

WHY THE TRANSITION FROM COMMUNISM IS SO DIFFICULT

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Presidential addresses to learned societies are usually not as well supported by citations, statistics, and proofs as the articles with which they appear. The opportunity for authorial self-indulgence that addresses provide probably also accounts for the tendency of these addresses to deal with relatively large if not grandiose questions. This address conforms to the genre in both respects, and this will be strikingly evident with respect to the character of the questions that are asked.

Compare what was expected to happen after the defeat of fascism in World War II to the societies that had been under fascist dictatorships with what actually happened to these societies. Then compare what was expected to happen after the collapse of communism in the societies that had been under communist dictatorships, with what actually happened in these societies.

At the end of World War II, the general expectation was that West Germany, Japan, and Italy would remain in poverty for a very long time. The United States was concerned that it might have to provide much of the food needed to keep the populations of these societies alive for the indefinite future. In fact, all three of the defeated Axis nations enjoyed extraordinary economic growth in the first quarter century after the World War II. These three experiences of growth were so contrary to expectation and so clearly beyond explanation with the prevailing theories that they were called "economic miracles."

By contrast, when communism collapsed, the peoples that had endured the economic absurdities of Soviet-type economic systems, like most Western observers, expected that economic performance would improve dramatically. In fact, in most of the formerly communist societies economic performance so far has, paradoxically, been even worse than it was under communism. Every formerly communist country has suffered from a drop in output, and some economies collapsed. Though I believe that the official statistics in the ex-communist countries exaggerate the drop in real incomes and am personally optimistic about the recovery of some of these economies, there can be no doubt that economic performance in these countries after the collapse of communism has been dramatically below expectations.

The extraordinary difference between actual and expected economic performance after the defeat of the Axis powers and after the collapse of communism is all the more remarkable in view of the desires of the victorious countries in World War II. At the end of the war and for some time afterwards, the victorious countries were fearful that Germany and Japan would again emerge as aggressive dictatorships, so they did not want them to have either strong industrial economies or to become substantial and unified countries. By contrast, the countries claiming victory in the cold war from the outset wanted to help the once-communist countries develop successful market economies. Thus my first oversized question is, "Why was economic performance

so much better, especially in relation to expectations, after the defeat of fascism than after the collapse of communism?"

The collapse of communism has generated another big surprise that the experiences of developed nations of the West, whether they had been winners or losers in World War II, gave us no reason to anticipate: an extraordinary amount of official corruption and Mafia-style crime. In Russia, for example, some polls suggest that crime and corruption are believed to be the most significant problem of the society. Though, of course, corrupt officials and Mafia organizations exist in most western countries (and in major American cities there is probably more street crime than in the former communist countries), the extent of official corruption and organized crime in the ex-communist countries (and especially in Russia and the former Soviet Union) is entirely outside the range of ordinary western experience. Westerners, at least, did not expect that when the iron curtain was lifted they would see nearly so much corruption and organized crime. So the second general question this address tackles is "Why do the formerly communist countries suffer from so much corruption and organized crime?"

A NEW THEORY OF POWER

The dramatic and unexpected contrast between the economic outcomes in the formerly fascist and the formerly communist societies and the astonishing amount of official corruption and Mafia crime in the post-communist countries has not previously been explained. The reason, I believe, is that we have not had the prerequisite theory. Thus I shall attempt here to develop the necessary conceptual framework. What we need is a theory that focuses on coercive power (and the gains from wielding that power), on the incentives to acquire coercive power, and on the incentives facing those who have it. Any adequate intellectual framework must, of course, also encompass the market and the attendant voluntary transactions, but (as we shall see) this is not the place to begin.

To make it obvious that I am focusing only on coercive power and analyzing only self-interested behavior, I shall use a *criminal* metaphor to start the analysis. Clearly, we cannot understand robbery as either a voluntary trade or a moral act, and thus it will help us focus only on the self-interested use of coercive power. Since, in any viable society, criminal behavior is the exception rather than the rule, the criminal metaphor will also remind us of the extent to which we are abstracting from the complexity of human nature.

Consider the incentives facing the individual criminal in a populous society. Other things being equal, a criminal is better off in a rich than in a poor society: there is more to steal. Theft also makes societies less prosperous than they would otherwise be — the time devoted to theft produces nothing, but it reduces the rewards from productive work and investment and induces a diversion of resources from production into guards, locks, police, courts, and the like. Therefore, the crime committed by each criminal reduces the wealth of society and thus also the amount that is available to steal. Does the individual criminal curtail his crime because crime reduces the amount that is there to steal?

Everyone already knows that he does not, but it is important to see why. The typical individual thief in a society of, say, a million people might bear something like one-millionth of the loss to society that occurs because his crime makes society's output less than it would otherwise be, but he alone is likely to bear the whole loss of whatever opportunities for theft he passes up. Thus the gain to criminals from a wealthy society and the fact that crime reduces society's wealth does *not* keep crime from paying — it is society's punishment of criminals and the efforts of individuals and firms to protect themselves that sometimes keep crime from paying. Though each criminal does have a stake in the prosperity of society, that stake is so minuscule that the criminal ignores it.

As we shall see, it makes a great deal of difference whether individuals with coercive capacities have a tiny or "narrow" stake in the society, on the one hand, or an "encompassing" interest, on the other.

Now let us shift from the individual criminal to the head of a Mafia "family" or other criminal gang that can monopolize crime in some neighborhood. Suppose that in some well-defined turf, a criminal gang can not only steal more or less as it pleases, but also prevent anyone else from committing crime there. Obviously, the Mafia family has an incentive to keep other thieves out of its domain. Will it gain from stealing whatever it finds on its own ground?

Definitely not. If business in this domain is made unprofitable by theft, or migration away from the neighborhood is prompted by crime, then the neighborhood will not generate as much income and there will not be as much to steal. Indeed, the Mafia family with a true and continuing monopoly on crime in a neighborhood will *not commit any robberies at all*. If it monopolizes crime in the neighborhood, it will gain from promoting business profitability and safe residential life there. Thus the secure Mafia family will maximize its take by selling "protection" — both against the crime it would commit itself (if not paid) as well as that which would be committed by others (if it did not keep other criminals out). Other things being equal, the more a community's environment promotes business and living, the more the protection racket will bring in. Accordingly, if one family has total power to commit and monopolize crime, there is — apart from the protection racket — little or no crime. The considerable literature on monopolized crime makes it clear that secure monopolization of crime does lead to protection rackets rather than ordinary crime and that outbreaks of theft and violence in such environments are normally a sign that the controlling gang is losing its monopoly.¹

The individual robber in a populous society obtains such a *narrow* or minute share of any loss or gain to society that he ignores the damage to the society. By contrast, the Mafia family that monopolizes crime in a community has, because of this monopoly, a moderately *encompassing* interest or stake in the income of that community, so it takes the interest of the community into account in using its coercive power. A gang with a secure monopoly over crime in a neighborhood will be able to obtain a significant fraction of the total income of the community from its protection "tax," and thus it bears a significant fraction of any social loss from robbery and burglary in its domain. These concepts of narrow and encompassing interests drive my argument and are drawn from an earlier book of mine [1982].

What would happen if the head of the Mafia family succeeds in taking complete control of some region or country? It would seem natural that in that case he would have an even more encompassing stake in the prosperity of the society he controls and that he would take even more account of the damage his exactions impose on the society. As has been shown elsewhere [Olson, 1991; 1993], this is in fact the case. When one rational, self-interested party can monopolize all coercive collections on a long-term basis, it serves its interests by regularizing its theft in the form of taxation and by providing public goods. Most of the autocratic governments in history have in fact arisen from such seizures and conquests, and to a great extent their behavior is explained by modeling them as rational, optimizing, stationary bandits.

THE LOGIC OF NARROW AND ENCOMPASSING INTERESTS

With the model inspired by our criminal metaphor, we can see the precise and general logic behind the foregoing stories. As we recall, our individual criminal in a society of a million has only a narrow or minuscule interest in the prosperity of the society, so little it is not worth his while to take into account, and his interests are best served simply by taking all of the cash from any till he robs. The Mafia family that has the power to monopolize crime in a given neighborhood will, by contrast, *not* rationally demand everything in the till; because of its encompassing interest it chooses a *less than 100 percent* protection tax.²

The rational, stationary bandit leader with secure autocratic power will not raise the percentage of his tax-theft beyond the point where the distortions due to this tax-theft reduce the society's total income so much that his *share* of this loss is as great as his gain from obtaining a larger percentage of the total. To see this, suppose there is a simple flat tax and that the tax rate that would maximize the tax-take for a given autocrat was exactly 50 percent. Then the last dollar collected in taxes would reduce the national income by two dollars and the autocrat would bear half of this loss, so he would be at a point of indifference, i.e., at the peak of his tax-revenue function. More generally, the stationary bandit finds that he cannot gain from increasing the share, S , of the national income that he takes beyond the point where the national income goes down by $1/S$. The stationary bandit's encompassing interest in the society means that he is led, as though by an invisible hand, to limit the rate of his theft.

This encompassing interest also induces him to provide public goods. Specifically, he gains from using his resources to provide public goods up to the point where the national income increases by $1/S$ times as much as the marginal cost of the public goods. If his optimal tax rate is fifty percent he will gain from spending an extra dollar on public goods so long as that dollar adds two dollars or more to the income of his domain. A secure stationary bandit uses his power, in part, constructively [McGuire and Olson, 1990, forthcoming].

Let us now consider a democracy under the control of a unified majority, and — impartially — assume that this majority is as self-interested as the bandit turned autocrat and thus has no inhibition about redistributing income from the minority to itself. Since the members of the majority not only have the same control of the tax and transfer system as the autocrat, but also earn income in the market, they neces-

sarily have a more encompassing interest than the autocrat. It follows that they will treat the minority better than the autocrat treats his subjects. Indeed, as has been proven formally elsewhere [McGuire and Olson, forthcoming], a majority that earns a sufficiently large fraction of the society's income will, paradoxically, be led by its own self-interest to abstain entirely from redistribution from the minority to itself and will even provide a Pareto-efficient supply of public goods. This, in combination with some inherent reasons why there are superior individual rights to property and contract-enforcement in the long run in lasting democracies, greatly strengthens the traditional case for democracy. But since these advantages of democracy are not necessary to the present argument and have been proved elsewhere, no more will be said of them here.

LAW ENFORCEMENT BY THE PRIVATE SECTOR

A government, whether run by an autocrat or a majority or whatever, will want to deter its subjects from stealing from one another and from engaging in other types of criminality. Obviously, the time and other resources devoted to crime produce nothing, yet impose considerable costs on society, so if other things are equal, a society with less crime is necessarily more efficient. The autocrat who can reduce the crime rate is rewarded by higher tax collections as the society's income increases, and the more encompassing interest of a democratic majority ensures that it will gain even more than an autocracy from a lower crime rate.

Of course, the police, prisons, and courts that are needed to deter crime are also costly, so it is logically possible that these costs could exceed the social savings from preventing crime. Yet throughout history kings and other autocrats have, after defraying the costs of keeping order, been left with huge net surpluses. Even though crime rates are high in the United States and some other developed democracies, these societies are nonetheless able, without spending more than a tiny percentage of the national income on law enforcement, to maintain order well enough so that their citizens can produce and enjoy high levels of real income. So the costs to governments of controlling crime are very small in relation to the gains from doing so.

The main reason why this is so becomes evident when we consider the *private sector* incentives to prevent crime and to induce law-abiding behavior in societies with good economic policies and institutions. The self-interest of the individuals and firms in a market economy with good economic policies and clearly delineated property rights is a major force for crime prevention, lawful behavior, and law enforcement.

Consider the prevention of theft or the maintenance of property rights (theft is, of course, taking something from someone who has a property right to it). The self-interest of owners leads them to guard against theft. In a society with well-defined rights to private property, the self-interest of individuals and firms leads them to install locks, hide valuables, hire guards, and keep watch.

The self-interest of individuals and firms in the private sector also often helps the police, the courts, and the government generally in apprehending and punishing theft. When a family or a firm is the victim of a theft, they normally report the offense to the police and provide whatever information they can to help the government apprehend

the thief. Sometimes firms and individuals will also offer rewards for information that leads to the apprehension of criminals who prey upon them.

There is, admittedly, also the self-interest of thieves. The thief has an incentive to conceal his crime and avoid apprehension, and sometimes even to bribe the police or the judge. So the self-interest of criminals works everywhere to undermine the law.

Yet in a market economy with good institutions and economic policies there are always, on the other side, the victims and potential victims of crime who not only use locks, guards, watchfulness, and a vast variety of behaviors to guard against theft, but who also report offenses, pressure the police to recover stolen property, and testify against offenders.

The fact that (with good institutions and economic policies) private self-interest limits crime and corruption is, when looked at closely, much more important than it appears at first to be. Consider the cost of enforcing laws against fraud. Important as the police and the courts are in deterring fraud, surely the wariness of the individuals and firms who do not want to be cheated is also crucial. Typically, buyers beware, so governments in societies with good institutions and policies do not need to spend huge sums to combat fraud. Consider also the enforcement of loan contracts. Suppose that somebody who has borrowed money decides not to pay it back. The borrower has an incentive to work against the enforcement of the loan contract, but the lender has the opposite incentive. The lender will try to induce the borrower to pay the loan back by threatening his reputation and access to future credit and, if necessary, by petitioning the courts to seize the borrower's assets.

Because lenders, in deciding to whom to lend, are favoring borrowers that they think are the lowest risks, a higher proportion of loans are paid back than if lenders did not exercise this judgment. That, of course, makes repayment of loans more common and generates a habitual obedience to the private law that grows out of a mutually agreed contract.

Consider also the differences in the power and wealth of the people and firms in the private sector. Usually, in a successful market economy, the same inequalities in wealth and power that are, in other respects, a problem, help to maintain law and order. When theft and the enforcement of contracts are at issue, the more substantial and wealthier interests will normally be on the side of upholding the law. If the average burglar is not as prosperous or as politically influential as his victim, the net force of the private sector is on the side of the law. If lenders are on average more influential than borrowers, loan-contract enforcement works better. This not only works in favor of contract enforcement, but it also helps those who can gain from borrowing money by creating an environment where money can be borrowed on reasonable terms. The net private force in support of many laws is, I think, a matter of extraordinary importance.

As we shall see later, the situation is dramatically different in societies with bad economic policies and poor institutions. But the pertinent point at the moment is that the governments with decent institutions and policies can maintain enough law and order for economic progress at relatively low cost because of the self-interest of the private parties. When we combine this point with the idea that majorities have

encompassing stakes in society that give them an interest in the productivity of society that limits any redistribution to themselves, we obtain a fairly optimistic perspective on modern democratic societies. The encompassing majorities that control these societies have an incentive to choose good economic policies and institutions, and then they can obtain a reasonable degree of law and order at modest cost. Unfortunately, as we shall now see, this vision of the modern western democracy is much too rosy.

COLLECTIVE ACTION IN INDIVIDUAL INDUSTRIES AND OCCUPATIONS

Consider now situations in which the firms or workers in an industry or the individuals employed in some occupation or profession are organized to act collectively, as a lobby or a cartel. The firms or workers in any single industry or occupation are only a tiny part of the electorate, and they earn only a minute percentage of the national income. Because they are not a majority, they cannot obtain complete control of the taxation and spending power of government. Instead, they take advantage of the "rational ignorance" of the electorate about the details of public policy about their particular industry or occupation and thereby obtain special-interest legislation, such as protection against imports, regulations that limit entry and competition, tax loopholes, and subsidies. They often also collude or form cartels to obtain monopoly prices or wages in their market.

To what extent will the organizations for collective action that represent particular industries or occupations have an incentive to refrain from any redistribution to themselves that will do great damage to economic efficiency?

The profits and even the value added in a typical industry and the wages in a typical craft or occupation are a small fraction of national income (or GDP). Suppose, for ease of calculation, that a given organized interest obtains exactly one percent of the GDP. Then it will pay this organized interest to press for both governmental and cartelistic redistributions to itself up to the point where the social losses are one-hundred times as great as the amount it obtains: only then will its marginal share of these social losses be as great as its gain at the margin from further redistribution. Thus the typical special-interest group has a very narrow rather than an encompassing interest. It therefore faces incentives that are by no means so wholesome as those facing majorities. Unfortunately, they are much more detrimental to society than those facing the secure stationary bandit-autocrat, often also worse than those that face the gang with a protection racket, and not much better for society than those facing the individual criminal.

Those in particular industries and occupations are sometimes not organized for collective action. Collective action must overcome the free-rider problem. It can emerge only when the gains from organization benefit just a small number of actors (like the few big firms in a concentrated industry) or when there are "selective incentives" (rewards or punishments that, unlike the collective good the organization provides its constituents, can be applied to or withheld from individuals depending on whether or not they contribute to the costs of the collective action).³

Even when small numbers or potential selective incentives make organization for collective action possible, it normally takes a long time before this occurs. Thus only

long-stable societies have dense and powerful networks of organizations necessary for collective action.

DOES THE ARGUMENT FIT THE FACTS FOR THE WEST?

I have argued that it takes a long time for a society to accumulate many organizations for collective action and that industry-specific, occupation-specific, and other narrow organizations for collective action are most harmful to economic efficiency and dynamism. We can therefore test whether the theory fits the facts by looking at the experience of the market democracies of the West. If my theory is right, we should expect that societies that set up a good legal order, after a catastrophe has destroyed organizations for collective action, will, for a time, grow extraordinarily rapidly. Similarly, long-stable societies ought to grow much less rapidly than societies that are in other respects comparable.

The society that has had the longest period of stability and immunity from invasion and institutional destruction is Great Britain. As the theory predicts, Great Britain also has had the "British Disease" — the poorest economic performance of the major developed democracies. The economic miracles of Germany and Japan after World War II are also consistent with the argument. With appropriate elaboration, the aforementioned theory explains the general pattern of regional growth in the United States since World War II, as well as other evidence. Most of the tests and evaluations by others are mainly corroborative.⁴

THE THEORY OF AUTOCRACY APPLIED TO SOVIET-TYPE SOCIETIES

To understand what enabled Stalin to make his domain a superpower — and also led to its corruption, decline, and collapse — we must return to the criminal metaphor with which we began and especially to the theory of the autocrat as stationary bandit.

The theory of autocracy offered earlier in this address suggests two reasons why the Soviet empire for a time offered both an economic and a military challenge to the United States and its allies. Stalin's Soviet Union was an autocracy and therefore:

1. It was governed by an encompassing interest — the more productive the Soviet domain was, other things being equal, the more resources were available to achieve the autocrat's objectives, so Stalin had a powerful incentive to make his empire more productive;
2. Stalin, as an autocrat, extracted the largest possible surplus from the society to increase his political power, military might, and international influence.

Important as these two factors are, they do not explain why autocracies in the Stalinist pattern — i.e., what has come to be called the communist or Soviet pattern — were organized the way they were. Before Stalin consolidated his control over the Soviet political system at the end of the 1920s, no autocrat (not even Lenin) had organized his domain the way Stalin organized the Soviet Union. Why did Stalin

impose on the Soviet Union (and later on the satellite countries) an economic system with almost universal state ownership and a vast proportion of the prices and wages set by the regime?

The conventional assumption — that Stalin's choice of a centrally planned economy was because of Marxist-Leninist ideology — is inadequate. Saying that a dictator's actions are explained by ideology adds only a word, not an explanation, unless the ideology can parsimoniously account for a broad and consistent array of choices over a period of time. No ideology can account for most of Stalin's choices.

After he obtained unchallenged power, he adopted policies that he had previously opposed: total state absorption of the economy with brutal collectivization of agriculture. Stalin was not a consistent adherent of *any* ideological position. Marx's writings also did not require the economic organization that Stalin imposed; Marx had focused on capitalism and said almost nothing about the organization of socialist and communist societies. In time, because of Stalin's practice and propaganda, Marxist-Leninist ideology came to be identified with the type of economic and political system he had imposed, but this later rationalization cannot explain the choices Stalin made when he first consolidated his dictatorial power.

Especially in view of the inadequacy of existing explanations of the special economic system in the communist autocracies, we need to extend the model of autocracy so that it can explain that system and the special problems its collapse has bequeathed to the societies in transition.

What limits the resources that an autocrat can extract from his society? To answer this question, we must make a distinction between autocrats who have a secure hold on power and take a long-run view from those that do not. I argued earlier that a roving bandit leader, if he could secure and hold a given domain, had an incentive to become a public-good-providing king. When insecurity about how long he will be in power or anything else makes an autocrat take a short-term view, we must stand this logic on its head. An autocrat by definition has sovereign power and thus the power unilaterally to take any asset that he wants. If an autocratic ruler has a short-term view, he has an incentive, no matter how gigantic his empire or how exalted his lineage, to seize any asset whose total value exceeds the discounted present value of its tax yield over his short-term horizon. In other words, just as the roving bandit leader who can securely hold a domain has an incentive to make himself a king, so any autocrat with a short time horizon has an incentive to become, in effect, a roving bandit.

But, except in a special case I will explain, a rational autocrat with a long time horizon will *not* confiscate the assets of his subjects because this will reduce investment and future income and therefore also his own long-run tax receipts. As was shown earlier, the rational autocrat chooses the revenue-maximizing tax rate. Is there anything he can do to obtain still more? It *appears* that the expropriation of capital goods, because it reduces future investment and income, cannot increase the tax receipts of an autocrat over the long run. But there is one way that it can, and (apparently by trial and error and continued improvisation) Stalin and his henchmen were the first to discover it.

Stalin confiscated all of the farmland and natural resources of the Soviet Union and all of the commercial and industrial property that had been privately held in the period of the New Economic Policy, and *the rate of savings and investment increased substantially*. In general, the Soviet Union after Stalin's innovations, and the other societies on which the Stalinist system was imposed, had far higher rates of savings and investment than most other societies. Stalin's innovation was to take almost the total natural and tangible capital stock of the country through a 100 percent wealth tax, i.e., an expropriation, and then to use these resources to produce a mix of output that was much more intensive in capital goods, and other goods Stalin wanted, than would otherwise have been produced. By determining himself how much of the nation's resources would be used to produce consumer goods and keeping this proportion much smaller than it was in most other societies, Stalin gave the Soviet Union an extraordinarily high rate of capital accumulation at the same time that he augmented his annual tax receipts by an amount approximately equal to all non-labor income. In the long history of stationary banditry, no other autocrat had managed to do this and also greatly increase savings, investment, and national output.⁵

EXPLOITING INCOME AND SUBSTITUTION EFFECTS TO COLLECT MORE

Stalin and his advisors also discovered a second innovative method to increase the amount of resources he could obtain for his own purposes. Most of Stalin's resources were obtained by *implicit* taxation — by taking all of the profits of state-owned enterprises rather than from explicit taxes on individuals. We must examine how this implicit system of taxation worked.

When an autocrat has *different tax schedules* for individuals of different productivities, he can collect much more tax revenue. In the typical modern democracy, high-income people confront higher tax rates or brackets than do low-income people, but everyone faces the same tax law or schedule. When everyone faces the same tax schedule, it is impossible to tax people more on their *first* hours of work than on their last or *marginal* hours of work and also to have very high tax rates. Obviously, if each of us was taxed heavily on the first eight hours of work each day, and not at all on work after that, then we would have an incentive to work more. The heavy taxation on our first eight hours would make us poorer and so the income effect of the taxation would make us work more. If we were also *not* taxed on our "overtime" work, we would also have a greater post-tax reward than we now have for additional work, so the substitution effect would also make us work more than we do now. Economic efficiency and the national income would also increase. So the western democracies would be more efficient and productive if somehow it were possible for their citizens to be taxed more on their first hours of work but not taxed on their last or marginal hours of work.

But that is not possible in a society where the same laws apply to everyone. With the rule of law everyone must face the same tax law — that is, the same schedule or set of tax brackets. Suppose that the United States decided to tax the *first* \$25,000 a person makes a year at 100 percent, the next 25,000 at 99 percent, etc., and to impose no tax at all on what each person makes in excess of, say, a million dollars. This

method — reversing the progression and regressively taxing lower incomes at much higher rates than higher incomes — would create a situation in which the least productive people would not have even enough income to survive. The productivity and efficiency-enhancing policy of taking most of people's infra-marginal income, but not taxing their marginal income, is not only morally repugnant, but also impossible when the same tax law applies to everyone.

FROM EACH ACCORDING TO HIS ABILITY, TO THE MAN IN CHARGE

There is, however, a way that a cunning autocrat can tax infra-marginal income at far higher rates than marginal income, and thereby obtain great increases in both tax collections and national output. Somehow, Stalin and his minions stumbled upon this method, and Stalin was power hungry and ruthless enough to put it into practice. The method is to set the salaries and wages of each occupation and ability level in the society with the purpose of collecting the maximum income from every individual in the economy.

First, Stalin had his subordinates in charge of the economy set wages and salaries *very low*, so people could not afford much leisure. Second, he established a system of bonuses and special rewards for people who were Stakhanovites or model workers. He also used *progressive* piece rates — that is, piece rates that increased the *per-unit* payment with the amount that the person produced. Stalin's combination of bonuses, progressive piece rates, prizes for Stakhanovites, and special perquisites for other especially productive workers was a system that provided people with a large proportion of the marginal output that they produced, but at the same time implicitly taxed them very highly indeed on their infra-marginal work.

In effect, Stalin's system of wage and salary setting had the effect of implicitly confronting individuals in different jobs or with different ability levels with a different tax schedule. This made it possible to impose higher average tax rates on the more able individuals who could produce a larger surplus over subsistence,⁶ while at the same time taxing the first hours of work severely and the last hours only lightly. To paraphrase an old saying, it was "from each according to his ability, to the man in charge."

The Stalinist regime obviously knew that it took more ability to be a factory manager than an unskilled factory worker, and it must have known roughly what ability and education level was appropriate for each major type of job. To motivate the more able people to take on the jobs needing more ability, Stalin set total pay — including bonuses and other forms of marginal pay — for the jobs demanding greater ability higher than that for the less demanding jobs.

Note that the familiar Western progressive income tax would not have served Stalin's purposes at all. Thus it is no coincidence that the Soviet Union, even as it attacked the market democracies for their inequalities of income, did not in any serious way use the progressive income tax. For a long time, the maximum rate of income tax in the Soviet Union, for example, was only 13 percent.

As I mentioned above, and as Ronald McKinnon's [1992] important work on this subject explained earlier, the main source of tax revenue for the Soviet-type soci-

eties was the profits of industrial enterprises (and turnover taxes that were, in effect, mainly taxes on the profits of these enterprises). Stalin not only claimed for the regime all of the profits of state enterprises, but also had his planners set inframarginal wage rates and prices at levels that would make industrial profits — and thus implicit taxes — very high.

The proportion of income that was devoted to personal consumption of the population in the Soviet Union in Stalin's time was lower than in any non-Communist country, and that is exactly what this theory predicts. Stalin was able to obtain a larger proportion of the national output for his own purposes than had any other government in history before.

The origins of Stalin's innovative system of tax collection showed up most starkly in agriculture. The collective farm was designed to be "collective" in the sense of "collection," not as in "collectivist." After providing extensive labor services to the collective farm, the farmers were allowed to use any leisure time for work on the tiny private plots allocated to them. As this theory predicts, the income from these plots was not, in general, taxed.

From Stalin's point of view, the food collection system worked. During World War I the Tsarist state (even though at times it also used coercive measures to collect food) was not able to provide enough food to people in the cities to maintain its control: the February revolution began as a protest over the shortage of bread. By contrast, during World War II, the Soviet regime

had at its disposal a well-developed procurement system... . Despite a disastrous fall in food production per head of the collective farm population, the share of total meat and grain output taken by the government rose. [Gatrell and Harrison, 1993, 444]

THE RATIO OF REGIME POWER TO PRIVATE CONSUMPTION AS A TEST

If the theory offered here is true, the military or geopolitical power and the expenditures on projects that add to the status and prestige of political leaders should have been greater, in relation to the standard of living of the population, than in other societies — even other autocratic societies. A casual glance at the historical record is enough to show that this was the case.

Tsarist Russia, though certainly the largest country on earth, was not able to give a good account of itself in the Crimean War. Nor was it able to defeat even the then-backward island society of Japan in 1904-5. Similarly, Chiang Kai-Shek's China, though it had the world's largest population, was militarily impotent.

Compare also Tsarist Russia in World War I with Stalin's USSR. In World War I the gigantic Empire of the Tsars was defeated essentially only by Germany,⁷ even though the German army had its hands full fighting on a second front against the French and British from the beginning of the War and most of the time used only a small fraction of its forces against Russia. By contrast, in World War II Stalin's Soviet Union was victorious against Nazi Germany, even though the Germans committed the great bulk of their fighting troops to the Soviet front: there was no "second

front" until the Normandy invasion in June of 1944. Though German ground and air munitions production was 2.6 times as large in World War II as in World War I, Soviet munitions production was 24.5 times as high in World War II as the Russian Empire's munitions production in World War I.⁸

Whatever interpretation may be offered for the fortunes of the different Russian autocracies in World Wars I and II, there can be no doubt that after World War II the Soviet Union was universally accorded a superpower status that the Tsarist autocracy never achieved, and that the Tsars never managed a prestige coup comparable to the Soviet initiation of flight in space. When the Stalinist system was applied in China, Vietnam, and North Korea it again made the communist autocracies incomparably more powerful militarily and politically than other Third World regimes.

WHY COMMUNISM DECLINED OVER TIME

Having given the Stalinist devil its due, we must not forget the well-known point that the Soviet system, even at its best, was inefficient. The Soviet system mobilized a fantastic amount of resources, but it also wasted a lot. Stalin's confiscations eliminated many of the markets needed for an efficient economy. To obtain all of what would, in a market economy, have been interest, rent, and profit, Stalin had to rule out private asset and rental markets for land and other natural resources and for capital goods. He also eliminated privately-owned firms, and society lost the gains from the innovations that private entrepreneurs would have undertaken. By setting wage and salary levels and differentials administratively in order to obtain colossal implicit tax collections out of labor income, Stalin also distorted labor markets, though by much less than expected because his taxation fell mainly on inframarginal earnings. As a result of the market eliminations and distortions required by Stalin's confiscations and implicit taxes, the total factor productivity of the Soviet-type societies was lower — and was growing less rapidly — than in market economies of comparable levels of development.

In the early years, the Soviet societies achieved rapid economic growth, in spite of their slow growth of total factor productivity, because they had extraordinarily high rates of investment. These exceptional rates of saving and investment were, as I argued earlier, due to the uniquely high proportion of national output that the Soviet societies could capture for investments that made them formidable and expanding competitors in the race for international influence and power. For about the first two decades after World War II, the societies that grew out of Stalin's innovations and conquests were able to make up for their inefficiency through extraordinarily high savings and investment rates.

We already know that, as time went on, the Soviet-type societies began to stagnate. Though they continued their high savings and investment, they were after a time unable to obtain even moderate rates of growth of productivity [Easterly and Fischer, 1993] even though they still had a long way to go to catch up to Western levels [Murrell and Olson, 1991].

This is because the Soviet Union and the other countries on which the Stalinist model had been imposed suffered from a sclerosis analogous to the one described

above when analyzing market democracies and the British Disease of slow growth. But, for reasons that will soon be evident, the "red sclerosis" was far more severe than the form that now afflicts the market democracies of the West. As time went on, the Soviet Union and (to a lesser extent) the societies that became communist only after World War II became severely sclerotic. Eventually this sclerosis reached fatal proportions and communism collapsed.

How could a system that served Stalin so well — that made him arguably the most powerful individual in the world — become so sclerotic that it could not, in the long run, even survive? This was not a question about which Stalin himself had to worry. To paraphrase Keynes: In the long run, Stalin was dead. But this is a crucial question for us if we want to understand why communism collapsed and why it left such a difficult legacy for the societies in transition from communism.

COLLECTIVE ACTION IN SOCIETIES WITHOUT FREEDOM OF ORGANIZATION

Obviously, the communist countries did not have freedom of organization. It would be absurd to suppose that lobbying organizations of the kind that buy advertisements in the American media or labor unions such as those that have played such a large role in the United Kingdom could be responsible for their sclerosis. The red sclerosis was very different from that in societies with freedom of organization, and not only because it reached the point of being fatal. It was also incomparably more discreet and subtle.

The key to the gradual decay of Stalin's system under his successors was its dependence on the decisions of subordinates. Though the role of markets in Soviet-type societies was much larger than is often supposed,⁹ the Stalinist system of implicit tax collection obviously had to limit markets more than any other society had ever done. To maintain and increase investment after confiscating the capital stock, the Soviet-type regimes had to control consumption and saving decisions. After seizing all the tangible capital and natural resources in the society, there could be no private firms. If infra-marginal wages are to be set far below the free market levels, they cannot simply be left to the market. Thus a system of the type Stalin founded obviously must handle an awesome number of matters through its command and control system, and for this it had to rely on a vast army of nomenklatura and lesser administrators.

How could the leadership of a Soviet-type economy, given that it had to make millions of decisions through a bureaucracy that in other societies are handled mainly by markets, obtain an even faintly rational allocation of resources? That such a system would be insensitive to consumer demands and would also have major inefficiencies is so well-known that it should no longer need to be discussed. But how could it work well enough to create and sustain a superpower? I have explained how the encompassing interest of the Soviet dictator gave him a strong incentive to make his domain as productive as he could. We still need to explain how the autocrat was able to obtain the information, plans, and implementation of decisions needed to get even a semi-coherent allocation of resources. Thus we face the extraordinary intellectual challenge of explaining how such a system could work at all.

Economists, operations researchers, and systems analysts have, of course, long understood theoretically what would be needed for a fully-efficient planned economy. The leader of a communist society would need to have enterprise managers and other subordinates estimate the input-output possibilities or "production functions" of each and every enterprise and spell out the leader's goals or "objective function" in great detail. In principle, economic planners could then calculate the optimal allocation of resources for the leader. The leader would have his subordinates impose this allocation. Since conditions and technologies are constantly changing, optimality requires that the whole process be redone continually.

As has long been known, a bureaucracy cannot obtain or process all of the information needed to calculate an optimal allocation or put it into practice. Of course, the communist countries did not need optimality to compete against their most imperfect competitors — they needed only a modicum of efficiency.

COMPETITION AND COLLUSION AMONG BUREAUCRATS

For a Soviet-type economy to obtain a modicum of efficiency — indeed, for it to function at all — the bureaucracy must centralize and utilize a staggering amount of information. The experience of actual conditions becomes evident only at the front line of the production processes, and it is only there that the performance of most workers can be monitored. The information has to be passed up layer after layer of bureaucracy to the top. The orders worked out in the light of this information also have to pass through all of these layers of officials on the way down. In any large bureaucracy, information is inevitably lost and distorted, even with the best efforts of all concerned.

For fundamental reasons, the best efforts of all concerned are not usually available. A manager's chances of promotion or bonuses are lowered if a superior learns of mistakes. Subordinates, therefore, have an incentive to hide all their shortcomings that can be successfully concealed. There is also an incentive to overstate the difficulties faced and to understate potential production. The more one reflects about these problems the clearer it becomes that there must be a countervailing factor, or the centrally planned economies would not have been able to function at all.

Competition among bureaucrats is such a countervailing factor. The strong incentive for production facing the leader of a Soviet-type society can at times be translated into tolerable national economic performance because managerial neglect and misrepresentation is exposed by the example and the monitoring of competitors. Suppose that a manager understates the output that can be produced with the inputs allocated to him or that he produces much less than he could. Those managers who are given similar inputs and responsibilities then have an opportunity to make a good impression by promising or producing better outcomes, and sometimes even by reporting their competitor's behavior to superiors.

The boss can also check with his subordinates' subordinates, and if there is unqualified competition among all the bureaucrats, the lower-level managers have an incentive to correct any erroneous information their superiors have given the boss in the hope of promotion and other rewards. Thus when there is unalloyed bureaucratic

competition, each official must be cautious in under-reporting the potential productivity or in under-producing. An astute superior can accordingly use competition among subordinates to exploit their more detailed knowledge and to draw out better estimates of potential production and better productivity than would otherwise be obtained. When there is full competition among subordinates, a leader can even allocate resources among his subordinates to those who make the best credible offers about how much output they will produce, so that, in effect, the resources are auctioned off to the subordinate managers who offer the highest "bids" or output-to-input ratios.

The foregoing argument assumes that collusion of subordinates does not limit bureaucratic competition or reduce the information or power available to the center. For the early period of a Soviet-type economy (or a period after a purge, or a cultural revolution like the one Mao instigated, or other total shake-up of a society), this is a fairly realistic assumption. But, as earlier parts of this address argue, in stable environments, collusion and other types of collective action increase over time. This eliminates the competition among subordinates that is the dictator's only source of information about what is actually happening in the factories, farms, and other enterprises. It also means that he cannot, as it were, auction the productive inputs off to the managers who promise to produce the most output, because managers will collude to offer less than they could have siphoning the surplus resources to control themselves. Thus collusion or any kind of independent collective action among subordinates eliminates the competition that enables a Soviet-type economy to attain even modest degrees of productivity.

Subordinates have an incentive to collude at the expense of the center when they can avoid being punished for doing so. If, for example, all the managers of the enterprises in a given industry understate how much they could produce with given inputs, they can keep a surplus that each of them can control. If they all offer less than they can when a superior "auctions" inputs off to those who promise the greatest return, there is a surplus that they can keep. If the workers in a given setting collusively agree that they will only pretend to work, they are spared the effort that the foreman could have obtained from them had they remained in competition with one another. Such collusion is often feasible, since subordinates are the superior's main source of information about what is really possible.

The collusion normally begins at the level of the nomenklatura. There will normally be only a small number factory managers in any given industry or locality. Because the numbers involved are small, the managers in a given industry can collude in much less time than would be required for a large group. The restraints on independent organization in a communist society — especially organization that weakens the control of the leader — require inconspicuous, informal, and secret collusion, and the need to proceed covertly makes collective action emerge much more slowly than it otherwise would. But small groups can typically collude secretly as can somewhat larger groups that have sufficient trust in one another.

Thus, as time progresses in a Soviet-type society, opportunities will arise for many groups — especially small groups of high-ranking administrators and enterprise managers in particular industries — to organize informally and covertly. As more

time passes, subordinates of subordinates organize. In due course this small-group covert collusion can reach down even to coterries of senior workers in factories, mines, collective farms, and retail shops. In the fullness of time, even big state enterprises, individual industries, and subordinate levels of governments will, in effect, become organized coalitions that can discreetly and subtly cooperate in their common interest at the expense of the regime. Enterprises eventually become more nearly insider lobbies or organized special interests than productive enterprises.

The accumulation of covert collective action would not be so damaging to the productivity of a Soviet-type society if each of the separate collusions, enterprises, and industry associations had a significant incentive to make the society work. But whereas the dictator or politburo at the center has an encompassing interest in the productivity of the society, the separate collusions and special-interest organizations do not. Their incentives are quite as perverse as those of narrow organized special-interests in the market democracies and nearly as perverse as those of the individual criminal.

LAW ENFORCEMENT WHEN ECONOMIC POLICIES AND INSTITUTIONS ARE BAD

I argued earlier that societies with good economic institutions and economic policies could maintain tolerable degrees of law and order without devoting any substantial share of the national income to law enforcement. The owners of private property do most of the work of guarding it against theft, the self-interested wariness of buyers limits fraud, the prudence of lenders reduces the cost to the government of enforcing contracts, and so on. Though the violators of law have an incentive to conceal their infractions and if necessary to bribe authorities to exonerate them, the victims of theft and fraud have an incentive to monitor and report the infractions they suffer and to pressure the authorities to enforce the law. Thus in many respects, in societies with good institutions and economic policies, the net force of the private sector does at least as much to uphold and enforce the law and the integrity of its enforcement as to undermine it.

Now let us look at countries, whether they are of the Soviet-type or not, that do *not* have good economic policies and institutions. Suppose that the government fixes prices and sets a price lower than the market-clearing price. With a price that is lower than the market-clearing price, the quantity demanded will be higher than the quantity that the suppliers, at that lower-than-market-clearing price, want to supply. So it will then be the case that there can be a *mutually advantageous* trade at a price that is higher than the controlled price and lower than the market-clearing price. Here is a situation in which *both parties* gain by violating the law and there is no victim with an automatic incentive to report the infraction. Of course, the same principle holds true if the government sets a price above market-clearing levels.

Suppose now that the government rules that the society will have a smaller quantity of some good than the market would have generated. There will then be some buyers who do not get as much as they would like and also some potential sellers who would profit from supplying these buyers at a price they are willing to pay. Both

parties can gain from evading the law, keeping the mutual violation secret, and, if necessary, corrupting the officials who are supposed to enforce the rule.

Suppose alternatively that it is ordained by the government that there must be more of some good than the market would dictate. There are then likely to be both producers and consumers who can gain by cooperating to evade that part of the stipulated production that costs more than it is worth.

The general point is that any legislation, regulation, or economic planning that is "market contrary" must leave all or almost all parties with the incentive to evade the law and is likely to promote criminality and corruption in government.

Thus one reason why many societies have a lot of corruption in government is that they prescribe outcomes that all or almost all private parties have an incentive to avoid, and of which almost no one has an incentive to report violations to the authorities. When caught in violation of the rule, moreover, those on both sides of the market have the same incentive to persuade or bribe the policeman or government official not to enforce the law. Not only is the *net* incentive of the private sector to evade the law — essentially *all* of the private sector incentives are on the side of undermining the rules. With lots of market-contrary regulation, sooner or later the private sector — because everyone or almost everyone in it has an incentive to undermine or suborn its market-contrary actions — makes the government corrupt and ineffective.

The governments of the Third World attempt to impose incomparably more market-contrary policies than do the governments of the prosperous market economies. As the foregoing argument predicts, by all accounts they also have vastly more corruption in their governments. The huge informal economies in the Third World are evidence not only of the extent of market-contrary policies, but also of the extent to which these policies have led over time to the corruption and ineffectiveness of Third World governments.

THE INCENTIVES FOR COUNTER-THEFT UNDER COMMUNISM

As everyone knows, the Soviet-type countries had very little private property and a lot of market-contrary policies. This encouraged crime and official corruption. This is *part* of the explanation of the chorus of complaints about crime and official corruption in the East, but only a part. As we shall see, we greatly *understate* the extent to which Soviet-type arrangements undermined law-abiding behavior and the integrity of government officials by saying that the Soviet-type societies restricted private property and markets to an unprecedented degree. The type of system that Stalin initiated had a more fundamental feature that prompted even more illicit activity and official corruption than could be accounted for by the foregoing argument. This fundamental feature can best be understood by going back to our stationary bandit metaphor.

It should not be astonishing if the subjects of a stationary bandit feel morally entitled to withhold income that a stationary bandit wants to tax, or to take back some of the income he has taken from them. Thus exploitative autocracies may not benefit much from the common feeling in successful democracies that individuals should not cheat on their tax returns, much less steal public property. Probably the

Soviet-type regimes suffered some losses because many of their subjects recognized that they were exploited, but we must be careful not to exaggerate this factor. The populations of these societies were from childhood exposed to education and propaganda designed to make them believe in the regime and to uphold the norms it required. Obviously the media in these societies contained nothing analogous to the complaints about high taxation and waste in government that are commonplace in democracies.

The most remarkable corruption-inducing feature of the Soviet-type systems becomes evident when one compares this system of implicit tax collection with the traditional types of autocratic tax-theft. The autocrat who leaves the productive assets and production of the society in the hands of his subjects has to fight tax evasion, but much of the work of maintaining order is done by his subjects. Each subject tends to protect his property, and this makes it possible for a traditional autocrat to keep theft among his subject within bounds and also limits the exposure of his officials to bribery.

If, by contrast, an autocrat insists on obtaining 100 percent of the rents, profit, and interest earned by the natural resources and tangible capital of his domain and also sets the wages of workers in order to maximize the implicit tax on labor, then there is *almost no private property or privately managed production to be guarded by subjects in their own self-interest*. The fixed assets, inventory, and inputs of every significant enterprise belong to the autocrat *and he is the only person who has an automatic incentive to keep them from being stolen*.

The autocrat has more property and more tax collection than any man can watch. So there must be watchers and also those who watch the watchers. If those who watch best and collect the most for the center are rewarded and those who lose property and collect the least are punished, the competition among the watchers and the collectors means that everyone is watched and all the collections are passed on: the watchers and collectors watch and collect from each other. Though they all would gain from overthrowing the stationary bandit and keeping his exactions for themselves, this overthrow would be a collective good for millions and no individual has an incentive to share the costs of obtaining it.

WHEN THE GUARDS COLLUDE

But within small groups, the autocrat's subjects can safely conspire together in their common interest when they eventually develop sufficient trust in one another. It is in their common interest to skim off part of the red bandit's take. Whenever any diversion of production, any theft of state property, or any failure to work conscientiously is observed only within the small conspiring group, it will not be detected by the center. Whatever the autocrat cannot observe with his own eyes, he can learn about only through reports of those beneath him. Each individual in a small group will obtain a significant share of the yield of any collusion. So as time goes on more and more small groups explicitly or tacitly agree that they will do less work, allocate more of the resources under their control to their own purposes, and share more of the state property that they work with among themselves.

There are, however, limits to what any small group can take without being observed by someone outside the group. If the managers take too much, their subordinates may notice. If those in Department A take too much, those in Department B may be able to tell what is going on. So, if *enough time passes* for the manager and his subordinates or for Department A and Department B to reach the point that they can trust each other with secrets, they can agree that more of the goods they produce and the assets they control will be kept for themselves. What happens in group after group and department after department becomes commonplace, and what becomes commonplace seems only natural and right. Eventually the enterprise, the industry, the locality, and even the ethnic or linguistic group come to agree, tacitly if not explicitly, that they can and should keep more for themselves. So as time goes on more and more of the central bandit's theft is taken back.

The center has those who watch the watchers: the higher officials, party cadre, police, secret police and other watchdogs whose job is to insure that none of the autocrat's property is stolen and that every enterprise, industry, locality, and ethno-linguistic group produces huge implicit tax collections for the center. But *if no one except the center owns property, and if no one except the center has the legal right to claim the implicit tax receipts, then everyone except the center has an incentive to induce these officials to become a part of the countless conspiracies to take back some of what the stationary bandit has stolen from them.* If the watchdog officials can persuade the center they are doing a great job guarding the property and increasing the implicit tax collections of the center, then they are likely to be rewarded. Even a small share of the gains from a diversion of production or the theft of assets is, however, likely to be worth more than the extra salary that comes from a promotion. The best outcome of all for the official is to be promoted and then take a share of the implicit tax collections and state property over a wider part of the economy. Of course, the center has an interest in preventing this, but it has virtually no source of information on what is happening other than subordinate officials, all of whom have an interest in being part of the conspiracy.

Ironically, it was Marx who coined the best phrase for describing such a situation. There is an "internal contradiction" in any system of the kind Stalin created. In such a system, the autocrat takes most of the economy's output for his own purposes and owns almost everything. But this means that almost everyone else has an incentive to be part of collusions to take back some of what the stationary bandit has stolen. If all of the autocrat's subordinates simply compete with one another to receive the autocrat's rewards and avoid his punishments, the system can work. But, in the fullness of time, as more and more coterie of subordinates collude in their own interests, the system not only loses efficiency and output but also becomes a web of counter-theft and corruption that ultimately leaves the center impoverished. If the harshest punishments are imposed on even the faintest suspicion, then the bureaucratic competition that is indispensable to the system can be preserved somewhat longer. Stalinist purges are not necessarily counterproductive for the regime — though the cost is ghastly, they also counter the fatal incentive for collusion among subordinates. In the long run, nonetheless, the difficulties of covert collective action are bound to be overcome in more and more enterprises, industries, localities, and ethnic or linguistic

groups. Thus it is a "law of motion" of Soviet-type societies that they must not only run down over time, but also become increasingly corrupt. Ultimately, some say, it becomes "impossible to buy and easy to steal." More and more victims of the regime come to believe that "he who refrains from taking state property is robbing his family." That is, part of the population comes to have a visceral, intuitive sense that they are the victims of an extraordinarily rapacious stationary bandit and that it is only right that they should take something back.

In a sense, the system becomes fairer as time goes on: the stationary bandit's take is shared more widely.

NARROW INTERESTS ARE STRONGER, THE ENCOMPASSING INTEREST WEAKER

It becomes fairer, but it cannot work. The stationary bandit who takes everything except the minimum needed to elicit the effort of his captives has an *encompassing* interest in the productivity of the society, so he does what must be done to make the society productive and thus better able to meet his needs. By contrast, each of the conspiring coterie, enterprise lobbies, industry associations, and local societies obtains so little of the society's output that each of them has only a *narrow* interest, (i.e., little or no incentive to maintain the productivity of the society). As communism devolved, it was bound to collapse.

Given the foregoing logic, that Soviet-type regimes normally required state enterprises to make all payments through the state banking system and whenever possible tried to keep enterprises from using or holding currency is not surprising: this facilitated extraction by the center and made retention of profits by the enterprise more difficult. The multiplication of private firms after the collapse of communism means that there are more enterprises that use significant amounts of currency. These private firms are subject to extortion by Mafia gangs in ways that state-owned enterprises without cash were not. This consideration has probably helped increase Mafia-type crime in many countries after the collapse of communism. The disorganization attendant upon the collapse of the old order has probably worked in the same direction. The emergence of a free press has greatly improved the reporting of crime and made it more visible.

Considerations such as these have made some people assume that the market economy, private property, and democracy promote corruption and crime. The emergence of democracy and the market economy opened the curtains and made crime more visible. They probably also created inviting new targets for criminals and corrupt officials.

But, if the logic in this address is correct, it was the inevitable devolution of the extractive system created by Stalin that is mainly responsible for the corruption and crime that many citizens of the post-communist societies are enduring. The advance of market economies in the late 19th century was in most Western countries associated with the development of meritocratic civil services and higher standards of honesty in government than had prevailed in prior centuries.

THERE IS NO PRIVATE PROPERTY WITHOUT GOVERNMENT

The foregoing diagnosis of the problem of corruption does not, however, imply that all that a society needs to do is to "let capitalism happen." In fact, corruption and crime cannot be properly controlled and a country's economic potential realized unless the government effectively performs a role that the private sector cannot. Some enthusiasts for markets suppose that the only problem is that governments get in the way of the market and that private property is a natural and spontaneous creation. This view is unquestionably and drastically wrong. Though individuals may have possessions without government, the way a dog possesses a bone, there is no private property without government. Property is a socially protected claim on an asset — a bundle of rights enforceable in courts backed by the coercive power of government. The governments of the societies in transition have to perform the gigantic task of making and enforcing general rules that define property rights, providing for the impartial adjudication of disputes about ownership of property, and cutting back drastically the domain in which the administrative discretion of government officials can affect the value of property and contract rights. Better property and contract rights in the post-communist countries will not only help the economy immeasurably, but also mean that assets will be held by individuals and firms who have a secure and precisely defined interest in protecting them, and that will reduce corruption and crime.

DEVOLUTION AND ECONOMIC DECLINE

The most important effect of the covert collusions that emerged in Soviet-type economies was probably not their impact on corruption, but their drag on economic growth. We recall that a Soviet-type system was dependent upon competition among subordinate officials both for information and for incentives for performance. Subordinate officials had an incentive to collude covertly to reduce the competitive pressures they imposed upon one another and to obtain surpluses that they could control. As time went on there was additional covert collective action and eventually state enterprises and industry associations became powerful insider lobbies. Each insider lobby was a narrow rather than an encompassing interest and had virtually no incentive to care about the prosperity of the society. Because of this, as well as the lack of information at the center and the paucity of market incentives, the state enterprises in the later and more sclerotic phases of communism were often extraordinarily inefficient. Some large state enterprises were so uneconomic that the value of the material inputs they used, when properly valued at world prices, exceeded the free market value of the outputs they produced. The size and the hierarchical character of these enterprises nonetheless meant that they had formidable lobbying power.

With the collapse of communism and the advent of democracy, the big state enterprises and industry associations could lobby openly for protection against imports, for other forms of government subsidies, and for nearly free loans and inter-enterprise credits that were ultimately financed by the creation of new money by the central bank. The relative political power of dinosaur enterprises was all the greater

because newly created firms had not had the time to overcome the difficulties of collective action and were therefore unorganized. This meant the lobbying power in societies in transition is disproportionately held in a vast number of cases by precisely those enterprises that need to be replaced by new or foreign firms. This has greatly slowed down the adaptation and transformation of the formerly communist economies. The subsidized credits obtained by these firms have also been the main source of inflation in most of the societies in transition. Privatization can substantially reduce the lobbying power of these firms by denying them their insider status, but it by no means eliminates it.

The economic miracles in West Germany and Japan after the defeat of fascism owed a great deal to the fact that fascist governments and allied occupiers had largely eliminated their lobbies and cartels. After the defeat of communism, by contrast, the societies in transition from communism were dense with powerful lobbies of the large enterprises and industry associations inherited from the old regime. Red sclerosis had bequeathed these societies an especially virulent form of the British Disease. I believe that this is one of the most important reasons why economic performance in eastern Europe has for some time been even worse after communism was abandoned.

THE SOLUTION: WISE UP

The therapy for this disease is easy to explain but difficult to implement. Each special-interest lobby, even if it consists of a gigantic firm or a major industry association, represents only a small minority of the population. Thus it will easily be outvoted whenever it demands special-interest favors if the public understands the matter. Indeed, most of the special-interests represent such a small part of the electorate that they are outnumbered even by the intelligentsia — even by that part of the population that does a lot of reading and is especially interested in public affairs. It follows that, if a better understanding of this problem evolves in the developed democracies of the West, these countries will overcome their sclerosis. If a better understanding of this problem — and of modern economics generally — emerges in the societies in transition, they will enjoy rapid "catch up" growth. It is not easy to change public opinion or even to obtain a more enlightened intelligentsia, but some progress can be made. With enough of this progress, we can be confident that economic miracles akin to those that followed the defeat of fascism will follow in the post-communist societies.

NOTES

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1. Gambetta [1993] is an example of such a study.
2. If there is both a Mafia family and a maximizing autocrat extracting resources, the combined protection-racket tax plus autocrat's tax will be higher than if only one of them had been taxing. When the

Mafia leader, for example, is deciding on the protection-racket charge and is aware that activity in the neighborhood is curtailed by the protection charge, he notes that some of the loss takes the form of lower governmental tax collections, and the Mafia family has no incentive to take this loss into account in deciding on the rate of protection payment it demands. If a Mafia family were, like our bandit gang that settles down, strong enough so that its protection-racket charge was the only tax, then the aggregate tax rate imposed on citizens would be lower and the income of the neighborhood would be higher. In other words, *competition* among autocratic rulers for power over the same domain is worse than *monopoly* by a single ruler for the subjects. By contrast, competition in a democracy between two parties to obtain a majority that gives the winning party a term during which it has a monopoly of government means a significantly lower tax rate than under a single autocrat, and a much lower than tax rate than results from a stationary bandit plus a Mafia family.

3. The assertions in this and the immediately preceding paragraphs are drawn from my 1965 and 1982 books.
4. See, for example, Choi [1983], Vedder and Galloway [1986], Chan [1987], Weede [1986], Lane and Ersson [1990], Sandler [1992], Rauch [1994], and many of the contributions in the following collections of assessments and tests of the *Rise and Decline of Nations*: Mueller [1983], *International Studies Quarterly* [1983], and *Scandinavian Political Studies* [1986].
5. In the very short run, just after the collectivization of agriculture and other productive assets, there was apparently a period of "indigestion" and confusion when output may have significantly declined. But for most of the rest of Stalin's reign, the output that Stalin cared about was far higher than it had been before he imposed Stalinization on the USSR.
6. I am grateful to James Buchanan for pointing out to me, at a very early stage of my work on the hypothesis that Stalinism was fundamentally a tax-collection system, that a communist tax-maximizing system would not only try to raise the ratio of infra-marginal to marginal taxes, but also try to take more taxation from those who were more productive.
7. The army of the Austro-Hungarian Empire was also used against Tsarist Russia, but this army was often said to be poorer than that of any other combatant country in World War I, and it did not play an impressive role in the defeat of Russia.
8. Gatrell and Harrison [1993, Table 9, 425-52]. Gatrell and Harrison point out that "In World War I...only Germany's failure to disentangle itself from the Western front prevented the speedy victory over Russia which Germany intended. Even so, a small fraction of Germany's military power was able eventually to bring about Russia's defeat and disintegration. In the second war...the scale of Soviet mobilization, when combined with overwhelming economic superiority of the Allies, was sufficient to destroy Germany completely as a military power...the USSR made a contribution...that was disproportionate to the size and level of development of the Soviet economy" [ibid., 438].
9. Because it is impossible for any bureaucracy to make decisions about all of the countless goods and services produced in a vast economy, innumerable decisions were in fact left for negotiations and contracts among state enterprises and to diverse legal, informal, and black markets.

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