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Establishing Property Rights

Andrei Shleifer

Establishing secure property rights in transition economies amounts to solving two problems: inefficient structures of control rights over assets and poor contract enforcement. Politicians and bureaucrats still wield excessive control over assets, which results in inefficient underinvestment by entrepreneurs. Corruption is one way of getting around political control, but the drawbacks are considerable, particularly the limited enforceability of corruption contracts. More workable strategies for establishing property rights in transition economies are giving equity to the bureaucrats (and other parties that have control), reforming the civil service, and removing bureaucratic control rights through privatization. Russia's experience shows how privatization, combined with equity incentives for enterprise insiders, transfers control rights from the bureaucrats and stimulates political and economic pressures to protect private property rights.

Poorly defined property rights are blamed for many of the problems of developing countries and transition economies. But just what constitutes "poorly defined property rights" has eluded analysis. The classics of the property rights literature—Demsetz (1967), Alchian and Demsetz (1972), Jensen and Meckling (1976), North and Thomas (1973), North (1981), and Barzel (1989) offer revealing historical and contemporary examples of the importance of welldefined property rights for efficient resource allocation and economic growth. But they are not very specific in describing poorly defined property rights or in explaining how to establish well-defined property rights.

Poorly defined property rights are usually discussed as a common pool problem: a resource gets overused because too many agents have the right to use it (North 1981; Ostrom 1990; Libecap 1989). In Eastern Europe, however, a major reason for inefficiency in the allocation of resources is that politicians and bureaucrats have excessive control rights over much of the economy, including the private economy. Establishing property rights is therefore to a large extent equivalent to reducing political control. This diagnosis of the problem is not new: many astute observers of

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Eastern Europe, such as Kornai (1992) and Frydman and Rapaczynski (1994), have reached the same conclusion.

Recent work by Grossman and Hart (1986) and Hart and Moore (1990), which associates property rights with residual control rights over assets, provides a framework for analyzing the problem of poorly defined property rights. Inefficient structures of control rights and poor enforcement of contracts are two aspects of the problem. Establishing property rights then means enforcing the contracts through which economic agents try to arrive at more efficient control structures themselves or finding ways to improve the efficiency of control rights directly.

From a Coasian analysis (Coase 1960) of the problem, the obvious strategy for getting around the inefficiencies resulting from political control of assets is corruption. (Coase's theorem asserts that, so long as there are no transaction costs, externalities will not prevent private agents from negotiating to the efficient outcome if physical control rights are protected as legal rights and if contracts are enforced; Cooter 1987.) If private entrepreneurs can bribe politicians, some of the undesirable effects of political control of assets can be undone. But because a corruption contract with a politician who promises not to interfere with the firm in exchange for a bribe is not enforceable, the usefulness of corruption for restoring efficiency is limited. Indeed, the difficulty of enforcing contracts of any kind in many reforming economies suggests that relying on contract enforcement may be a poor strategy for establishing property rights in the first stages of reform.

Three alternative strategies are also explored:

- Giving politicians equity ownership in an asset over which they have control rights, to reduce their incentive to expropriate the asset.
- Reforming the bureaucracy by providing bureaucrats with incentives for maximizing something closer to the public interest or by devaluing the control rights of the bureaucrats, usually through competition among them.
- Eliminating bureaucratic control through the political process, particularly through privatization, which reallocates control from bureaucrats to firm insiders (managers and workers) and outsiders (shareholders), with clear benefits for economic efficiency (Megginson, Nash, and van Randenborgh 1994; Mueller 1989).

Not surprisingly, however, in Eastern Europe and elsewhere privatization and devaluation of the control rights of bureaucrats face enormous opposition from the bureaucracy. Nor is wresting control rights from politicians the end. Getting the benefits of private property rights also means halting the stream of government handouts to firms, which in Eastern Europe is closely related to macroeconomic stabilization. Otherwise, even after control rights are taken away, politicians can direct government resources to subsidize firms and thus continue to get their way with a firm after privatization (Boycko, Shleifer, and Vishny 1994; Shleifer and Vishny 1994a)—witness the many examples in Eastern and Western Europe.

Nor does the transfer of control rights from politicians to shareholders of the firm by itself create secure private control rights. Bureaucrats in many countries, such as Poland and Russia, maintain control rights over corporate assets despite their lack of

legal rights. Securing property rights takes strong enforcement of contracts and of private rights as well. Still, contract enforcement is an easier task after control rights have been transferred from politicians than before, because private agents then have an incentive to protect their control rights and to lobby for appropriate regulations.

Russia's experience with privatization gives practical expression to many of the ideas explored here (for an in-depth analysis of Russia's privatization, see Boycko, Shleifer, and Vishny 1993a,b). In particular, Russia's privatization shows how control rights can be removed from politicians through a political process of building coalitions through equity grants to managers and employees and how corporate governance is thereby improved. In focusing on the problem of establishing property rights in transition economies, the analysis ignores problems that arise in other contexts, such as the common pool problem. Much of the discussion is preliminary—considerable theoretical work needs to be done before the issues are fully understood.

What Are Poorly Defined Property Rights?

Property rights, as defined by Grossman and Hart (1986), are residual control rights over assets. Imagine a society in which each person has a collection of control rights over a set of assets. For example, Mrs. A has a right to cultivate a certain field, live in but not sell a certain house, and use a particular road, but she has no rights over her neighbor's house and field. Her neighbor, Mr. B, has a right to cultivate his own field, to live in as well as to sell his own house, and to use the same road as Mrs. A. This list of people, assets, and control rights defines the property rights structure of society.

An Inefficient Control Structure

Grossman and Hart do not focus on the distinction between physical rights and legal rights, a distinction that is crucial to transition economies. A legal right is protected by police and the courts, so recourse is available if legal rights are violated. For example, if Mr. B has the right to cultivate a field and keep its output, he can presumably use the courts or other powers of the state to seek damages from another party that steals his crop. But not all rights are everywhere fully protected by the courts. In many countries, if someone steals Mr. B's crops or dumps garbage on his field, Mr. B does not have legal recourse and has to protect his control rights privately. Even in a market economy, top executives of private corporations often have a physical right to divert some of the resources of the firm to their personal use despite having no legal right to do so. Not surprisingly, making physical rights legal and legal rights physical is part of the work of establishing property rights. The analysis here considers control rights as physical rather than legal rights over assets.

As must be clear by now, the prevailing structure of physical control rights need not be efficient. One reason is the standard externality problem—people overfish a common pool or overuse and fail to fix a road. Most discussions of poorly defined property rights have focused on this problem (Libecap 1989; Ostrom 1990). Alternatively, an inefficient control structure in the Grossman-Hart sense may fail to promote efficient investment even if people are eventually able to negotiate to an efficient outcome. For example, a shopkeeper who does not own the premises might fail to upgrade the store for fear the landlord would then expropriate the higher profits by raising the rent. If the landlord and the shopkeeper do not (or cannot) sign a long-term lease up front, the landlord could later threaten to kick the entrepreneur out and, through this threat, extract higher rents. So, the first sense of poorly defined property rights is inefficient control structures. If the pool or the road were controlled by a single person, or if the shopkeeper controlled the building, the allocation of resources would be efficient.

The Coase theorem, however, argues that even with an externality problem, people renegotiate to the efficient outcome and so (assuming away transaction costs) solve the common pool problem themselves. The fishermen or road users agree on restrictions on the catch or on road use and on mechanisms for keeping up the common pool. Ostrom (1990) shows how farmers in developing countries use and maintain irrigation systems efficiently despite the common pool problems they face.

Unenforceable Contracts

Even in the Grossman-Hart setup, if people can trade control rights ex ante, they will trade to a better control structure before they make any investments. If not all contracts are enforceable, the trading of control rights does not lead to the first-best outcome, but it does lead to the most efficient control structure given the set of allowable contracts. For example, even if the tenant and the landlord cannot sign a long-term lease, the tenant shopkeeper can sometimes buy the building. With enforceable contracts whether they result from Coasian ex post renegotiation or Grossman-Hart style ex ante renegotiation—people arrive at (constrained) efficient outcomes. Inefficient control structures do not prevent efficient outcomes so long as contracts are enforced.

The trouble is, such Coasian or Grossman-Hart bargaining often relies on contracts that cannot be enforced. Part of the problem is that the underlying physical control rights need not be legal control rights, so public enforcement cannot be counted on. But even if rights are legal, enforcement may be too expensive or otherwise unavailable. If restrictions on fishing cannot be supported by an enforceable contract, or if the sale of the building cannot be upheld in court or through some other enforcement mechanism, Coasian renegotiation is not available to bring about efficiency. Thus the second aspect of poorly defined property rights is the unenforceability of contracts that could lead to more efficient control structures or outcomes.

But contract enforcement is just one of several ways of getting to an efficient control structure and, as shown below, not the best way during the first stage of reform. Other ways, such as reallocating control rights through the political process, may have more to recommend them for transition economies.

Other Aspects of Poorly Defined Property Rights

Other definitions of poorly defined property rights, such as the idea that "rights over some assets just don't exist yet," can be incorporated into the two concepts

that I argue are key aspects of poorly defined property rights: inefficient control structures and the unenforceability of contracts. For example, the common pool problem is often described as a case of nonexisting property rights. Hart and Moore (1990) show that it can be thought of as an inefficient control structure called "joint ownership," in which every agent has veto power over the use of the asset. Similarly, it is often said that shareholder rights do not yet exist in Russia— in the sense that there are no rules governing the rights of shareholders to vote, receive dividends, sell their shares, and so on—and therefore that these rights need to be established.

A more fruitful way to think about this problem is to view control rights over corporate assets as belonging to the managers (and perhaps the workers) rather than as not yet existing. With all control rights in managers' hands but cash flow rights dispersed, managers have an incentive to invest in inefficient projects that give them personal benefits, while shareholders have little incentive to invest in monitoring the managers' decisions. Thus this control structure is inefficient. (This result is closely related to the efficiency of the one share—one vote rule analyzed by Grossman and Hart 1988.) Establishing shareholder rights should be viewed as reallocating some control rights from managers to shareholders rather than as introducing new control rights from scratch. In this framework there are no missing rights, just inefficient control structures, and the problem of establishing property rights becomes that of finding ways of moving from inefficient to efficient control structures.

Who Establishes Property Rights?

Whatever the strategy for getting to efficient control structures, it usually has to be implemented by a government. People have argued about what kind of government is likely to establish property rights. One view holds that a strong (but benevolent) dictatorial government is needed to establish property rights. The Republic of Korea and Taiwan (China) are put forth as examples. Even a selfish dictator, the argument goes, is effectively a shareholder in the economy and so has an incentive to establish efficient property rights to maximize the value of his share (North 1981).

But for every dictator who has tried to enforce property rights, several others have destroyed their economies by expropriating assets and eliminating private incentives to invest. Evidence from Africa (Bates 1981; Klitgaard 1990) and from medieval Europe (Veitch 1986; Delong and Shleifer 1993) reveals the economic depredation caused by unlimited dictatorship. Efficient control structures are difficult to sustain over the long term under dictators because dictators always have some control rights over private assets, which they cannot easily be forced to surrender in courts (North and Weingast 1989).

An alternative view argues that constitutional governments, their power limited by courts and other systems of checks and balances, are more successful at establishing property rights since they can more credibly promise not to grab assets for themselves (Brennan and Buchanan 1980; North and Weingast 1989). Evidence from medieval Europe shows that limited governments were associated with faster economic development than autocracies (Delong and Shleifer 1993), but scholars have been unable to establish a strong relationship between democracy and economic growth (Barro 1991). The evidence on the effectiveness of limited government in establishing property rights is far from conclusive. The very limited Russian government of the early 1990s has been completely unable to enforce contracts.

Since the evidence is inconclusive and little useful policy advice is likely to emerge from such a focus, I deal instead with the more prosaic questions of what strategies might work to establish property rights and how to exert pressure on governments to make them more interested in establishing property rights. Effectively, I am assuming that the government in power, for reasons of benevolence or political pressure, has some interest in establishing property rights. The strategies described below work better under a government committed to establishing property rights, but some property rights can be established even under a far from perfect government, as the example of the Russian privatization in 1993 illustrates.

An alternative approach is to consider enforcement mechanisms that do not involve government. Individuals interested in efficient control structures often come up on their own with enforcement mechanisms such as reputation, peer pressure, private arbitration—or violence (Bardhan 1993; Ostrom 1990). These mechanisms are often valuable, but they are too expensive to be the rule, so the police powers of the state are usually needed to protect control rights and enforce contracts.

Political Control: The Leading Example of an Inefficient Control Structure

The literature on poorly defined property rights has focused on the common pool problem, a model relevant to an understanding of economic development but one that she is little light on property rights in transition economies. It explores how a society 100 s

But in Eastern Europe assets are already too valuable to remain common property, and well-defined control structures govern the use of these assets. These control structures give politicians enormous control rights over all assets, including private assets that are politically controlled through regulation (Kornai 1992; Frydman and Rapaczynski 1994; Boycko, Shleifer, and Vishny 1994). In theory, politicians and bureaucrats assume control rights in order to protect public welfare where private control structures are inefficient (for example, if privately owned firms pollute too much). In practice, politicians' control rights seem to be much more extensive than most reasonable calculations of economic efficiency would

suggest, and politicians have enormous discretionary control over economic life that is only vaguely related to social welfare. Though some authors distinguish between politicians, who serve the public interest, and bureaucrats, who are selfish (Laffont and Tirole 1993; Banerjee 1994), that distinction appears tenuous: both use their control rights to produce inefficient outcomes that serve their personal goals.

In many countries politicians can shut down a business, kick it off its premises, or refuse to allow it to start up for completely arbitrary reasons tied only loosely to social welfare. Sometimes the politician has a formal excuse (control right) for this behavior, such as violation of a fire or sanitation code, but often that is not necessary. In this situation the structure of control rights is very clear, but it is not efficient. The bureaucrat can take an inefficient action (not issuing a permit hereause of laziness or ill humor) because someone else bears the cost. And if a complete contract cannot be written in advance between the bureaucrat and the entrepreneur, the bureaucrat can expropriate profits from a business by threatening to shut it down. Anticipating expropriation by bureaucrats, entrepreneurs underinvest in both their human capital and their businesses (Grossman and Hart 1986). Inefficient control structures thus lead to inefficient resource allocation.

De Soto (1989) has revealed with great clarity the tortuous process involved in starting even a simple small business in Peru, which involves securing vast numbers of permits and licenses from bureaucrats. I conjecture that most Eastern European, and surely Russian, entrepreneurs could tell as good a story as De Soto. Examples of the inefficiencies of political control abound on all continents, including Europe (as recent scandals in Italy illustrate), Latin America, and Africa (see the depressing account of Equatorial Guinea in Klitgaard 1990). Rent control, patronage in employment, and abuse of farmers through predatory pricing are just some examples.

Perhaps the most systematic evidence on the inefficiency of control of business by politicians comes from studies of public enterprises (Vernon and Aharoni 1981; Shleifer and Vishny 1994a). The evidence shows compellingly that politicians use their control rights over these firms to force them to overemploy, overpay, locate in areas where it is not efficient to produce, and make products that the market does not want. National airlines such as Olympic and Air France are notorious for their excess employment. Some state companies have built plants that have never produced goods but serve only to put people on the payroll; the mill built by the Italian state-owned steel giant ILVA near Naples is one example (*Economist*, January 22, 1994). The money-losing Concorde was the idea of French politicians, not of private firms (Anastassopoulos 1981). Even in such routine activities as garbage collection, in the United States costs are typically 20 to 50 percent lower for private contractors than for government agencies (National Commission for Employment Policy 1988).

How do political control rights get to be so extensive? Because physical control rights over particular assets are not fully legal in many cases, politicians and bureaucrats appropriate the legal control rights to themselves—and with them the power to receive bribes. For example, tenant rights are rarely complete, and bureaucrats can easily find reasons to threaten to kick tenants out. An art gallery in Moscow used to be closed by the fire brigade every few weeks for fire code violations. The gallery would move a few paintings, pay a bribe, and reopen for business. In other cases politicians try to rewrite laws to take legal control rights away from private parties. When the Russian government approves a law, the draft circulates among the ministries, and each ministry diligently writes in amendments requiring its consent for any private action discussed in the law. Every ministry wants to be involved in giving permission to open a bank or receive an export license. And with the amendments come not only more bribe income but also more staff for the ministries. It is this endless rent-seeking by the bureaucrats that accounts for the extensiveness of political control rights (Tullock 1967; Krueger 1974). In a transition economy the problem of establishing property rights largely comes down to shrinking the range of political control.

Political control is but one example of inefficient control structures in transition economies, though it is the most pervasive, and the analysis developed here can easily be modified to address other inefficient structures. For example, worker control has been blamed for delayed restructuring in many enterprises in Poland. And managerial control that overrides the rights of outside shareholders has often made it difficult to put good managers in Russian companies.

The Limits of Contract Enforcement

In the spirit of Coasian analysis, the problem of poorly defined property rights is often reduced to the problem of contract enforcement: if the government protected physical control rights as legal rights and enforced contracts, private agents would negotiate to efficient outcomes (Cooter 1987).

Under socialism contract enforcement is not very important. Most contracts are between government entities, and the government's direct control over assets ensures that contracts are upheld. Even if contracts are broken, no one gets too upset because the government pays for any losses. If production comes to a halt because an input is not delivered, for example, there are no private shareholders demanding to know why.

But the demand for contract enforcement rises sharply when private parties take over some control of assets or when new, privately controlled assets are created. Private parties govern their relationships through contracts, which need to be enforced. Some governments respond to this demand by providing enforcement mechanisms, but others do not.

The Possibilities and Limits of Corruption

In a pure Coasian world, socialism is as efficient as capitalism: there is no problem with the inefficient allocation of control rights because bribes restore efficiency. Though a bureaucrat can shut down a business or prevent it from opening, bureaucratic control presents no problem because corruption eliminates any inefficiencies

resulting from this bad allocation of control rights. If it is efficient for the business to start or to continue, the bureaucrat and the entrepreneur would negotiate to that efficient outcome. Simply put, the entrepreneur bribes the bureaucrat to let him operate or bribes the bureaucrat to refrain from interfering in the future, thereby restoring investment incentives for the entrepreneur.

No normative value is attached to corruption in this analysis. Corruption is no different from any other side payment that restores efficiency. (Leff 1964 and Huntington 1968 have informally presented this argument for corruption as an eliminator of inefficiency in the allocation of control rights; Shleifer and Vishny 1993, 1994a present it more formally.) But corruption is a far from perfect mechanism for restoring efficiency. The most obvious problems are the two famous reasons (the "transaction costs") why the Coase theorem might not apply: asymmetric information (the bureaucrat and the entrepreneur might fail to reach an efficient bargain if they fail to agree on how much the business is worth) and the free-rider problem (if many entrepreneurs must collectively bribe the bureaucrat to rescind some rule that hurts all of them, the expectation of a free ride will keep them from acting together).

A third, deeper problem is that corruption contracts are not enforceable in court: the arbitrary component of bureaucrats' control rights that allows bureaucrats to collect bribes does not constitute a legal right that a court would protect or that bureaucrats can surrender through a contract enforceable in court. In practice that means that the bureaucrat can come back and demand another bribe from the entrepreneur or that a second bureaucrat can come in and demand a bribe. Without enforceable contracts the Coase theorem simply does not work (contrary to the theory the initial allocation of control rights is not irrelevant), and corruption is ineffective in restoring efficiency.

Courts, of course, are not the only mechanism for enforcing contracts. In some East Asian countries, governing parties purportedly maintain a reputation for moderate corruption. If an official demands too large a bribe, the deviation becomes known to the bureaucrat's superiors, and the official is replaced. But in many other countries individual bureaucrats are not in office long enough—nor is the power of reputation strong enough—to sustain corruption contracts on this basis. And if a bribe does not buy control over a business, the entrepreneur will not pay it, so the business will not open. I have little doubt that this is the predicament of many would-be Russian entrepreneurs.

So the problem comes back to government enforcement. On the face of it the idea of the government upholding corruption contracts seems ludicrous, but we must look deeper. Why not respect corruption (meaning enforce it, not just turn a blind eye to it)? It is true that enforcing corruption violates the public image of government. Italy's recent government scandal illustrates clearly that the public does not consider corruption income to be a legitimate reward for public service.

But this explanation also begs the question: why don't voters like corruption if it boosts efficiency? There are two reasons. First, corruption does not boost efficiency when the result of an agreement between a bureaucrat and a businessman is theft of the public assets. Managers of state firms often bribe bureaucrats to allow assets to be diverted to personal use, or to simply steal from the public company. Such corruption can be extremely distortionary and wasteful. Second, enforcing corruption contracts—including the contract that in isolation would raise efficiency—would encourage bureaucrats to generate new control rights for themselves, which would eventually result in stopping all business. Accepting corruption reduces public welfare, and the universal public dislike of corruption reflects the hatred of political control shared by people the world over.

In developing and transition economies many physical control rights are not legal rights, and these physical rights are in danger of being grabbed by bureaucrats. When people do not have full legal rights to occupy a piece of land they are in constant danger of being forced off by bureaucrats. Of course, people might protect their physical rights, making it costly for bureaucrats to try to grab them. Since the willingness of a bureaucrat to engage in such rent-seeking behavior depends on the financial benefits that the rights bring, lack of enforcement of corruption contracts might serve the long-run interest of establishing property rights by reducing the personal benefits of additional control rights.

A good illustration of this principle comes from the Russian State Antimonopoly Committee. Assigned the task of regulating monopolies in Russia, the committee immediately compiled a list of *thousands* of firms in Russia that it classified as monopolies. A few dozen real national monopolies were included, but so were local bakeries, bathhouses, and other small shops. Firms started bribing local antimonopoly officials just to get off the list. If corruption contracts were enforceable, it is not difficult to imagine that every firm in Russia would have become a monopoly under some suitable market definition.

So if corruption contracts are not enforced, bribery cannot eliminate the consequences of the inefficient allocation of control rights when it is politicians who hold these rights. The problem of poorly defined property rights is not solved by transfers that take the form of bribes.

Private Enforcement

What about other cases in which the government is unable or unwilling to enforce contracts? Sometimes private parties create their own arrangements. Arbitration is an example. In Russia in 1991 and 1992 a large volume ci internal trade took place through commodity exchanges to facilitate the trade of highly heterogeneous products. On the Russian Goods and Raw Materials Exchange (the largest commodity exchange) buyers and sellers had one minute on the floor to negotiate delivery terms after agreeing on the price. Not surprisingly, more than a quarter of the trades were disputed. The exchange soon set up its own arbitration procedure, which apparently resolved most contract disputes relatively quickly.

Organized crime is another private mechanism for protecting control rights and enforcing contracts. The mafia provides a broad range of services to protect physical control rights (credit, supply assurance, protection from theft), and it enforces

contracts through violence. Because Russia has no established bankruptcy procedures, private loan contracts are not viable. Lenders can neither collect on their loans nor seize collateral from their debtors. The mafia steps in to enforce loan contracts through violence: if there are no assets to grab, the loan defaulter is killed. The rise of the mafia in Russia reflects the increase in demand for protection of control rights and enforcement of contracts, which is not being met by the government.

Although private contract enforcement addresses a market need, it is generally less efficient than effective government protection of contracts. When the mafia steps in to replace the government in protecting property rights, it is also capable of expropriating assets from private entrepreneurs. (In this respect, it is similar to government.) Expropriation tends to be excessive since competition between mafias and their short time horizons prevent mafias from becoming effective equity holders in the businesses they protect. Moreover, protection of property rights and enforcement of contracts are increasing-returns-to-scale technologies. A monopoly national force is cheaper than feudal militias, and a monopoly legal system is cheaper than a variety of local systems. Private protection of property and enforcement of contracts are expensive alternatives for a government that fails to provide these services.

Why Contract Enforcement Might Not Be a Top Priority

Many Western observers of the Russian reforms have argued that protection of property rights and enforcement of contracts should be the first priorities of the government. But there are two reasons why a reform government might not move to provide contract enforcement as soon as it gains power. For one, these activities are expensive. Police in Russia are paid very little, so they often prefer to be bribed rather than to protect private property. Civil court justices often refuse to hear commercial cases, arguing that they are paid only to handle divorces. Contract enforcement requires new mechanisms, including courts and other institutions. For another, politicians working to introduce basic reforms do not view property protection and contract enforcement as priorities worthy of a heavy allocation of resources. By and large their primary constituents are not involved in contracts, so this area is not a political priority. Business people, for their part, are not yet a powerful enough political coalition to affect policy, and besides, they often view private enforcement mechanisms as cheaper than public ones.

Initially, then, the government does not even allocate to contract enforcement the resources it could afford to allocate. So there is an impasse: the government does not enforce contracts without political pressure from private business interests, but private business interests cannot accumulate enough resources to lobby the government until contracts are enforced.

According to North (1981) and North and Weingast (1989) progress in establishing property rights occurs when the government is forced by political pressures from the propertied classes to commit itself to protecting property rights. That time generally comes when a weak sovereign wants to tax its subjects who control the assets. In exchange for paying taxes the subjects extract from the sovereign constitutional commitments to protect property rights and not to expropriate property. Throughout history political pressures from business interests have played an important role in prompting government interest in contract enforcement. There is little doubt that in Russia today political pressures emerging from privatization have done more to move the government toward a system of contract enforcement than all the preaching of Western advisers. But these interests emerged after privatization, not before.

What this analysis suggests about the early stages of reform is that contract enforcement, though highly desirable in most case, is very expensive and not a political priority. It cannot be relied on exclusively as a mechanism for getting to an efficient control structure over assets. Moreover, contract enforcement, especially of bribes, may not be good policy. Contract enforcement thus is not the universal solution to the problem of poorly defined property rights. Alternative strategies for establishing property rights are needed, at least as a first step in reform.

Three Strategies for Improving the Efficiency of Control Structures

Reformers interested in arriving at more efficient allocations of control rights over assets and who choose not to rely (solely) on private bargaining and contract enforcement have several options. One strategy is to turn bureaucrats into shareholders—giving them formal rights to the cash flow from an asset in addition to control rights. Examples of this strategy are the "nomenklatura privatizations" in Eastern Europe and village enterprises in China. A second strategy is to reform the bureaucracy by bringing bureaucrats' objectives in line with public welfare or by devaluing their control rights. This strategy is inspired by East Asia's experience with rapid, government-directed economic growth. A third strategy is to reallocate control rights through the political system—taking control rights from bureaucrats and allocating them to other parties who will presumably use them more efficiently. The leading example of this strategy is privatization.

Turning Bureaucrats into Shareholders

Giving bureaucrats an equity stake (legal cash flow rights) in the businesses over which they have control rights replaces their illegal claim (obtained through a threat of expropriation) to income from the enterprise with a legal claim. The cash flow rights from this stake have to be enforceable, whether through the courts or some other mechanism. A person with both control rights and cash flow rights has an incentive to choose efficient actions (Grossman and Hart 1988), so the selfish interests of a bureaucrat with an equity stake would be more likely to coincide with the decisions of entrepreneurs seeking to reach an efficient outcome for the firm. Threats to shut down the firm or to expropriate its assets diminish as well, because a bureaucrat with a cash flow stake stands to lose his equity by doing so. The bureaucrat has become an entrepreneur. This approach to more efficient control structures is common in countries with poor contract enforcement. In many developing countries relatives of bureaucrats own businesses expressly because they can get protection from political expropriation. In Eastern Europe, particularly in Russia, local bureaucrats often become equity partners in small privatized businesses, a strategy sometimes referred to as nomenklatura privatization. In a typical transaction a bureaucrat (or a public organization controlled by the bureaucrat) becomes an equity holder in a privatized or newly created small business, such as a vegetable wholesaler. The bureaucrat offers the business protection from expropriation (by other bureaucrats as well as himself) and in return receives dividends in the form of cash or goods. Even when the formal shareholder is a public organization, the bureaucrat ends up with the dividends. A large share of new private enterprises in Russia have such public partners, precisely to solve the problem of bureaucratic expropriation.

Although flawed, these emerging control structures are likely to result in more efficient outcomes than cases in which bureaucrats lack cash flow rights. If equity ownership is transferable, bureaucrats have an incentive to maximize the value of their shares. Even without full transferability, pseudoequity ownership probably reduces the bureaucrat's interest in quick expropriation through bribes. To the extent that nomenklatura privatization lengthens the horizons over which bureaucrats evaluate the cash flow of firms, it is an efficiency-improving adaptation to the problem of excessive bureaucratic control. Relatedly, the longer the bureaucrat's political horizons, the greater the interest in equity ownership over quick expropriation. Nomenklatura privation has been much more common in regional privatizations in Russia, where the bureaucrats' horizons are relatively long, than in national privatizations, where political turnover is greater.

Another example of effective equity ownership by bureaucrats is the Chinese village enterprise. Some studies have claimed that the success of these firms shows the irrelevance of well-defined property rights (Weitzman and Xu 1993). Recent work by Oi (1994) challenges the claim that property rights in village enterprises are poorly defined. Oi shows that control rights among local party bosses, township party bosses, and the central government are clearly specified. Moreover, detailed agreements govern repatriation of profits to higher levels of government, so local governments and officials who effectively control these firms become residual claimants of their cash flows.

Oi's research suggests that the local party officials who run these firms benefit from a firm's economic success, in the form of bonuses and goods that the enterprise buys for them—a form of nomenklatura privatization, if you will. And in a permutation unique to China, local bureaucrats appear to need the profits from these enterprises to finance local public spending, since they get no money from other sources. So their political survival depends on the enterprises' profitability. Because these personal and political benefits effectively turn local bureaucrats into shareholders, the control struct⁻res of village enterprises appear to be reasonably efficient.

Why are these village enterprises different from the enormously inefficient public enterprises in China and elsewhere? Recent evidence shows that state firms in China are as inefficient as those in Russia (South China Morning Post, April 30-May 1, 1994). What keeps local officials from padding the employment rolls of village enterprises with relatives and political supporters? Part of the answer is that local governments simply do not have the money to subsidize inefficient village enterprises. Another is that fierce competition between village enterprises keeps down profits so that firms cannot afford the luxury of excess employment. China's rapid economic growth has contributed as well, making patronage employment less necessary. But if growth were enough, it should have rescued state enterprises too, which it evidently has not.

These answers do not bode well for the future efficiency of China's village enterprises. A recession (perhaps because of a trade shock) could intensify pressures to use village enterprises to create employment, while a turn toward democracy could tempt local bureaucrats to use the enterprises to deliver political patronage. Or the central government might decide to use its power to extract political benefits from village enterprises. These concerns suggest that the efficiency of Chinese village enterprises is fragile. Unless local bureaucrats effectively privatize these firms through full nomenklatura privatization, at some point the village enterprises are likely to suffer the same afflictions as public firms elsewhere in China and the rest of the world.

More generally, the strategy of making bureaucrats shareholders has three serious drawbacks. First, the bureaucrat may not be getting real transferable equity, especially if the equity comes through a shell organization. The less secure the bureaucrat's equity claim, the less efficient the control structure. A bureaucrat fearing dismissal and the loss of an equity claim might threaten expropriation as an incomegenerating strategy, which would discourage efficient investment by entrepreneurs.

Second, giving bureaucrats equity is obviously unfair, which is presumably why the equity claims are informal in so many countries. Like corruption, this strategy rewards the arbitrary grabbing of control rights and recognizes explicitly that bureaucrats are not acting in the public interest. For this reason, no government has openly engaged in nomenklatura privatization.

Third, entrenching bureaucrats as shareholders improves their incentives but reduces the likelihood that asset control will shift to managers with the appropriate human capital. To the extent that new management is essential for efficient resource allocation, giving equity to bureaucrats can reduce efficiency by entrenching the old human capital.

The general idea of giving equity to bureaucrats can be extended to other parties with control rights over assets, such as enterprise workers and managers. Adding some cash flow rights to control rights strengthens interest in efficient outcomes. Most privatizations in Eastern Europe have awarded large equity stakes to worker and management teams, in part to get their agreement to privatization in the first place.

Reforming Bureaucracy

An alternative strategy for dealing with inefficient political control rights is to reform the bureaucracy to get it to maximize social welfare. That can be achieved either by strengthening bureaucrats' concern with public welfare, so that their interests coincide more with those of shareholders, or by reducing bureaucratic discretion, usually through competition between bureaucrats, who then become powerless to pursue personal goals.

History yields some examples of efficient ("Weberian") bureaucracies, though their public-spiritedness is less clear-cut—the Korean bureaucracy after the 1961 coup, some local (often communist) administrations in Northern Italy and West Bengal, and perhaps some parts of the French civil service. These effective bureaucracies appear under special circumstances. Sometimes they appear in military dictatorships (Republic of Korea and Taiwan, China) or in militaristic organizations (armies, some private companies), where the boss can fire—or even kill—subordinates for ineffectiveness. Effective bureaucracies also sometimes arise where local democracy is welldeveloped and a free press and strong electorate closely monitor the bureaucrats' behavior (some local governments in the United States). And sometimes they appear when a common purpose or ideology energizes them (communist local governments mentioned above, the New York Turnpike Authority under Robert Moses, perhaps some parts of the French bureaucracy). In some cases, however, the difference between bureaucratic efficiency and the maximization of public welfare may be substantial.

Although creating an effective, public-spirited bureaucracy is theoretically a viable strategy for establishing property rights, by linking the bureaucrats' control rights to a public purpose, I am deeply skeptical that such public-spirited bureaucracies can be created in Eastern Europe or Russia. These countries are not now dictatorships, and the sort of dictatorship that they are at risk of becoming is far from benevolent. Nor are fledgling democratic institutions in these countries ready to provide the close monitoring needed to force public-spiritedness on the bureaucracy. In Russia local political machines are controlled by long-time communists, and the press is often bought off. Finally, in most of these countries government has been publicly discredited, and counting on public-spirited bureaucracies is probably a waste of time. For these reasons, bureaucratic reform strategies in Eastern Europe should probably focus on devaluing political control rights rather than on improving the public-spiritedness of the bureaucracy.

The idea behind the devaluation of political control rights is to make it difficult for bureaucrats to abuse those rights. For example, if a bureaucrat's discretionary behavior gets reported in the press with some regularity and the bureaucrat is penalized as a result, the value of bureaucratic control rights is reduced. Competition, too, can drive the value of bureaucratic control rights down to zero. A bureaucrat in the United States cannot charge a supplement for granting a passport because a citizen will just go to the next window at the passport office. But if there is just one bureaucrat issuing passports and the probability of detection is low, the bureaucrat can credibly threaten not to issue a passport without a side payment and earn some rents from this threat (Rose-Ackerman 1978; Shleifer and Vishny 1993).

Setting up competition between bureaucrats is difficult. More often than not, several bureaucrats end up controlling complementary rights rather than competing over the same right, and control rights expand rather than shrink. For example, if one bureaucracy controls export licenses, another export taxes, a third foreign exchange transactions, a fourth the right to set up a bank account, and so on (roughly the situation in Russia), the bureaucrats are competing with each other but not in prices. The result is a lower volume of trade (Shleifer and Vishny 1993). It is extremely difficult to design bureaucracies with little discretionary control.

As with efforts to establish an efficient bureaucracy or to otherwise reform the bureaucracy, the greatest impediment to the strategy of devaluing political control rights is the dependence on a benevolent dictator or on well-developed democratic institutions that do not exist in Eastern Europe. As a result, it is hard to recommend this approach for increasing the efficiency of control structures in the short run.

Removing Control Rights from Bureaucrats

Another strategy is to use the political process to remove control rights from bureaucrats. Killing incumbent bureaucrats, as often happens in revolutions and coups, is one way. A less horrific strategy is to remove them through peaceful political processes, as Czechoslovakia and Poland, but not Russia, have done. A final strategy is to strip bureaucrats of the legal means of protecting their control rights—something that a reform government might find easier to do than a long-entrenched government—and then to reallocate (or sell) the control rights or allow them to be taken over by agents who can use the rights efficiently. Privatization is the principal form that this reallocation of control rights from bureaucrats to private parties has taken. In Eastern Europe privatization is linked first to the removal of control rights from ministries and then to the reallocation of the rights to enterprise insiders, such as workers and managers, and to outside investors.

Bureaucracies, of course, resist the alienation of their control rights, since they would suffer a large loss of wealth. The essence of every reform, therefore, is to politically reinforce the removal of control rights from bureaucrats, usually by mobilizing the support of those who get the control rights (relatively easy) and the general public. In developed democracies, such as France and the United Kingdom, an electoral mandate to privatize often suffices to remove control rights from bureaucrats. In less-developed democracies, such as Mexico and the Czech and Slovak Republics, a reform government might have considerable power to remove control rights from bureaucrats, but it must also build political coalitions to resist opposition from bureaucrats and their allies, such as unions.

Coalition building in the course of privatization often takes the form of equity awards to political allies. Most countries give enterprise workers preferential equity treatment. In addition, a generalized version of nomenklatura privatization is sometimes combined with the political redistribution of control rights to soften bureaucrats' opposition. When the government is as weak as the Russian government was in 1992–93, the democratic mandate is ineffective, and a lot of coalition building becomes necessary.

When a government is weak, any reform that removes control rights from the bureaucrats must be accompanied by new rules and laws that allow private parties

to take over control rights and that forestall efforts by the bureaucracy to prevent change. As Hay (1994) argues, designing such rules is difficult but doable-and essential. The public desire for change, however strong, is not enough. A good example of a dramatic failure of reform despite strong public interest is the attempted reallocation of property rights to land in Russia in 1992-93. Russia has over 40 million very small land plots, used for private farms, garden plots, or building lots. Those who use the land have few control rights: use is restricted, sale is prohibited, and so on. In 1992-93 the government tried several titling procedures to give users fuller property rights. The effort failed miserably, and only a few titles were issued. The reason: the government bureaucracy Roskomzem controlled land surveying prior to the issuance of titles and used its power to collect bribes while issuing few titles. Land users had no recourse to this holdup by the bureaucrats. In late 1993, when President Yeltsin issued a decree allowing land titling without surveys, the bureaucracy moved quickly to control the secondary market for land, demanding the right to issue permits and set prices in all land transactions. Thus despite the enormous political popularity of land reform, it has proved impossible to outwit Roskomzem or to relax its grip on land control rights.

From Transferring Control Rights to Establishing Property Rights

Transferring asset control rights from bureaucrats to firm insiders and shareholders does not, in itself, establish full property rights. The problem of protecting private control rights and enforcing contracts is not solved simply by transferring these rights from politicians: the solution is only delayed. Even after bureaucrats lose control rights, they can use the resources of the treasury to convince, rather than order, firms to pursue political objectives. Firms soon discover that the interests of their shareholders are best served by following the wishes of the politicians and receiving subsidies in return (Boycko, Shleifer, and Vishny 1994; Shleifer and Vishny 1994a). Subsidies render private control rights—even secure private control rights—insufficient for achieving economic efficiency. Also, transferring control rights from politicians to private agents does not ensure the security of those rights. For example, shareholders, despite their legal control rights, might be unable to fire the manager or to sell their shares through an enforceable contract. Or workers might have physical control rights that are greater than their legal rights.

Tightening the Budget Strings

As long as politicians can direct grants and subsidized loans to firms, private control rights do not lead to efficient resource allocation. Thus if politicians are responsive to labor interests and are willing to subsidize employment, even privately controlled firms will not cut employment because profit maximization calls for catering to politicians. So long as subsidies flow freely, privatization will not lead to substantial restructuring.

Analytically, subsidies are similar to bribes (Shleifer and Vishny 1994a). When politicians have control rights, bribes can in principle alleviate the damage from political control and so improve resource allocation. Once control rights are transferred to private agents, subsidies play the reverse role: they allow politicians to counter the benefits of private control by paying shareholders not to be efficient. The unenforceability of bribes limits their effectiveness. Reducing the availability of subsidies should have a similar effect.

Polish enterprises began to restructure in 1991–92 even before control rights were transferred from politicians because a tough monetary policy limited the availability of cheap credit, which was an important mechanism of political control (Pinto, Belka, and Krajewski 1993). In contrast, many Russian enterprises were slow to restructure even after privatization because the government continued to subsidize them. Hard budget constraints are essential for realizing the benefits of private control rights, because they prevent politicians and managers from striking the Coasian bargain (see Boycko, Shleifer, and Vishny 1994 and Shleifer and Vishny 1994a for a more thorough theoretical analysis of these issues).

Improving Corporate Governance

In Eastern Europe when control rights are transferred from politicians, control often goes to insiders: managers and workers rather than outside shareholders gain physical control rights over firms. In practice that means that managers cannot be fired, that workers can delay or prevent restructuring, and in some cases that shares cannot be traded by outside shareholders. While superior to political control, this structure of control rights is far from optimal because the control and cash flow rights of insiders are not perfectly aligned (Grossman and Hart 1988). A more efficient control structure requires transferring effective control rights to outside shareholders and legally protecting their control rights. This process requires the creation of mechanisms of corporate governance (Frydman and Rapaczynski 1994; Phelps and others 1993; Boycko, Shleifer, and Vishny 1993a).

Scholars and practitioners have proposed various mechanisms of external control for improving corporate governance in Eastern Europe: banks and debt finance, boards of directors, stock markets, takeovers, bankruptcy rules, product market competition, core investors, and others. For example, Boycko, Shleifer, and Vishny (1993a) argue that corporate governance mechanisms that rely on debt are unlikely to be effective in Russia any time soon because they rely on bankruptcy or other mechanisms of transferring control to creditors that are not yet in place. Large outside investors are more likely to be the most active agents of corporate governance, but even they require an extensive system of corporate law, corporate voting, independent share registrars, and so on to be able to exercise their control rights.

In fact, critics have argued that much more attention should have been paid to preparing corporate law and other building blocks of a governance system before privatizing enterprises. Specifically, they argue that privatization in Eastern Europe, by focusing on the transfer of control away from politicians, allowed too much control to go to insiders and thus permanently damaged the prospects for effective corporate governance. I believe this argument is wrong, for two reasons. First, weak reformers require all the support they can get, including the help of enterprise insiders, to wrest control rights from politicians. Managers who feel threatened by privatization would rather strike a bargain with politicians to maintain state ownership and subsidies than venture into privatization. Setting up threatening governance mechanisms before privatization is made effective would only stop privatization.

Second, there simply is no political interest in governance mechanisms before privatization. That interest emerges during privatization, as large outside shareholders are created and come to realize their needs for independent registrars of shares, for laws governing corporate voting, and even for financial markets in liquid assets. Pressure from these new owners can then counter the political influence of enterprise managers and convince the government to adopt regulations that foster corporate governance. Under pressure, the government begins to protect property rights.

The transfer of control rights from politicians to private parties gives the process of establishing property rights a jump-start by creating the political demand for the protection of property rights. As the government begins to respond to this demand, genuine property rights become established.

The Example of the Russian Privatization of 1992–94

The Russian effort in 1992–94 to establish property rights over public enterprises through large-scale privatization shows how two of the strategies outlined above conferring cash flow rights on those with control rights and using the political process to transfer control rights—were combined. To achieve their goals, the reformers had to build a political coalition strong enough to counter the bureaucratic opposition to loss of control. The transfer started the process of establishing property rights by paving the way for private investors to use their economic and political resources to protect their rights. (This section draws on Boycko and Shleifer 1993 and Boycko, Shleifer, and Vishny 1993a,b, 1994; for additional detail, see Frydman, Rapaczynski, and Earle 1993.)

Following the collapse of communism, the central ministries began to lose control of Russian industrial enterprises to several other "stakeholders." Enterprise managers got substantial control over investment, employment, product development, and many other decisions previously controlled by central ministries. Workers, through their allies in Parliament, had effective veto power over any change in the legal ownership structure of the enterprise, though they had little control over decisions in the firm. Local governments, yet another group of stakeholders, controlled the supply of water, electricity, and other services to firms and wanted enterprises to maintain employment levels and to continue to provide social services for local residents. Finally, the central ministries retained some control over firms in part because they could coordinate supply and distribution much better than the enterprise managers could.

This devolution of control rights from the ministries in the early 1990s followed from the decision of the Gorbachev government not to protect these rights. Thus the rights were not peacefully turned over to new stakeholders but were grabbed by the managers. Throughout this period the bureaucrats attempted to reassert their control rights over firms. Some tried to combine firms into associations, industrial groups, and other cartel arrangements that would be "coordinated" by their former ministries. The Russian gas industry was consolidated into a single state enterprise, bringing the former head of that industry enough political support from the old guard to allow him to become the prime minister.

The control structure that emerged before privatization was not very efficient because ministries and local governments retained enough control over firms to undercut any incentive for managers to restructure. In 1992–93 it looked as though the ministries, arguing the need for Japanese-style *keretsu*, would succeed in merging firms into large associations; the minister of industry ardently advocated that approach. There was also a threat, particularly in 1992, that firms would come under the control of workers collectives, as the Moscow city government had proposed. Finally, the ministries and the central bank continued to subsidize industrial firms in exchange for maintaining employment and output, effectively eliminating most incentives to restructure. Under these circumstances firms were essentially killing time and kept most of their operations intact.

The Russian large-scale privatization program was intended to consolidate the removal of control rights over firms from the central bureaucracy and to allocate those rights to enterprise managers and shareholders. The program demonstrated how a small political mandate could be built up into a successful reform. In the Russian political environment of 1992 a workable privatization program had to combine the reallocation of control rights with the establishment of a new group of stakeholders who would support the program. No consensus on privatization had emerged inside the government, let alone in the much more conservative Parliament. The minister of privatization was a new, and not particularly powerful, political figure. A few reformers in the government would not have been able to carry this program off on their own without stakeholder support.

Control over privatization transactions (but not the rules) was turned over to local privatization offices rather than to the central ministries. That decision allayed the fears of local administrators, since it gave them some power in negotiating the future of social assets controlled by firms and prevented the complete takeover of local firms by "undesirable" outside investors. Removing control over privatization from the ministries effectively stripped them of their control rights over firms, so that in the end the industrial ministries withered away to almost nothing.

The privatization program gave substantial cash flow rights to managers and workers in the privatizing firms. The privatization ministry had proposed offering roughly 30 percent of the shares to workers and managers (option 1), an amount Parliament effectively raised to about 50 percent (option 2). While Parliament's more generous offer did not make the new control structures any more efficient, the larger equity awards may have strengthened the support of managers and workers for privatization, further reducing the viability of bureaucratic control rights. The privatization also involved all Russian citizens, who were invited to become shareholders through a system of free vouchers distributed to the population at large (Boycko, Shleifer, and Vishny 1993a,b). Vouchers became the sole means of buying shares of privatizing firms, which were sold at auctions. Since the vouchers were tradable, large investors were able to acquire stakes in Russian companies by buying vouchers from the public. Trade in vouchers facilitated the transfer of control rights to outside investors, whose interests are closest to economic efficiency. The popularity of the voucher program, in my opinion, "saved" the Russian privatization by eliminating the threat of quasi-governmental cartels and preventing complete control by insiders.

The program combined the political redistribution of control rights (using managers, the public, and local governments to undermine the power of Moscow bureaucrats) with equity awards to parties that already had control rights (managers and workers). Much of the program's success is attributable to its reliance on a politically viable approach to transferring control rights from politicians. In 1993 alone almost 10,000 industrial enterprises, employing 40 percent of industrial workers, were privatized. By July 1, 1994, when the program was completed, more than 14,000 industrial enterprises, employing almost two-thirds of industrial workers, became private.

But the transfer of control from politicians is only a first step in establishing property rights. Enterprise managers (but probably not the workers) have emerged from the privatizations with enormous control rights. They make most of the corporate decisions, select directors, control shareholder votes, and often control the trading of shares through physical control over share registrars. Through their influence on workers and on the government property funds that still own some shares, many managers almost fully control their firms, even though management teams directly own only about 15 percent of their companies' shares (Boycko, Shleifer, and Vishny 1993a,b; Pistor 1993). Even such nearly complete managerial control is probably better than political control. Though managers are also interested in empire building and preserving their own jobs, their welfare is more closely tied to the profits of the firm than is that of politicians, particularly when managers have an equity stake.

Establishing property rights in these enterprises, however, will require curtailing managerial control and increasing control by outside investors. Progress in this area seems to have begun. Many Russian companies now have core outside investors, Russian and foreign. These investors are interested primarily in profits, and they use whatever control rights they have (votes at shareholders meetings, jawboning the managers) to demand value-maximizing strategies. In a few cases outside shareholders have allied themselves with the workers to replace incompetent managers. Outside investors, including investment funds, have also begun lobbying the government for regulations to protect their control rights (independent share registrars, laws protecting investor rights, secret corporate voting, and so on) and for the creation of a securities and exchange commission to enforce the unrestricted trading of shares. These efforts began to bear fruit toward the end of 1993, as the government adopted regulations protecting shareholder rights. In this way privatization, while not establishing full property rights by itself, has stimulated policies that increase the protection of these rights.

As property rights become established, the restructuring of Russian enterprises should begin. Indeed, once managers had gotten control rights but before they had received cash flow rights, employment in state enterprises began to fall. The share of state employment fell from an estimated 89 percent in 1990 to 74 percent in 1992 (Blanchard, Commander, and Coricelli 1993). Among newly privatized enterprises employment fell again in 1993, by an average of 5 percent (Webster and others 1994). Nevertheless, most firms continue to consider themselves substantially overstaffed. Surveys of Russian enterprises by Webster and others (1994) and the European Expertise Service (1994) show that a substantial number have diversified their product lines, increased exports, and unloaded on municipalities some of the social services they provided. Although these changes are still coming too slowly, they are visible in most firms.

The Russian reform has had much less success in halting enterprise subsidies, the other requirement for making private property rights effective. In 1992–93 the government continued to subsidize private and state firms to maintain employment and output, postponing macroeconomic stabilization (see the article by Jeffrey Sachs in this volume). The continued subsidization preserved political control over firms and substantially delayed restructuring. In 1994, however, subsidies to firms began to fall and restructuring accelerated.

The Russian experience shows how the political transfer of control rights from bureaucrats and the allocation of cash flow rights to parties with control rights can improve the efficiency of the structure of control rights and prepare the way for the establishment of genuine property rights. But that experience also shows how difficult it is to destroy or escape political control. Privatization of shops has worked much less well in Russia than in Eastern Europe because local governments continue to control businesses through leases and regulations. Land reform has been similarly stymied by government agencies with effective control over all land transactions. Even for large-scale privatizations, proposals for consolidating firms into large industrial groups and other quasi-governmental structures continue to resurface even after most firms have been privatized firms. It is also plausible to argue that politicians have intentionally delayed protecting private property rights and that, to hold on to their own control rights, have perhaps even condoned crime since fear of the mafia often drives entrepreneurs to seek political protection.

Conclusion

Getting to better defined property rights requires understanding that "poorly defined property rights" means both inefficient structures of control rights over assets and weak contract enforcement. Better contract enforcement, though central to establishing property rights in the long run, may not solve the critical problems in the short run. In particular, better contract enforcement does not solve the

problem of inefficient political control of firms; other strategies are needed for that purpose.

In Eastern Europe defining property rights usually means transferring political control rights to private agents through the political process, as well as awarding equity to stakeholders who have control rights over assets. Genuine protection of property rights and enforcement of contracts begin to emerge only after control rights are removed from politicians. Russia's experience with privatization shows how economic analysis of property rights can guide policy in a successful direction even in a politically hostile environment.

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