Economists have long recognized that institutions shape incentives and therefore have an enormous influence on economic growth, but economists have only recently been concerned with understanding the forces that may hinder the emergence of efficient institutions. Because of a lack of secure property rights—the rule of law—many countries remain poor. This paper addresses one issue pertinent to institutional change: the obstacles to the demand for the rule of law in the transition economies.¹

After the collapse of communism and the mass privatization in 1992–94 of state assets in Russia (the so-called big bang), the market in Russia could fairly be characterized as a “‘wild’ market outside the law” (Rose 1993, p. 430). Many argued that out of this wild market, a political constituency for the rule of law would emerge (for example, Boycko, Shleifer, and Vishny 1995), that is, those to whom state assets had been transferred would become that political constituency. Mass privatization would initiate a demand-driven evolution of institutions toward the rule of law.

This did not happen. Despite the eventual passage of a blizzard of laws, most observers agree that a strong constituency for their enforcement, or for the rule of law, has not yet emerged in Russia and many other transition economies (see, for example, Black, Kraakman, and Tarassova 2000; Gray and Hendley 1997; Pistor 1999). In Russia, the last 10 years have witnessed not the hoped-for burst of entrepreneurship, but a massive stripping of assets. Russia has become a net capital exporter. Capital flight from Russia averaged, depending on the measure used, more than US$15 billion to US$20 billion per year during 1995–2001, or 5 percent of gross domestic product (Loungani and Mauro 2001; Reuters February 20, 2002).

What explains the gap between what emerged in the 1990s and what the reformers hoped would emerge? In earlier work (Hoff and Stiglitz 2003, forthcoming), we provided an explanation based on simple models in which individuals make both

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economic choices (to build value or strip assets) and political choices (for example, by voting over policies that would establish the rule of law). Individuals’ choices are interdependent, and therefore considering the circumstances in which the equilibrium does or does not lead to the establishment of the rule of law is appropriate. This paper provides a diagrammatic exposition of a simple model to highlight the reasons why the self-interested demands of each person may not lead to a strong demand for a broadly beneficial legal regime.

Traditionally, questions about the emergence of property rights institutions were viewed as prior to, and thus outside, the domain of economics. Neoclassical economics assumed that the rule of law prevailed and “gained the title of queen of the social sciences by choosing solved political problems” (Lerner 1972, p. 259).2 When neoclassical economists, for example, Demsetz (1967), North and Thomas (1970), and Barzel (1989), began to study the formation of property rights, they adopted a functionalist position. In this view, the choice of institutions is dictated by efficiency considerations. In Barzel (1989, pp. 65, 74), the implicit assumption was that property rights could be treated like a private consumption good:

[By taking] actions directly in the private sector and indirectly, through the state, in the public sector . . . individuals are able to control and to affect the delineation of their rights over “their” property. Individuals will exercise such control as part of their maximizing process. Whenever individuals find the existing level of delineation to be unsatisfactory, they will alter it until they are satisfied.

However, this statement is true only if the private and social benefits of an individual’s actions to influence property rights institutions are the same. In general, they are not the same. An obvious reason is that property rights institutions can reinforce inequalities in power; political insiders may be able to establish a legal regime that privileges their own interests. In this paper, we abstract from this problem. We analyze the interdependence between economic and political choices under conditions that we would interpret as highly favorable to the emergence of the rule of law: individuals are too weak individually to obtain privileged property rights protection from the state, but are strong enough collectively to secure the rule of law.

The problem on which we focus is unintended spillovers from individual actions.3 In the past, economists believed that the implication of spillovers (externalities) was that the economy would be slightly distorted, but we now understand that the interaction of these slightly distorted behaviors may produce extremely large distortions.4 This paper focuses on externalities mediated by the political environment. As a result of these spillovers, the political positions of a set of mutually interacting individuals can be quite different from what one would have predicted by looking at the preferences of each individual in isolation. In the model, individuals are rational, risk neutral, and forward looking, but in some political environments individuals will correctly believe that the rule of law will not be, or is unlikely to be, established. Given that belief, many individuals with control rights over assets will choose to strip assets. In turn, stripping gives some of these individuals an interest in prolonging the absence of the rule of law so that they can enjoy the fruits of stripping without the constraint of government enforcement of property rights. The interaction between individuals’
choices about whether to build value or strip assets, on the one hand, and individuals’
political demands, on the other, can lead to an equilibrium in which the demand for
the rule of law is weak. Each individual, in attempting to influence society’s choice of
the environment, focuses on the impact on himself, not the impact on others. He takes
the political positions of others as given, independent of his own vote. The political
environment, in that sense, is a public good (or public bad).

In our analysis, we try to parse out the role of various market failures. We show
that how agents vote influences others’ economic actions (a spillover effect) and how
each individual acts in the economic sphere influences how he votes (an intertempo-
ral incentive effect). The first section presents a model in the standard form of a
coordination game. The second section explains why the implications of that model
extend to a dynamic setting with forward-looking individuals. The third section
argues that because individuals’ economic and political choices are interdependent,
demand for and opposition to the rule of law cannot be separated from macroeco-
nomic policy. A too stringent macroeconomic policy can lower the returns to build-
ing value relative to stripping assets and thereby weaken the equilibrium demand for
the rule of law. The model suggests why a narrow focus on stabilization policy can
lead to policy errors.

**A Static Model of the Demand for the Rule of Law**

The agents in the model are individuals who have control rights over assets. (This
was the hoped-for natural constituency for the rule of law.) We consider the case
where many such individuals exist and where each is small in the sense that no sin-
gle individual can dictate the legal regime. Instead, the legal regime that is established
reflects the demands of the group, for example, by majority voting.

We assume that the establishment of the rule of law raises the return to building
value for every agent. This assumption captures the idea that to build value, individ-
uals must interact with others in the economy. They benefit from the rule of law
because it enforces property rights and contracts and expands their access to markets.
Without the rule of law, they risk not even being able to capture the return on their
investments. As an alternative to building value, individuals can strip the assets they
control by whisking capital to a safe place, tunneling value out through self-dealing
at the expense of minority shareholders who do not have control rights over assets,
and letting the capital stock wear out. Russia implemented mass privatization on the
basis of a government decree that stipulated only the most basic shareholders’ rights
and rules of corporate governance. This left ample scope for those with control rights
over firms to tunnel value out at the expense of other shareholders and to harvest
public resources. Privatization expanded the ability of firm managers to do that,
because it granted them greater independence from the state.

We assume that individuals differ in their ability to strip assets. In the real world,
many factors would give rise to such differences. The ability to strip is larger the
greater (a) the equity of minority shareholders, (b) the firm’s debt, and (c) the ability
to harvest commodities that require little or no processing and that can be sold on thick international markets where they are hard to trace (for an earlier paper that emphasized this factor, see Stephan 1996). If the ability to strip assets is normally distributed, then the distribution of stripping returns will have the shape depicted in figure 1.

The horizontal axis in the figure plots the percentile of the population and the vertical axis plots the payoff to stripping (per unit asset) for each percentile, beginning with the top percentile. The figure depicts the case where a few individuals have a great ability to strip assets, a few individuals have a small ability to strip assets, and most individuals have a moderate ability to do so. (That shape, however, is not necessary for our results).

Figure 2 adds two horizontal lines to figure 1 to represent the returns to building value under the rule of law, denoted by $v^L$, and under no rule of law, denoted by $v^N$. We assume, as depicted in the figure, that most individuals are better off building value than stripping assets if the rule of law is established, but worse off otherwise. This is a central aspect of the situation that interests us: the relative ranking of an individual’s alternatives may depend on the political environment.

Those who build value make up the constituency for the rule of law. They demand reform—the rule of law—because it is the only legal regime that allows them to earn a high return on investment. In contrast, asset-strippers, who follow a strategy of “take the money and run” and can illegitimately profit from their control rights, do
not gain from the rule of law. The economic strategy of an individual therefore determines his political position.⁶

In a slightly more general model, presented formally in Hoff and Stiglitz (forthcoming), the establishment of the rule of law would hurt asset-strippers by constraining their ability to strip assets. By abstracting from this effect here, we leave out an influence on behavior that will be important in our dynamic model, which we discuss later, while we gain a simpler way to exposit the coordination game diagrammatically, with one curve representing the payoff to the marginal asset-stripper and the other representing the expected payoff to building value.

Let \( x \) denote the fraction of individuals who do not support the rule of law; thus \( 1 - x \) denotes the constituency for the rule of law. We capture the idea that government is responsive to political interests by assuming that the probability, \( \pi \), of the establishment of the rule of law is a decreasing function of \( x \). Associated with any value of \( x \), there is thus an expected payoff to building value, denoted by \( \bar{v}(x) \), where

\[
\bar{v}(x) = \pi(x)v^L + [1 - \pi(x)]v^N.
\]

Each individual is assumed to know not how any other single individual votes, but rather to have beliefs about those votes that, in the equilibrium explored here, are fulfilled.

Figure 3 depicts a typical expected payoff function. As the political environment becomes less favorable to the establishment of the rule of law, the expected payoff to
building value decreases. The curve in figure 3 indicates all the possible values of the expected payoff to building value ($v$) as $x$ varies from 0 to 1 (and the constituency for the rule of law varies from 1 to 0). The equilibrium is now easy to describe: it is a fraction of individuals, $x^*$, whose return to stripping exceeds the expected payoff to building value, $v$, evaluated at $x^*$.

An interior equilibrium (where $x$ lies between 0 and 1) occurs at any point where the expected payoff to building value equals the payoff to stripping assets for the marginal asset-stripper. Hence an interior equilibrium is any point where the curve $v(x)$ intersects the stripping ability curve.

Figures 4–6 illustrate the possibilities. The figures capture both relationships described earlier: the fact that the expected return to building value depends on the constituency for the rule of law and the fact that individuals differ in their ability to strip.

The figures depict three cases. Figure 4 depicts the case where the expected return—the curve $v(x)$—cuts the stripping ability curve in three places. All agents except a fraction $x_0$ are strictly better off building value under the rule of law than stripping assets under no rule of law. However, the constituency for the rule of law has three equilibrium values. The “good equilibrium” occurs at $x_1^*$, where the demand for the rule of law is strong, and the “bad equilibrium” occurs at $x_3^*$, where the demand for the rule of law is weak. The equilibrium at $x_2^*$ is unstable, because at that point there are increasing relative returns to stripping assets (relative to building value). The expected return to building value falls more steeply than the stripping
FIGURE 4. Two Stable Equilibrium Levels of Demand for the Rule of Law

FIGURE 5. A Case Where Equilibrium Is Unique

Source: Authors.
ability curve. Starting from such a point, the slightest disturbance that increases the number of those who strip lowers the return to building value by so much that the fraction of individuals who choose to strip increases further until it comes to rest at $x_3^*$. By the same token, a slight disturbance that lowers the number of agents who strip assets raises the return to building value by so much that the fraction of individuals who choose to strip decreases further. Thus, in practice, an unstable equilibrium would not occur.7

Figure 5 depicts the case where a unique equilibrium exists. There is a unique intersection of the returns to building value and the returns to stripping assets. To the left of the intersection, the return to stripping assets exceeds the return to building value, hence $x = 0$ cannot be an equilibrium. To the right of the intersection, the return to stripping assets is less than the return to building value, hence $x = 1$ cannot be an equilibrium.

Figure 6 depicts the case of majority rule, where the curve that describes the expected return to building value is a step function. It equals $v^L$ for $x < \frac{1}{2}$, and otherwise it equals $v^N$.

The simple relationships captured in the model illustrate a paradox: even if most individuals are better off building value under the rule of law than stripping assets under no rule of law,8 an equilibrium can exist in which the demand for the rule of law is weak. The paradox is due to social interactions mediated by the political environment. Society has no equivalent to the physicists’ vacuum: there is always an environment in which individuals make their decisions. One of the most important aspects of that environment is the behavior of others. When other individuals exploit
their opportunities for stripping, they will not demand the rule of law, because they do not need it and do not benefit from it. If the demand for the rule of law is weak, it is unlikely to be established. In that political environment, many individuals will have an interest in taking what they can quickly rather than waiting for the establishment of property rights protection that would permit them to build more valuable assets. Therefore many individuals will strip, which can make that set of behaviors an equilibrium.

The model sheds light on the highly charged debate in the 1990s between Russian studies scholars and the Western economists who advised the Russian government on transition policy. Russian studies scholars generally argued that the Soviet inheritance would make it extremely difficult for Russia to quickly undertake real reform. They emphasized that the former Soviet Union lacked experience with the market, responsive institutions such as distribution and marketing infrastructure, an independent judiciary, and a history of the rule of law (see, for example, Braguinsky and Yavlinsky 2000; Goldman 1994). They pointed out that during the long period of Soviet rule, a parallel, informal structure had grown up alongside the official party structure in which people engaged in illegal trade, often at the expense of the state. The parallel structure survived the collapse of Soviet rule and made stripping public assets easier (Anderson 1995).

On the other side of this debate, many Western economists argued that the Soviet legacy did not matter. In their view, the rapid privatization of state enterprises both solved the problem of committing the government to the market—because a mass privatization would be difficult to reverse—and ensured a political constituency for institutions that would support the market. They argued that there was no “Soviet man,” only “economic man,” and given democracy and privatization, those “economic men” who benefited from privatization would create an automatic and irresistible lobbying force for the rule of law.

The model sheds light on this debate. In the model individuals are “economic men.” Moreover, the model makes the seemingly favorable assumption that no individual has sufficient power to buy rules à la carte from the state or to simply impose them. Nonetheless, spillovers mediated through the political environment can block the demand for the rule of law. An individual’s political position both depends on the political environment and is a constituent part of the political environment. The diffuse spillovers may mean that, in effect, no one demands what he might have been expected to want (in a setting that abstracted from those spillovers).

The Soviet legacy can have several effects in the model. First, if there are multiple equilibria, then history helps to select the equilibrium that will exist. What people see has happened in the past affects what they believe will happen in the future; expectations can be self-confirming.

Second, an aspect of the Soviet legacy was the absence of civil society institutions, such as churches, the press, and political clubs, with countervailing power to hold the state to account. In contrast, Poland, for example, had powerful social networks, including the Catholic church and the Solidarity trade union. The former Soviet Union had few institutions on which individuals could build to try to coordinate their interests in legal reform. This legacy would tend to depress the probability of the near-term
establishment of the rule of law, shifting down, at any level of $x$, the functions $\pi(x)$, and hence $v(x)$. The institutions inherited from the Soviet period also tend to enhance the ability to strip (shifting up the stripping ability curve). Both kinds of shifts increase the likelihood that an equilibrium exists with only a weak constituency for the rule of law.

**Forward-Looking Individuals**

The preceding section presented a chicken and egg problem, whereby the political environment could lead individuals to adopt certain economic strategies and, given those economic strategies, they would not support the rule of law. However, do the implications of this simple model extend to a dynamic framework? Should not forward-looking behavior affect voting, so that an individual can strip assets today and also demand the rule of law for the sake of the benefits it would provide in the future? If so, even an asset-stripper might vote for the rule of law.

To explore this argument, we have extended the model to a dynamic framework (Hoff and Stiglitz 2003). Two variables play a key role in this extension. First, a current decision to strip assets reduces the stake that an individual has in the future legal regime. Second, a current decision to strip assets reduces the individual’s current return from the rule of law (relative to the absence of the rule of law) if the establishment of the rule of law at the end of any period constrains his ability to strip during that period. The basis for the rule of law cannot be only power; the rules must have some legitimacy. The perceived justice of a system is important in gaining the cooperation of those involved in the process of producing the rule of law, namely, judges, regulators, jurors, potential offenders, and so on (Robinson and Darley 1995). Accordingly, state protection of past asset-strippers may be infeasible under the rule of law. Knowing this, they will be less supportive of the rule of law.

Given the link between present and future, stripping may give individuals an interest in prolonging the no rule of law state. We can therefore demonstrate that the qualitative results of the static model carry over to a dynamic framework with forward-looking, rational individuals.

The intuition for this result can be put another way. If the expected probability of transition to the rule of law is low, then the relative return to building value is low, because both current income and the expected return to increasing the asset base are reduced. Thus some individuals will rationally strip. If they strip, the asset base that will remain to invest in the future shrinks, which reduces the future benefit of the rule of law. Furthermore, the immediate establishment of the rule of law would lower asset-strippers’ current income by constraining their ability to tunnel; to harvest public assets; to withhold payments on debt, taxes, and wages; and so on. Thus the immediate establishment of the rule of law imposes a cost on asset-strippers and some individuals will rationally vote to postpone the establishment of the rule of law state. This can make the no rule of law regime persist, period after period.

In choosing their economic actions, individuals ignore the effect of their economic decisions on how they themselves vote, how other people believe the system will
evolve, and thus how others invest and vote. Therefore two distortions of individual behavior are associated with the public good nature of votes.

Figure 7 illustrates this idea. Consider two individuals, person 1 and person 2. Each person’s action influences his political position (an intertemporal incentive effect), as indicated by the horizontal arrows. How each person votes influences the political environment, and thus the other person’s action (a spillover effect), as indicated by the diagonal arrows. In attempting to influence society’s choice of legal regime, each individual focuses on the impact on himself, not on others. Economic choices that affect political outcomes beget spillovers that affect economic choices.

A deeper point is that if capital markets were perfect (with nongovernmental enforcement), then the prospect of the establishment of the rule of law in the future would make it in individuals’ interests to take actions that would maximize the social value of the assets they control because they could “capture” that value. In that case, all individuals would build value and all would support the rule of law. The imperfections in capital markets cause the inefficient behaviors that, in turn, cause the opposition to the establishment of the rule of law. An economy with perfect capital markets may have been the economic model in the minds of those who implicitly made the functionalist argument for the emergence of a strong demand for the rule of law, but privatization occurred prior to the creation of effective capital markets.

Macroeconomic Policy

As noted earlier, until the recent past, questions about the emergence of property rights institutions were viewed as prior to, and thus outside the domain of, neoclassical economics. Economists still view macroeconomic policies and the emergence of property rights institutions as two separate issues. This section argues that this view is incorrect and that it can lead to policy errors. To make this argument, we present a highly stylized example.

Suppose that the establishment of the rule of law depends on a simple majority voting rule, thus \( \pi = 0 \) if \( x > \frac{1}{2} \), and otherwise \( \pi = 1 \). The tipping point at which the rule of law will be established is a population fraction \( x = \frac{1}{2} \).
Associated with the tipping point is a critical value of stripping ability. Let $\hat{\theta}$ denote the critical value. Half of the population has a stripping ability above the critical value and half has a stripping ability below the critical value. To make things interesting, assume that $\hat{\theta}$ is sufficiently high that if an individual of type $\hat{\theta}$ strips, then that individual will have an interest in voting against the establishment of the rule of law in the current period.

The establishment of the rule of law now depends completely on the incentives of the individual of type $\hat{\theta}$. If the individual prefers to strip rather than build value, then so will at least half the population (those with the ability to strip above $\hat{\theta}$), and the rule of law will surely not be established. The discounted sum of the individual’s lifetime payoffs from stripping assets is denoted by $S^N(\hat{\theta}, r)$, where $\hat{\theta}$ denotes the individual’s stripping ability and $r$ denotes the interest rate.

If, however, the individual prefers to build value rather than strip, then again so will at least half the population (those with the ability to strip less than $\hat{\theta}$), and the rule of law will be established with certainty. Thus, as an individual of type $\hat{\theta}$ votes, so votes a majority. The discounted sum of lifetime payoffs from building value is denoted by $V^L(r)$.

The government chooses a level of public spending ($G$), and through monetary policy influences the level of the interest rate. Under plausible circumstances, raising $r$ lowers the relative return to building value: at a higher value of $r$, the cost of capital is higher, the likelihood of credit rationing is greater, and future profits obtained from current investments are more heavily discounted. For simplicity, suppose that the level of $G$ does not affect the relative return to stripping and to building value. In that case, the rule of law will be established if, and only if,

$$S^N(\hat{\theta}, r) \leq V^L(r).$$

Equating the two sides of this inequality defines a critical value of the interest rate, $\hat{r}$. Only if the interest rate is below the critical value will the rule of law be established. We call this the rule of law constraint.

As in standard macroeconomics, suppose that social welfare can be viewed as a function of the levels of economic growth, social expenditures, and inflation, and that these three variables in turn depend on $r$ and $G$. This means that social welfare is an indirect function of these two government policies. A possible shape for iso-welfare curves is depicted in figure 8. The social optimum is depicted at point $P$.

This paper poses a fundamental objection to this standard approach: namely, that the structural equations relating growth, social expenditures, and inflation to the policy instruments $\{r, G\}$ depend on the institutional structure, which itself is endogenous. Macroeconomic policies and institutional evolution are not independent issues.

Suppose that social welfare under the rule of law is so much higher than under no rule of law that we need only focus on the rule of law state. However, we must then recognize that $\{r, G\}$ must be chosen so that the rule of law emerges as part of the political equilibrium. This requires $r \leq \hat{r}$. In figure 8, the iso-welfare curves are dashed in the policy region where the rule of law is unattainable, and maximum social welfare is obtained at point $P'$, not $P$. 
In this case, the defenders of tight monetary policies in Russia who said that the problem was not the policies, but the weak Russian institutions, are missing the mark. If our analysis is correct, the institutions themselves are affected by the macroeconomic policies and in a way that can be adverse to the creation of the rule of law.

**Conclusion**

We have used a simple diagrammatic approach to argue that mass privatization without institutions to limit asset stripping is a perilous path to take in building a constituency for the rule of law. The political environment created by asset-strippers can give many individuals an interest in taking what they can quickly, rather than waiting for the establishment of property rights protection that would permit them to build more valuable assets. Asset-strippers neither need nor want the rule of law, and so they will not be part of a constituency for the rule of law. The functionalist argument that if the rule of law is good for the group, then it will always be good for each individual, is wrong, because the argument abstracts from spillovers mediated by the political environment.
Notes

1. The idea developed here is briefly described in Hoff (2001). Here we provide a diagrammatic exposition. For a mathematical treatment see Hoff and Stiglitz (2003, forthcoming). Berglof and Bolton (2002) and Sonin (2003) have developed related models.

2. More formally, the traditional model assumes that only endowments, preferences, and technology determine the allocation of resources, and that economic outcomes are the same as those that would emerge as the equilibrium allocation under a competitive market system with the rule of law.

3. In this respect, this paper is related to de Meza and Gould (1992). In their work, the private and social benefits of the enforcement of private property rights differ because of spillovers mediated through the labor market, whereas in this paper, private and social benefits from the establishment of a broadly beneficial legal regime differ because of spillovers mediated through the political environment.

4. This interaction gives rise to coordination failures. See Hoff (2001) for a survey of the literature on coordination failures in economic development.

5. For a firm with multiple shareholders, the controlling shareholder might want to pursue both the value-creating and the tunneling strategies, but that would not be sustainable, because investors would ultimately refuse to do business with a firm that defrauds them.

6. This will not be true in the case of long-lived individuals. In that case, some individuals who strip assets will at the same time support the establishment of the rule of law because of the future benefits that the rule of law would provide them. In the dynamic model, an individual’s economic action influences, but does not alone determine his political position.

7. The role of increasing relative returns (over some range) is a feature of all models with multiple equilibria. This idea is emphasized, for example, in the diagrammatic exposition of rent-seeking equilibria in Murphy, Shleifer, and Vishny (1993). They analyze a case of direct externalities in a setting where agents prey on productive entrepreneurs. We abstract from such externalities in order to highlight the role of spillovers mediated through the political environment.

8. This is true for all but a fraction of the individuals equal to $x_0$ in figure 4. The paradox can occur even if the stripping ability of every individual is less than the return to building value under the rule of law. In that case, one equilibrium will be at $x = 0$ (unanimous demand for the rule of law), but other equilibria may exist where the demand is weak. Hoff and Stiglitz (forthcoming) provide a numerical example.

9. This idea is also captured in the following humorous exchange (quoted in Kortkin 2001, p. 113):

   “I think,” says Ivan to Volodya, “that we have the richest country in the world.”

   “Why” asks Volodya.

   “Because for nearly 60 years everyone has been stealing from the state and still there is something left to steal.”

References

The word “processed” describes informally reproduced works that may not be commonly available in libraries.


