. McKinnon, Ronald I. (1992), "Macroeconomic Control in Liberalizing Socialist Economies: Asian and European Parallels," Working Paper, Stanford University.

67. See McKinnon (1992).

68. Krueger, Anne O., "Virtuous and Vicious Circles in Economic Development." A paper prepared for the annual meeting of the American Economic Association, January 5-7, 1993.

69. The following account is based on Rodrik, Dan, "The Positive Economics of Policy Reforms." A paper prepared for the annual meeting of the American Economic Association, January 5-7, 1993.

70. McKinnon, Ronald I. (1990), *Stabilizing the Ruble:* ***The Problem of Internal Currency Convertibility*** (Paris: OECD Development Center).

71. Komai answers, no. Komai, Janos (1990), *The Road* ***to A Free Economy — Shifting from a Socialist System:*** *The Example of Hungary* (New York: W.W. Norton & Co.).

72. "Finance Minister of Czechoslovakia Speaks on Economic Reform," *Transition 1,* No. 2, May: p.2.

73. Gray, Cheryl et al. (1991), *The Legal Framework for* ***Private Sector Development: The Case of Poland,*** World Bank, WPS No. 800.

74. Dhar, Sanjay (1992), "Public Enterprise Restructuring: Achilles' Heel of the Reform Process," *Transition 3* (March): 6-8.