The State as an Instrument of Transaction-Cost Economies

Todorova, Tamara

November 2011

Tamara Todorova[1]

The State as an Instrument of Transaction-Cost Economies

The state plays a role in reducing the transaction costs of an economic system. While the scholarly focus seems to be on the indirect role of the state through the legal system and the definition and enforcement of property rights, economists seem to overlook the direct role the state has to play in allocating economic resources through its centralized, administrative, and direct mode. This role of the state as a transaction-cost economizing agent becomes particularly important in high-transaction cost societies such as transitional economies and especially in view of the difficult process of transition taking place in the past twenty years. Experiencing staggeringly high transaction costs, former socialist economies show that, in contrast to the established clichés, the market does not "always work itself out," the state is not always "a bad owner," and it still has a role to play in the economy. The article argues that there are societies and sectors where the state, rather than the market, is a preferable instrument for allocating economic resources. It shows that, from the perspective of transaction-cost economics, markets sometimes do not function smoothly and are costly to use, as in the newly emerging market economies, and there is room for the government in the direct running of the economic system.

While many developed market economies can be described as part of what classics call the "Coasean" world, that of zero or negligible transaction costs, the concept of positive transaction costs becomes vitally important in societies where the costs of transacting are prohibitively high and institutional backwardness blocks the functioning of the market mechanism. In most of the Western economies, transaction costs tend to be low, as there is little friction in using the market system and markets function smoothly. However, the period of transition in East European societies, already taking twenty years, has proved that markets generally fail to perform their function in allocating economic resources, opposite to what was expected at the start of reforms, and that economic underdevelopment is now a major problem for transitional societies.

Facing serious institutional impediments and dramatically high transaction costs of using the market, transitional economies produce a lower net aggregate output than their Western counterparts. These sizable transaction costs lead to substantial divergence between the gross and net aggregate production function at a particular level of technology. The less efficient the coordination of economic activities in society and the higher the costs of using the market mechanism, the lower the net output supplied in the economy. The lower output and deep structural problems of East European economies can be related to the effect of transaction costs and institutional building. Production is hampered, on the one hand, by a lower technological level and, on the other, by high transaction costs. The prescriptions of classical economics on efficiency and general market equilibrium do not work in Eastern Europe, and new institutional economics helps explain the impediments to its economic development. Ceteris paribus, firms in Eastern Europe achieve lower profit levels and tend to pay less for inputs as a result of higher transaction costs. Furthermore, the breakdown of transaction costs into ex ante and ex post transaction costs in their role in high-transaction cost and low-transaction cost societies shows that ex ante safeguards that prevent precontractual opportunism in commercial transactions are more important in East European economies, than in western markets.

The concept of market transaction costs and the role of the state originate in Ronald Coase's two seminal articles, "The Nature of the Firm" (Coase, 1937) and "The Problem of Social Cost" (Coase, 1960). In "The Nature of the Firm" he introduces the term "transaction costs" and uses it to explain the raison d'être of firms. According to Coase, the firm exists because it is an alternative to the market mechanism and a way to economize on the costs of using it, that is, the marketing costs of transacting. Thus, smaller firms can be associated with lower, but positive, transaction costs on the respective market, whereas larger firms supersede markets in which the costs of transacting are sizable. In the extreme case, Coase argues, there will be only one firm, a superstructure of unique character that will substitute the market completely. Such an example to him is the state in the face of the Soviet socialist firm, which represents an extremum, and in which the market is entirely missing.

Then, in "The Problem of Social Cost," Coase reveals the indirect role of the state—that of defining and enforcing property rights. He discusses the case of a crop owner and a cattle breeder, whose interfering activities reduce the maximum amount of their joint production. Depending on the existing property right system, Coase concludes, liability would fall on either party and, in the absence of transaction costs, they would negotiate and renegotiate to the point where the joint output of the two

[1] Tamara Todorova is affiliated with American University in Bulgaria. Address correspondence to 1, Georgi Izmirliev Square, Blagoevgrad 2700, Bulgaria; e-mail: ttodorova@aubg.bg. I thank Bharath Ramachandran for encouraging me to write this article.

businesses would be maximized. However, since in the real world transaction costs are always positive, there is a role for the state to play in such cases of nuisance. In particular, by deciding in favor of one party and much to the disadvantage of the other, judges and courts, in effect, allocate economic resources. This responsibility of judges and the legal system is seen by Coase as an indirect role that the government plays in determining the outcome of resource allocation. It is this indirect role of the state that is widely covered in economic literature. Thus, scholars generally agree that the costs of transacting are positive and that, indeed, to ensure a smoothly functioning economic system that achieves the maximum output of joint activities, the state should perform its main task, that of defining and enforcing property rights. Much attention is paid to the state, as discussed in "The Problem of Social Cost" to the point where some classical economists assume transaction costs to be negligible and, therefore, see no room for government in the economy. What is overlooked by scholars is the direct role that the state can play in running the economic system, as implied by Coase in "The Nature of the Firm." The latter is much cited in its treatment of the individual firm, manager, and market. But there is no mention of the extreme case of the firm, that of the socialist, purely centralized, command-economytype firm that represents an alternative to market allocation. It is this extreme case that we want to emphasize, as it helps explain why in some societies, such as market economies, resource allocation is left to the market and why in others, the socialist, Soviet-type, command economies, resource allocation is left to the state. While scholars pay great attention to the indirect task that the state should perform, that of defining and enforcing property rights, as shown in "The Problem of Social Cost," no attention is given to its direct role, that of the state as a centralized commander and a direct mechanism for allocating resources, as seen by Coase in "The Nature of the Firm." We believe that this second role of the state in the economic system is as important and should be studied in greater detail.

The adverse effects of transaction costs on East European firms

Some scholars equate the activity "transaction" to the activity "production" in its conventional classical meaning.[1] A given commodity can be traded between a producer and a consumer. In order to identify each other, conclude the deal, monitor and enforce the agreement, the two parties incur transaction costs, the amount of which is measured in a net loss of that commodity. Similar to the classical production function the activity "transaction" may be presented by a "transaction function," where the transaction output depends on the production function and, therefore, replicates its form. As transaction costs are positive in the real world, some of the transaction input is always wasted and the transaction output is less than the input. As the volume of trade increases, the marginal product of the transaction process decreases and the slope of the transaction function falls. This shows that transaction output increases more slowly than transaction input, which is the result of the increasing transaction costs. The more transactions take place, the higher the transaction costs and the greater the divergence between transaction input and output. Furubotn and Richter (2005, p. 66) maintain that this situation could occur if, from a certain point onward, buyers and sellers have to search harder for exchange possibilities and monitor transactions with increasing care, as the total volume of transactions increases. In order to secure themselves against opportunistic behavior, the parties to the exchange must exercise increased monitoring and enforcement effort. For East European firms the transaction function would lie much below the optimum at zero transaction costs in comparison to that of Western transaction firms whose transaction function would lie close to the latter. The marginal product of the transaction process is, thus, smaller for the East European transaction firm, and for a higher increase in the transaction input there will be a smaller increase in the transaction output. Much more of the commodity will be wasted in the form of transaction costs.

For a profit-maximizing transaction firm, the slope of the transaction function or the marginal product of the transaction process will always be positive but less than one and, hence, the concave curvature of the transaction function, which again can be attributed to the presence of transaction costs. There exists an optimal amount of the activity "transaction" that would maximize the profits to the transaction firm. Since the transaction firm is profit-maximizing, some highest isoprofit line must be tangent to the transaction function at the profit-maximizing point. The East European transaction firm will likely achieve less profit than its Western counterpart producing at a higher isoprofit line. At the optimum, it will supply much less output than if transaction costs were lower.

The activity "transaction" could be integrated into the production firm, the household or the consumer. To find the effect of transaction costs on the activity of the production firm we subtract them from the gross product achieved by the firm at a given level of technology. This gives the net production function, which would lie below the gross production function. In the presence of transaction costs a profit-maximizing firm would pay a smaller price for an input than if transaction costs were zero. In transitional economies where the marginal transaction cost is higher and total transaction costs grow faster, firms would opt to pay a lower price for inputs.

Because the marginal transaction costs can be prohibitively high and may exceed the gross value of the marginal product, firms will be reluctant to hire any of the input. The firm will not demand any input when the marginal cost of transacting exceeds this value. Optimum production decisions within the firm, thus, differ in the world of classical economics and that of positive transaction costs. In reality the firm would never pay the gross value of the marginal product of its input. It would tend to pay less for an input the faster the transaction costs of economic activity grow. It will pay more, the more slowly those costs increase.

At the individual firm level, there may be firms or market situations where the transaction costs outweigh productive efficiency. For example, one firm may be less productive in gross terms but much more efficient in transaction, that is, net terms. With the same level of technology it may achieve greater final output due to reduced transaction costs. At the aggregate level, one may study societies at different levels of institutional development and economic efficiency. Sizable transaction costs offset the benefits of exchange in some countries. At a particular level of technology, the net aggregate production function lies below the gross production function showing the size of the transaction costs. It will lie further below the production function when aggregate transaction costs are sizable in the economy and when the coordination of economic activities is less efficient. Furubotn and Richter (2005, p. 69) point to poor legislation as an example of such inefficiency in governmental activity. Although two economic systems or countries may have the same level of technological knowledge, their governments may not be equally efficient, which will result in different net production functions. The one with the more efficient government will enjoy greater net output at any respective level of input.

The transaction costs in question may be political transaction costs, the costs of setting up, maintaining, and changing the formal and informal political organization of a system, as well as the costs of running a polity. But the difference between gross and net aggregate output may also result from high costs in private bargaining, that is, from high market transaction costs. Transaction costs do matter and may offset what was achieved with the help of production efficiency. Their importance is most vivid in the case of complete market failure when transaction costs are so high they prevent market exchange. The high costs of using the market can be overcome by the formation of hierarchies within which it is less costly to organize economic activities. The managerial costs of running a firm might be lower than the transaction costs of using the market and the firm becomes an alternative to the market. A problem for East European economies has been that both market and intrafirm or managerial transaction costs seem to be excessively high and economic activity can be organized neither through the market nor through the firm. Yet, it could be that the state is a better way to organize economic dealings and economize on transaction costs. The transaction costs of obtaining some commodities through the market are so high that the sum of the transaction and production costs completely discourages consumers from demanding those commodities. High transaction costs hinder and in many cases completely block the economic development of countries in transition.

The aggregate production function of an advanced economy lies above that of a transitional economy (due to technological advancement and productive efficiency). Outdated technology and inefficient organization of production contribute to the much smaller gross aggregate output of the transitional economy. Furthermore, institutional impediments and significant transaction costs yield much less net output in transitional economies. Both types of economies face positive transaction costs and their net production functions lie below their respective gross production functions. But the net production function of the transition economy lies much below that of the advanced economy. The difference between the gross and net production function is much greater for the transitional, high-transaction-cost economy than for its advanced, low-transaction-cost counterpart. This shows a greater loss to transaction costs in the transitional economy.

The difference in aggregate output can be directly traced to the lack of stable and developed market institutions in Eastern Europe as the formal and informal rules of transacting. If mutual trust and ethical behavior prevailed in business relationships in the region, the difference in the gross aggregate output and the technological level might have been offset by low costs of transacting. The net aggregate production functions of a low- and hightransaction-cost economy look very different. At the same level of input, the advanced economy produces much more net output than the transitional economy. The optimum amount would depend on some highest community isoprofit line for both societies. For the same level of input and output prices in the two economies, at the optimum where some highest isoprofit line touches the surface of the net aggregate production function, one country will produce more than the other. The optimum for the transitional economy at the same slope of the isoprofit line occurs at output, which is substantially smaller than that in an advanced economy facing lower transaction costs. The isoprofit line at which the transitional economy is producing is lower than the isoprofit line at which the advanced economy is producing. Thus, firms in the transitional economy achieve much lower profit. Consequently, less of it will be invested in future production and the return on investment will be smaller. Transaction costs reduce not only aggregate output of an economy but also the profits of firms in that economy.

If the economic development of a country is to be stimulated, attention must be paid to both production and organizational technique. The lack of legislation reducing transaction costs may offset any improvement based on technical progress and hence lead to the discouragement of economic activity. Legislation reducing transaction costs may increase total productivity in an economy despite the lack of substantial technological improvements. On the other hand, countries experiencing high transaction costs and having difficulty changing their legislation, should rely more heavily on the achievements of technological progress to compensate for the institutional impediments to market exchange. While it is true that institutional effectiveness is a better road to pursue, countries, which are not successful in bringing down transaction costs and creating a more efficient market economy, should rely on innovation in productive technology or product development. Yet, institutional reform is crucial to the transformation of East European economies into more productive systems of market capitalism.

The comparative analysis of different types of economies can further be extended to the study of the role that ex ante and ex post transaction costs play in the different economies. Theoretically, ex ante transaction costs are those of ensuring, defining, and protecting property rights prior to concluding the contract. To Williamson (1985, p. 20) the ex ante costs are those of "drafting, negotiating, and safeguarding an agreement." The parties draft a complex document where numerous contingencies are recognized and appropriate adaptations are stipulated and agreed to in advance. The ex post transaction costs, on the other hand, represent the costs of enforcing, monitoring, and observing a contract that has already been signed. Williamson emphasizes that ex ante and ex post costs of contracting are interdependent and must be addressed simultaneously rather than sequentially. In particular, transactions that are subject to ex post opportunism will benefit from appropriate safeguards designed ex ante (Williamson, 1985, p. 48). In transitional economies the importance of the ex ante transaction costs would be high. Even minor increases in input levels would stimulate higher ex ante transaction costs. They can further be associated with a greater reduction in the level of ex post transaction costs thus compensating for future opportunism. While ex ante transaction costs would have a minor role in developed market economies experiencing weaker opportunism, ex ante transaction costs would be vital in emerging market economies. Parties to commercial contracts would rely much more heavily on ex ante safeguards prior to the deal against future opportunism and moral hazard after the deal.

The state as an instrument of transaction cost economies

The direct role of the state is undermined in the economic field probably because communism failed as an economic system. This made many believe that socialism is dead and there is room only for the market—it is the only way to allocate resources, the most efficient instrument of economic coordination, as it "works itself out." The process of transition shows, though, that markets have their failures, too, and do not function smoothly in all societies and sectors. It also shows that, while going into extremes is dangerous and maintaining an entirely centralized economy is suboptimal, there is still some potential for government in resource allocation. Leaving allocation entirely to the market may not create an advanced, developed economy producing at its full potential. While the case of the omnipresent, omnipotent socialist state in the economy presents an extremum and has proved to be wrong in time, nothing necessitates a move to the other extremum, having only markets and no state.

In "The Problem of Social Cost" Coase emphasizes the role that judges and courts play in the economic system by deciding in favor of one business or another in cases of nuisance. In effect, this is a resource allocation mechanism on the part of the state, although indirect by its nature. This happens when markets hampered by friction do not allow economic agents to negotiate independently so that to reach the maximum total product of their activities: the situation is quite different when market transactions are so costly as to make it difficult to change the arrangement of rights established by the law. In such cases, courts directly influence economic activity. It would therefore seem desirable that the courts should understand the economic consequences of their decisions and should, insofar as this is possible without creating too much uncertainty about the legal position itself, take these consequences into account when making their decision. (Coase, 1960, p. 19)

Thus, through courts the state indirectly allocates resources where judges should understand the economic consequences of their decisions so that to maximize total economic output. In the Western legal system, courts have recognized the economic implications of their decisions and are aware, as Coase (1960) suggests, of the reciprocal nature of the problem. In contrast, judges in Eastern Europe do not realize the economic implications of their actions, nor have they been educated in the Western economic tradition. Glaeser, Johnson, and Shleifer (2001, p. 854) find that in many emerging markets, courts are underfinanced, unmotivated, unclear on the applications of law, unfamiliar with economic issues, and even corrupt. The authors conclude that enforcement by regulators can be more successful than judicial procedures. Thus, direct regulation may turn out to be more efficient than the court system, where judges lack incentives to enforce property rights. The lessons from transition show that almost all economies in Eastern Europe require direct, rather than indirect, government participation in spheres and activities facing sizable transaction costs.

While much attention is given to the indirect role of the state, as discussed in Coase's "The Problem of Social Cost" in its emphasis on the definition and enforcement of property rights, little attention is paid to its direct role, as suggested in "The Nature of the Firm." The article is much praised for the explanation it gives to firms. What is overlooked is the explanation it gives to the role of the state in the economy. Classical and other economists cannot explain why in some societies resource allocation is done through markets and why in other societies, by the state. The collapse of the socialist state and the move to market have diverted the attention of economists from this topic even further since transitional economies have desperately tried to achieve a market in the past twenty years. What has not been recognized is that those efforts have been futile and a functioning market system has not been created. Furthermore, economists have failed to analyze why this has happened and what the role of the state in the process of transition is. The state has largely been ignored, if not detested, since it has been seen as the complete opposite to the market, as the ideal situation and Pareto optimum for the economy.

Modern economists have largely been interested in the way Coase saw the firm and have expanded his notion of it. Using his postulate they have been able to study the reasons for the firm to exist, its size, boundaries, limitations, various forms, and optimal structure. Economists such as Oliver Williamson have made major contributions to economic theory in studying types of institutional arrangements, the hierarchical form of firms, their structure, and different forms. Yet, no one has studied the meaning of the postulate in its extreme case, the role of the state as one big company, a superfirm or superstructure that supersedes the market in some societies, an alternative system of resource allocation. Why is the state ignored by market economists? Why do markets work better in some societies and worse in others? Why is the market not always an optimal social arrangement? The answer seems to be that there are market and nonmarket societies, the latter being those in which market rules simply do not work. Historically, Russia was a nonmarket society. On the eve of the October Revolution, Russia was trapped in underdeveloped feudalism and, with the Bolsheviks coming to power, never experienced true capitalism, a market economy, or an Industrial Revolution of its own. The same applies to most of Russia's direct neighbors. At the time of Russian occupation and imposed communism, these countries experienced an underdeveloped, premature market economy and a delayed capitalism. Market relations, commercial customs and norms were lacking, series production was absent, much of the economy was based on agriculture, and the prevailing attitude to capitalism was negative. In a sense, this is still the case in some parts of Eastern Europe. Capitalism is much detested, as people experience the negative effects of an underdeveloped market economy, have little or no trust in the market, and see the illegal and blatant enrichment of few individuals through fraudulent privatization and direct theft. Thus, the market economy seems to be less and less preferred by the citizens of Eastern Europe who, historically, have little trust in it. Opposite to them, Western citizens, who owe much of their welfare to the market, praise the market economy and oppose state regulation. Unlike the expensive, high-transaction-cost markets in Eastern Europe, Western markets function smoothly, continuously, and without friction.

To attract attention to the state as a superfirm, Coase mentions socialist states a number of times. His observations receive little attention in the academic world, though. What economists seem to "buy" from Coase is his explanation of the firm, but not his vision of the state as an alternative mechanism for resource allocation. While many economists call an ideal situation of zero transaction costs a "Coasean world," Coase (1988, p. 174) disagrees with that and claims that positive, rather than zero, transaction costs should receive the attention of scholars. Most economists, new institutionalists being in the lead, seem to agree that transaction costs are positive and, therefore, can be sizable in some sectors of the economy or societies. Williamson (1979) claims that there are and always will be transaction costs. Eggertsson (1999, p. 102), Furubotn and Richter (2000, p. 85) also believe that transaction costs are positive in the real world. According to Williamson (1989, p. 227), not only do all transactions incur some transaction costs but also the different forms of organization can be associated with different levels of transaction costs, which makes the choice of economic institutions vital. Williamson does not particularly study the state as a form of economic institution that can economize on transaction costs.

In some economic sectors or activities transaction costs are negligible, which makes private bargaining a preferable mode of economic organization. But what matters more for transitional, nonmarket societies are situations of prohibitively high transaction costs, that is, activities or societies in which transaction costs are so remarkably high, that they make the state a preferable social arrangement. When private bargaining is costly, relative to its returns, and the state can achieve the same returns at less cost, the state becomes a better instrument for coordinating economic activities. According to Max Gillman, it may be too costly for one private coalition to bargain and negotiate with another private coalition:

> Even though the use of school-grounds may be worth more to the children when for quality education than to the neighboring home owners when alternatively for a drug market, a playground, or a park, the costs to the children or their parents of forming an effective coalition that can bargain with an effective coalition of property owners, plus the cost of forming an effective coalition of property owners, remain so high as to prohibit most such private exchanges from taking place. With such a public initiated exchange of property rights, the government is forcing the exchange by giving the property owners higher community education in exchange for their property taxes. . . . This type of transfer, only feasible because of the social norms that accept the legal contract of individuals to the rule of the democracy, is left untouched by standard economic theory but not by Coasian logic. (1999, pp. 592–92)

In "The Nature of the Firm" Coase (1937, pp. 396–97) discusses the transaction cost economizing effect of administrative control and direction. To him, the firm ceteris paribus would tend to be larger:

a. the less the costs of organizing and the slower these costs rise with an increase in the transactions organized;

b. the less likely the entrepreneur is to make mistakes and the smaller the increase in mistakes with an increase in the transactions organized; and
c. the greater the lowering (or the less the rise) in the supply price of factors of production to firms of larger size.

Although he does not mention the state explicitly, one can conclude that with the help of administrative control and direction the state-owned firm can save on transaction costs. This would be the case when the state-owned firm can achieve the task of economic coordination at very low costs compared to the operations of many small, privately owned firms. Classical, laissez-faire economists would argue that markets and privately owned firms would always perform better than the state. Indeed, this would be case in market societies where the particular market and individual entrepreneur achieve their tasks very easily and at low cost. In nonmarket societies, markets fail to perform the task of economic coordination, as economic agents incur high costs in private dealings, while individual managers may be more prone to mistakes. Thus, the state becomes a more efficient form of economic organization and a preferable social arrangement. For Coase, the state is a superfirm of a very special kind:

> The administrative costs of organizing transactions within the firm may also be high, and particularly so when many diverse activities are brought within the control of a single organization. . . . An alternative solution is direct government regulation. Instead of instituting a legal system of rights which can be modified by transactions on the market, the government may impose regulations which state what people must or must not do and which have to be obeyed. . . . The government is, in a sense, a superfirm (but of a very special kind) since it is able to influence the use of factors by administrative decision. (Coase, 1960, p. 17)

The market and the state can be viewed as two contrasting forms of economic organization. In effect, the state is an extreme form of firm resource allocation based on a central plan, centralized commands, directives, and orders. When transaction costs are prohibitively high and a few small private firms cannot operate, the state is the only way to allocate resources. This would be the case in industries and areas where markets do not function and cannot clear, information is strongly asymmetric, there are insurmountable market failures present, there is no trust in markets or in commercial partners, markets do not seem to evolve with the passage of time and opportunism, as the strongest form of self-interest seeking, is evident. In such societies or situations the market becomes too costly to use and the state is a substitute for it. For Coase (1960, p. 18) each of the two forms of social organization comes at a price and the choice of the two depends on whichever is cheaper to organize:

> From these considerations it follows that direct governmental regulation will not necessarily give better results than leaving the problem to be solved by the market or the firm. But equally there is no reason why, on occasion, such governmental administrative regulation should not lead to an improvement in economic efficiency. This would seem particularly likely when, as is normally the case with the smoke nuisance, a large number of people are involved and in which therefore the costs of handling the problem through the market or the firm may be high.

One example of market failure in a transitional economy such as Bulgaria is the sector of public utilities and natural monopolies. It illustrates clearly a nonmarket society in which private bargaining is costly. Through privatization, an electrical company has been transformed from a state monopoly into a private one. As a pure monopoly, the company has millions of individual customers, households, and firms. It is too costly for the customers to form a coalition so that to undertake collective action against the electrical company in cases of noncompliance or in relation to monopoly rents, to lead negotiations and bargain with the firm on private terms. State control over private monopolies in nonmarket societies turns out to be more difficult than control over state-owned monopolies. Thus, a state-owned monopoly might be socially and economically preferable to the market and private monopoly in nonmarket, transitional economies. The difference with the West is that such problems could be more easily resolved through the market in Western economies.

The case is similar with the provision of public goods such as education, health care, security, and so on, where the state clearly achieves transaction cost economies and where private bargaining in transitional societies has proved to be costly and strenuous. Thus, the period of transition has shown that state-owned schools are still better in postcommunist societies, staterun hospitals are more reliable, and firms supplying electricity, water, and telecommunications operate better under the state. Not only is the behavior of those private providers opportunistic, but the many lawsuits against them show the inefficiency of the court system, the inability of those affected to protect their contractual rights, and the high cost of private, as opposed to public, bargaining. Privatization for the most part has been unsuccessful and formerly state-owned companies that have functioned relatively well seem to have collapsed under private owners. A notable transitional expert, János Kornai (2000), claims that from forceful nationalization in the 1940s and 1950s on the eve of communism, Eastern Europe has plunged into forceful privatization at the start of reforms, a process which continues even today. Such forceful privatization of industries facing high transaction costs is wrong and should be undone.

As a superstructure, the state is an extreme case of Coase's exposition of the firm as a substitute for the market. While with zero transaction costs there should be no state, and perhaps no firms of any size, with dramatically high transaction costs, larger and larger firms prosper, replacing the costly market mechanism. Thus, at the other extreme, there may exist only one such large firm, the state, a social arrangement that can overcome very high transaction costs. With the concept of transaction costs Coase explains why there are alternative resource allocation systems, something classical economists are not able to do. At the contemporary stage, Coase explains why market reforms succeed in some countries and fail in others, why markets function smoothly in some societies and spheres and collapse in others. Being two extremities, neither the market nor the state may work on their own, so Coase, implying a mixed economy, suggests choosing between the two social arrangements on a case-by case basis and using a step-by-step approach. New institutional economists (Furubotn and Richter, 2005, p. 43) speak of political transaction costs as the "costs of running and adjusting of the institutional framework of the polity." These are the costs of sustaining the formal and informal political organization of a system, that is, the costs of running the state machine. In contrast to them are market transaction costs, the costs of search and information, bargaining and enforcement using the market. When political transaction costs are lower than the costs of using the market, then centralized control and decision making under the state become preferable to market coordination.

Other authors also recognize the special role of the state in resource allocation. For Arrow (1969), the coercive power of the state can economize transaction costs where tax collection and regulatory legislation are the most vivid illustrations of this power. Arrow (1969, p. 61) views the state as a system of individual agents where political representation is an outstanding example of the principle–agent problem. He believes that the state and firms are similar in that they represent forms of collective action. Just as in the state apparatus, firms are illustrations of collective action and within firms the allocation of resources takes place by authoritative and hierarchical controls. As to coercion, Coase seems to believe that it distinguishes the state from the ordinary firm—in other words, firms do not use coercion and force in their operations, while the state obligates citizens to comply with its laws. However, even an employee has to obey the rules of the company, act on the commands of his boss, or abide by the corporate culture. There is some degree of coercion within the ordinary firm, too. Within certain limits, defined by the employment contract, the worker agrees to obey orders and commands. But while the social contract is implicit, employment contracts delineating the rights and duties of managers and employers are explicit. At the same time, while the state-owned firm is publicly owned, a single firm operating as a pure monopoly in an industry is privately owned. It seems, therefore, that the form of ownership, rather than coercion and the use of force, is the major difference between the state-run firm and the privately owned, monopoly-type one. It is then logical that the transaction-costeconomizing role of the state is strongest in the provision of public goods such as health care, education, defense, and so on. With all its disadvantages, public property seems to save on transaction costs in certain spheres of life or societies, while private property, with all its virtues known, seems not to.

That Coase was aware of the transaction cost economizing effects of the state is evident from his Nobel Prize lecture (1991) delivered seventy years after the initiation of the central plan. He draws a direct parallel with the Russian economy on the eve of the October Revolution and the changes instituted by Lenin:

> And yet we had a factor of production, management, whose function was to co-ordinate. Why was it needed if the pricing system provided all the co-ordination necessary? The same problem presented itself to me at that time in another guise. The Russian Revolution had taken place only fourteen years earlier. We knew then very little about how planning would actually be carried out in a communist system. Lenin had said that the economic system in Russia would be run as one big factory. However, many economists in the West maintained that this was an impossibility. And yet there were factories in the West and some of them were extremely large. How did one reconcile the views expressed by economists on the role of the pricing system and the impossibility of successful central economic planning with the existence of management and of these apparently planned societies, firms, operating within our own economy?[2]

Excessive government interference and state regulation may be as bad as organizing it all through the market. Coase (1960, p. 18) realizes that the governmental administrative machine is not itself costless, that state bureaucracy can be expensive for society to maintain and that the state administration can be subject to political pressures. State officials would be operating without any competitive check or "the gain which would come from regulating the actions which give rise to the harmful effects will be less than the costs involved in government regulation." Coase observes:

> Such (government) action is not necessarily unwise. But there is a real danger that extensive government intervention in the economic system may lead to the protection of those responsible for harmful effects being carried too far. (1960, p. 28)

Yet, it turns out that in transitional economies the costs of using the market mechanism by far exceed those of state control and the creation of a wellfunctioning market is a difficult process. Furubotn and Richter (2000, p. 22) recognize that Western economic advisers have disregarded the relationship between political processes and economic development. As a structural adjustment package designed to ensure structural transformation and sustainable growth in developing countries, the Washington consensus showed the infinite belief of free-market economists in market forces. However, introducing more market into all spheres of transitional economies has not achieved the expected results. Eastern Europe is still lagging behind economically, and transformation is slow. The countries in the region have moved from one extreme to another—from highly centralized, Soviet-type economies with no market to an underdeveloped market and no state. According to Posner (1993, p. 202), economists inclined by temperament or life experience to favor a weak and passive government may overlook real opportunities for fruitful government interventions.

The smooth operation of many markets and industries in East European economies is blocked by prohibitively high transaction costs. Markets do not seem to evolve with the expected speed. Merely defining property rights, introducing private property and freeing prices turned out not to be sufficient for economic growth, as prescribed by Western laissez-faire scholars. Favorable conditions to respect property rights are lacking, thus requiring more state intervention in areas where government regulation, temporary or permanent government intervention are necessary. Kornai (1995, p. 163) maintains that the transitional state is overactive in areas where it should not be and passive in areas where it should be present. Creating market institutions that minimize transaction costs through the process of organic growth is a difficult and lengthy task. Institutional factors become particularly important for traditionally nonmarket societies such as those in Eastern Europe experiencing high transaction costs. Coase (1991) concludes that former communist countries are advised to move to a market economy "but without the appropriate institutions no market economy of any significance is possible." Coase (1991) thinks that the West would have done a better job advising the emerging market economies, if it knew more about its own economy. Since appropriate market institutions are absent in the region, the state through its direct intervention and control may be a better form of economic organization.

Conclusion

The state can play a vital role in reducing the transaction costs of an economic system. The state can perform this task not only indirectly through the definition and enforcement of property rights but also through the direct control it can exercise over the allocation of economic resources. This role of the state as a transaction-cost-economizing agent has been overlooked in economic theory. It becomes particularly important in high-transaction-cost, nonmarket societies such as transitional ones. Although the resource allocation function of the state comes at a price, it may be that the state performs this task more cheaply and efficiently than the market. Examples are present in areas of life where the costs of bargaining between private economic agents exceed those of bargaining through the state. While in Western societies markets generally work smoothly and private bargaining is efficient, in many spheres of life and the economy in Eastern Europe they operate with friction and at high cost relative to the state apparatus. Due to the presence of sizable transaction costs, transitional economies produce much less aggregate output compared to Western market economies. At the same technological level, a country facing strong opportunism in market dealings and lacking transaction-cost-reducing institutions can supply much less output. Firms in such an economy achieve much smaller profits. They are likely to invest less in the future, pay less for inputs and receive a lower price for their output as a final result. In this way, transaction costs block the economic development of newly emerging market economies lacking commercial customs, practices, and formal rules of the market game. With costly market institutions, the state machine and direct government regulation become a substitute for inefficient markets and a better instrument of resource allocation.

Notes

1. Furubotn. and Richter (2005, p. 65) refer to Foley (1970), who includes transaction costs in the standard model of perfect competition by adding the activity "transaction" to the system as though it is equivalent to the activity "production."
2. In addition, Coase (1991) states: "It makes little sense for economists to discuss the process of exchange without specifying the institutional setting within which the trading takes place since this affects the incentives to produce and the costs of transacting. I think this is now beginning to be recognized and has been made crystal-clear by what is going on in Eastern Europe today."

References

Arrow, K. J. 1969. "The Organization of Economic Activity: Issues Pertinent to the Choice of Market Versus Nonmarket Allocation." In *The Analysis and Evaluation of Public Expenditures: The PBB System*, Joint Economic Committee, 91st Congress, 1st sess., vol.1. Washington, DC: Government Printing Office.

Coase, R.H. 1937. “The Nature of the Firm.” *Economica*, New Series, vol. 4, pp. 386–405.
———. 1960. “The Problem of Social Cost.” *Journal of Law and Economics*, vol. 3 (October), pp. 1–44.
———. 1988. *The Firm, the Market, and the Law*. Chicago: University of Chicago Press.
———. 1991. Nobel Prize Lecture, December 9. Available at www.nobelprize.org/ nobel_prizes/economics/laureates/1991/coase-lecture.html.
Eggertsson, T. 1999. *Economic Behavior and Institutions*. Cambridge: Cambridge University Press.
Foley, D.K. “Economic Equilibrium with Costly Marketing.” *Journal of Economic Theory*, 1970, no. 2, pp. 276–91
Furubotn, E., and R. Richter. 2005. *Institutions and Economic Theory: The Contribution of the New Institutional Economics*. 2d ed. Ann Arbor: University of Michigan Press, 2005
Gillman, M. 1999. “The Problem of Social Cost: The Role of the State.” *International Journal of Social Economics,* vol. 26, no. 5, pp. 590–95.
Glaeser, E; S. Johnson; and A. Shleifer A. 2001. “Coase Versus the Coasians.” *Quarterly Journal of Economics,* vol. 116, no. 3, pp. 853–99.
Kornai, J. 1995. “Post-Socialist Transition: An Overall Survey,” In Kornai, *Highways and Byways. Studies of Reform and Post-Communist Transition,* ch.
8. Cambridge: MIT Press,.
———. 2000. “Ten Years After ‘The Road to a Free Economy’: The Author’s SelfEvaluation.” Paper presented at the World Bank Annual Bank Conference on Development Economics ABCDE, Washington DC, April 18–20.
Posner, R. 1993. “Nobel Laureate: Ronald Coase and Methodology.” *Journal of Economic Perspectives,* vol. 7, no. 4, pp. 195–210.
Williamson, O. E. 1979. “Transaction-Cost Economics: The Governance of Contractual relations.” *Journal of Law and Economics,* vol. 22 (October), pp. 233–61.
———. 1985. *The Economic Institutions of Capitalism*. New York: Free Press.
———. 1989. “Book Review on *The Firm, the Market and the Law.*” *California Law Review,* vol. 77, pp. 223–31.