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The Rule of State Law and the Rule-of-Law State: Economic Analysis of the Legal Foundations of Development

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In a rule-of-law state the law is consistent with social norms that embody citizens' sense of justice, and the law is obeyed out of respect. Under such a system private citizens supplement official enforcement of the law, which is critical because officials lack the information and motivation to enforce the law effectively on their own. In a rule of state law, by contrast, people disobey the law or they obey it out of fear of punishment. The rule-of-law state facilitates economic development; the rule of state law impedes it. The policy implication for the World Bank and other development institutions is that technical legal assistance should focus not on establishing new codes and regulations but on developing intermediate institutions and a community of judges, lawyers, and scholars that can shape law so that it conforms to reality.

The aim is a rule-of-law state, not the rule of state law.

—Vasili Vlasihin (1992)

A modern economy needs effective laws to promote cooperation among people. Yet states enact many laws that few people obey. People tend to disobey, or obey out of fear, laws that are not consistent with social norms and to obey laws that reflect social norms.

In a modern economy, with its many specialized business communities, social norms arise to coordinate the interactions of people (Ullmann-Margalit 1977; Taylor 1982, 1987; and Rubin 1993). Such communities may form around a new technology, such as computer software; a body of knowledge, such as accounting; or a particular product, such as credit cards. I refer to the norms of these specialized business communities as “the new law merchant” (Cooter 1994).

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As an economy develops and the law becomes more complex, citizens need more information about the law in order to obey it. Alignment of state law with social norms enables citizens to economize on costly legal counsel by using morality as a guide to legality. A large body of evidence indicates that ordinary citizens and many businesses actually know little about the legal consequences of their acts. For example, business people often sign contracts without understanding their legal implications, take risks without understanding their legal liability, and invest in property improvements without fully understanding their ownership rights (Macaulay 1963; Ellickson 1991). This behavior is rational when state law reflects social norms. When that is the case, most people perceive the law as just, and many people obey the law out of respect, thereby creating a rule-of-law state.¹

As an economy develops and the law becomes more complex, officials, too, need more information to enact and enforce laws. When laws reflect social norms, private citizens take risks or use their resources to help officials enforce state law (by filing complaints with the police or testifying against alleged offenders, for example). Citizens also enforce social norms by imposing informal punishments, such as gossip, rebukes, and shunning. By contrast, when state laws are inconsistent with social norms, many people perceive the law as unjust or irrelevant and disobey it or obey it out of fear of punishment, thereby creating a rule of state law. Private citizens are reluctant to help officials enforce laws that are perceived as unjust or irrelevant. When state law conflicts with social norms in such areas as contracts, property, and torts, citizens and businesses often disobey the law out of ignorance or willfulness and follow morality instead. Businesses usually ignore contractual remedies for breach, for example (Bernstein 1992; Macaulay 1963). Neighbors often ignore property law in trespass disputes (Ellickson 1991). Insurance companies sometimes allocate liabilities for claims without regard to underlying tort law (Ross 1970).

And as an economy develops and the law becomes more complex, the information and motivation constraints on laws tighten. Aligning state law with social norms loosens the information constraints on government in a growing economy. The rule-of-law state thus promotes economic development. Conversely, if law is misaligned with social norms, the constraints on information created by a growing economy tighten. The rule of state law thus impedes economic growth.

Theory of Games, Norms, and the Rule of Law

To explore the relationships between state law, effective law, and economic development, I use a model of social norms that explains how the internalization of norms strengthens people's willingness to punish violators informally. The costs of punishing a violator (expending one's resources or exposing oneself to the risk of retaliation) diminish as more people participate in punishing wrongdoers; that is, the technology of informal enforcement is characterized by increasing returns to scale and multiple equilibria. Given the existence of multiple equilibria, can a society move from an inferior equilibrium, in which few people obey the law, to a supe-

rior equilibrium, in which most people obey it? I show how state institutions and intermediate institutions can tip the balance in the direction of widespread obedience.

In the tradition of economics this article analyzes “markets” for social norms and praises decentralized law. Unlike traditional economics, however, my model assumes that some participants act morally rather than from narrow self-interest. Narrowly self-interested actors violate social norms or conform adventitiously depending on which behavior increases their wealth and power. In contrast, moral actors obey social norms out of respect, even at the cost of modest losses in wealth or power. I assume that some actors are moral.

Social Norms in Business

The agency game depicted in figure 1 is a paradigm for cooperation in business. The first player to move, the principal, decides whether to make an investment of amount “1.” If the principal decides not to invest, the game ends and the players receive nothing. If the principal decides to invest, the second player, the agent, decides whether to appropriate or cooperate. Appropriation is merely redistributive: the agent appropriates the principal’s investment of 1, and the sum of the payoffs in the upper right quadrant of figure 1 is 0. Cooperation by both players is productive: the principal recovers the investment, and the sum of the payoffs in the upper left quadrant of the figure is 1.

If the agency game is played only once, the agent’s best move is to appropriate. Knowing this, however, the principal concludes that the best move is not to invest. The one-shot game of investment thus has a single solution, which is unproductive. An enforceable contract can overcome this inefficiency by changing the agent’s incentives. The costless recovery of expected damages, for example, provides the principal with an incentive to invest regardless of the probability of breach of con-

Figure 1. Agency Game

		Agent	
		Cooperate	Appropriate
Principal	Invest	0.5 0.5	1.0 -1.0
	Don't invest	0 0	0 0

tract by the agent. Similarly, the costless collection of expected damages from the agent provides the agent with a strong incentive to perform.

Although enforcement of contracts typically requires coercion by a third party, such as the state, the problem can also be solved without recourse to third-party enforcement. Investment in a business network usually occurs among people who maintain enduring relationships. When players commit to an enduring relationship, the problem of cooperation is usually solvable, provided that players can observe each other's moves and that they do not discount the future too heavily (Axelrod 1984). (The exceptions to this generalization—noted in Harrison and Hirshleifer 1989, Hirshleifer and Coll 1988, and Anderson and Hill 1975—need not concern us here.) Assume that the agency game depicted in figure 1 is repeated indefinitely, transforming a one-shot game into a repeated game. In any round of the repeated game in which the principal invests, the agent enjoys an immediate advantage through appropriation. A successful strategy for preventing such opportunistic behavior, called *tit-for-tat*, is for the principal to respond in the next round by refusing to invest and to begin investing again in a subsequent round (Axelrod 1984). The experience of immediate punishment usually suffices to stop opportunistic behavior by the agent and restore cooperation. Theory and experimental evidence indicate that *tit-for-tat* comes very close to maximizing a player's payoff under a variety of circumstances.²

Enduring relationships can be based on kinship, friendship, ethnicity, or religion, to name a few bases of commitment. Relationships substitute for state-enforced law among criminals, under communism, within tribes, and in much international trade. These groups often develop compelling ideologies to stabilize relationships. The ideology of kinship, for example, can extend biologically based relationships, as shown in the theory of cross-cutting ties of kinship developed in anthropology by Levi-Strauss and others (see Harris 1968). Rather than analyzing the anthropology of business, however, I turn to the tentative relationships that form the fabric of most modern business transactions.

Contracts solve the problem of cooperation through law, and enduring relationships solve the problem of cooperation through repetition. In tentative relationships the problem of cooperation is solved by social norms. To model tentative relationships, assume that there are an indefinitely large number of players who form pairs to play each round of the agency game. After each round some of these partnerships are maintained and others are terminated. Partnerships are terminated if the principal dissolves the partnership after the agent appropriates or the partners separate amicably after a change in business conditions makes the relationship unproductive. Appropriators play only once with any particular principal, whereas cooperators form stable relationships (Schussler 1993; Dawes and Orbell 1993).

The equilibrium concept for this kind of game draws on evolutionary theory.³ Think of players as vehicles for competing behaviors and ask which of these behaviors will survive in competition with the others, assuming selection favors the behavior associated with the higher payoff. Thus the proportion of players using a particular strategy increases as long as that strategy produces above-average payoffs

(and that the proportion of players using a strategy decreases as long as that strategy produces below-average payoffs). Since competition tends to eliminate all below-average strategies, every strategy surviving in equilibrium earns the same rate of return.

A social norm that everyone obeys does not exist in practice; a social norm that no one obeys does not exist by definition. In practice some players cooperate and others appropriate. In such an internal equilibrium both strategies earn the same expected payoff, as required to survive.

It is easy to see why both strategies might earn the same expected payoff. When a partnership dissolves, the players must search for new partners, which requires the expenditure of resources and time. Because appropriating agents form unstable relationships and repeatedly search for partners, they expect a high payoff occasionally. In contrast, cooperating agents form stable relationships (and therefore seldom search for partners) and expect a modest payoff often.

In goods markets a stable internal equilibrium usually exists when an increase in the quantity of production causes the marginal cost of production to increase. Similarly, in the agency game a stable internal equilibrium usually exists when an increase in the proportion of appropriators causes the expected payoff from appropriation to decrease.⁴

Internalization of Social Norms

Interactions such as those captured in the agency game usually generate social norms that impose obligations on members of a community (such as the rules of conventional morality). Every individual accepts some social norms and rejects others. A person who accepts a norm "internalizes" it by making a personal commitment to be governed by the norm. Because social norms are general, a person who internalizes a norm feels that others ought to abide by it as well and so may criticize or punish people who violate it. Such informal punishment deters some potential violators.

When a significant proportion of people in a community internalize a norm, the norm directs behavior internally by respect and externally by fear. A social norm exists, according to the positive theory of law, when it achieves a minimum level of effectiveness in directing behavior within a community (Dworkin 1977). (The many refinements and criticisms of the positive theory of norms need not concern us here; see Fuller 1958, 1964 and Hart 1958.)

Internalizing a norm can tip the actor's motivational balance. Economic models often view motivation as a calculus of psychological benefits and costs.⁵ From this perspective internalization attaches a guilt penalty to violating a norm, which can change the sign of the net psychological benefits (Casson 1991). Suppose, for example, that after internalizing the norm against appropriation, the agent in figure 1 incurs a cost of 0.7 from violating the norm. The net payoff to the agent from appropriating the investment would fall to 0.3 (figure 2). Note that under this assumption cooperation is the dominant strategy for both players.

Figure 2. Agency Game with Internalization of Social Norm against Appropriation

		Agent	
		Cooperate	Appropriate
Principal	Invest	0.5 0.5	0.3 -1.0
	Don't invest	0 0	0 0

Figure 2 depicts an agent who maximizes net benefits. Some moral theorists object to this characterization of motivation. A Kantian decisionmaker, for example, does not aim to maximize anything; thus figure 2 cannot depict Kantian reasoning. Given the lack of agreement on motivation, I will not rely on a particular moral theory. Instead, I rely on the fact that internalizing a norm makes a person more willing to sacrifice to uphold it.

Emergence of Social Norms

To see how social norms arise, consider the principal in figure 1. If the principal believes that the agent is a cooperator, the principal will invest; if the principal believes that the agent is an appropriator, the principal will not invest. Every agent has an incentive to send signals that induce principals to invest since the principal must invest if the agent is to receive a positive payoff. Thus every agent will signal “cooperation,” whether the real strategy is cooperation or appropriation.

Recall that cooperation is productive and appropriation is unproductive. People who want to increase the community’s wealth will praise cooperation. If everyone in a business community has an incentive to signal conformity with a practice and if conforming to the practice increases the community’s wealth, no one in the community will argue publicly against the practice. These two conditions—uniform signaling by individuals and wealth creation for the group—create a consensus that community members ought to conform to a particular practice. The consensus may cause some members of the community to internalize the norm and to inculcate it in young people, so that a new norm emerges in the community.⁶ A social norm thus typically emerges when increasing the community’s wealth is consistent with individual incentives for signaling.⁷

Changes in the Evolutionary Equilibrium of Social Norms

How will the emergence of a social norm in a business community affect behavior? Typically, the evolutionary equilibrium changes because individuals punish violators of the norm, not because they obey the norm themselves.

People who internalize a norm will cooperate even if the objective payoff (the payoff in terms of wealth and power) for cooperating is slightly lower than the payoff for appropriating. I call this behavior principled conformity to the norm. In contrast, people who do not internalize the norm will cooperate only if the objective payoff for cooperation is at least as high as the payoff for appropriation. I call this behavior adventitious conformity to the norm.

When the objective payoff for cooperation is at least as high as the payoff for appropriation, obeying the norm creates no "strain of commitment" (the term is from Rawls 1971), and an outside observer cannot distinguish between an individual who cooperates adventitiously and one who cooperates from principle. In contrast, a higher objective payoff for appropriation than for cooperation strains commitment and induces only principled conformers to cooperate.

In an evolutionary equilibrium all strategies that persist yield the same objective payoff. In an internal equilibrium some players pursue the strategy of cooperation and others pursue the strategy of appropriation. Equilibrium is reached by adjusting the number of people who conform adventitiously to the norm; the presence of players who conform out of principle does not affect the equilibrium.

To grasp the point, assume that the rate of return for players in the agency game equalizes when eighty players cooperate and twenty players appropriate, and that sixty players cooperate out of principle and twenty players cooperate adventitiously. Now assume that one of the appropriators is persuaded to cooperate. That change in behavior causes a disequilibrium in which eighty-one players cooperate and nineteen players appropriate. Equilibrium will be restored by a change in the strategy of one of the adventitious cooperators from cooperation to appropriation. When equilibrium is restored, eighty players once again cooperate and twenty players appropriate. Thus the internalization of the norm by one more player changes the identity of the cooperators, but not their number.

Marginal players change their strategy when objective payoffs change by a small amount, whereas players who are not on the margin ("inframarginal") persist in their strategy when objective payoffs change by a small amount. In an internal evolutionary equilibrium adventitious conformity is marginal and principled conformity is inframarginal.

Dynamics of Punishment

Agents who have internalized a social norm will bear modest costs to enforce it for the benefit of others through informal sanctions such as gossip, rebukes, and shunning.⁸ The internalization of norms thus promotes the sanctioning of wrongdoers by disseminating information about their past acts.

An increase in enforcement by one agent changes the evolutionary equilibrium toward more cooperation. Assume an initial situation in which agents enjoy the same expected payoff from cooperating and appropriating. Now assume that some agents begin using some of their resources to publicize the identities of appropriating agents. The risk of publicity reduces the expected payoff from appropriating, which in turn causes the expected payoff from cooperating to exceed the expected payoff from appropriating. To restore equilibrium, some agents must switch from appropriating to cooperating until the expected payoffs equalize. The willingness of some agents to censure appropriators thus increases aggregate cooperation in equilibrium.

An individual agent bears the cost of censuring appropriators, the gains from which are shared by many players in a competitive situation. Enforcing agents are thus principled, and no adventitious agent enforces.

Does informal enforcement of norms actually take place? Anthropological evidence indicates that enforcement of norms occurs without the support of the state and even in the face of state opposition. In order to sway opinion within close ethnic groups, for example, squatters in Papua New Guinea sometimes hire lawyers to draft real estate "contracts" for buying and selling land that belongs to someone else (Cooter 1991a).

Modeling punishment helps to explain some peculiar features of norms. To begin, I assume that the cost of enforcement includes some risk of harm to the individual who enforces a norm and some expenditure of personal resources. A person who externalizes a norm will not pay the expected cost without receiving an offsetting benefit; a person who internalizes a norm will pay more to enforce it than the benefit received in return.

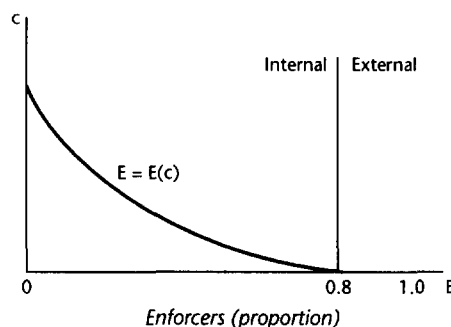
Even people who have internalized a norm will pay only up to a certain amount to enforce it. As the cost of enforcement rises, fewer people are willing to pay to enforce the norm. Thus a graph of the enforcement function would slope downward to indicate that the expected cost of enforcing, c , must decline in order to attract more enforcers (figure 3).⁹

Next I consider the actual cost of enforcement. Informal punishments (gossip, rebukes, shunning) may require effort, time, or other expenditure, and an informal enforcer may face confrontation or revenge. The risk of confrontation and revenge—and thus the cost of enforcement—tends to fall as the proportion of people willing to punish increases (figure 4). As the proportion of enforcers, E , rises toward the maximum possible value (1), the expected cost of enforcement falls to its minimum value, \underline{c} . Conversely, as the proportion of enforcers falls to 0, the expected cost of enforcement rises to its maximum level, \bar{c} .

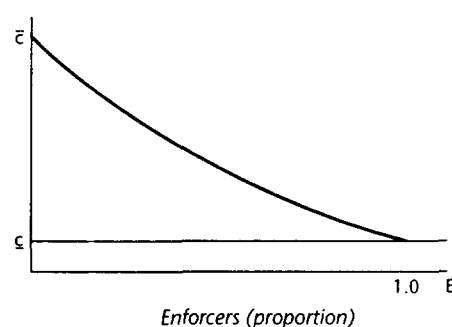
Equilibrium is reached where figure 3, the willingness to pay for enforcement (demand curve), intersects figure 4, the cost of enforcement (supply curve). Intersection of the curves graphed in figures 3 and 4 indicates an equilibrium in the number of enforcers and the cost of enforcement.¹⁰ In other words, if the actual number of enforcers equals the number required to sustain the current cost of enforcement, the cost of enforcement remains constant.

Figure 3. What Enforcers Are Willing to Pay

Cost of an act of enforcement

**Figure 4. What Enforcement Actually Costs**

Cost of an act of enforcement



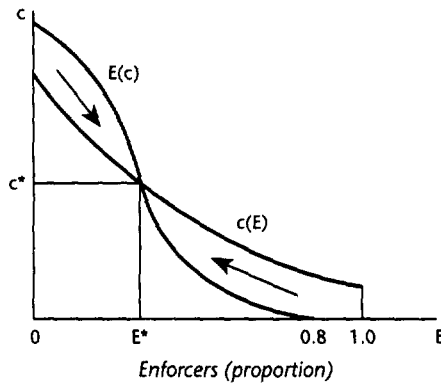
Graphing several different equilibria helps to explain some observed cases. Consider first a situation in which some proportion of the people who internalize the norm enforce it in others (figure 5). An equilibrium occurs where the two curves intersect (at E^*, c^*). The dynamic behavior of the system is easily explained. If the actual number of enforcers exceeds the number required to sustain the current cost of enforcement, the cost of enforcement will fall. In figure 5 this situation is shown at points where c is more than c^* and E is less than E^* . The arrows in figure 5 indicate the direction of change. Conversely, if the actual number of enforcers falls short of the number required to sustain the current cost of enforcement, the cost of enforcement will rise. In figure 5 this situation is shown at points where c is less than c^* and E is more than E^* , as indicated by the directional arrows. Notice that the directional arrows in figure 5 point toward the intersection of the two curves (at E^*, c^*), indicating that this equilibrium is stable.¹¹ As explained below, stable equilibria characterize the rule of law state.

Now consider the case in which either everyone who internalizes the norm enforces it or no one enforces it (Taylor 1987; Casson 1991). This situation results in an unstable internal equilibrium (figure 6). Assume that the system begins at the equilibrium (E^*, c^*) and then that a small disturbance moves it downward to the right, where E is greater than E^* and c is less than c^* . Now the actual number of enforcers exceeds the number required to sustain the current cost of enforcement, so the cost of enforcement falls, as indicated by the directional arrow pointing away from the equilibrium (E^*, c^*). Consequently, the system moves even farther from the equilibrium, until the point $0.8, \bar{c}$ is reached, where everyone who internalizes the norm enforces it.

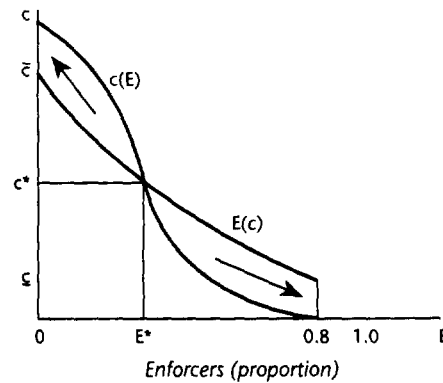
Now consider a move in the opposite direction. Assume that the system begins in equilibrium (at E^*, c^*) and then that a small disturbance moves it upward to the left, where E is less than E^* and c is greater than c^* . Now the actual number of enforcers falls short of the number required to sustain the current cost of enforcement, so the cost of enforcement rises, as indicated by the directional arrow pointing away from E^*, c^* . Consequently, the system moves even farther from the equilibrium, until the point $0, \bar{c}$ is reached, where no one enforces the norm. As explained below, unsta-

Figure 5. Stable Equilibrium

Cost of an act of enforcement

**Figure 6. Unstable Equilibrium**

Cost of an act of enforcement



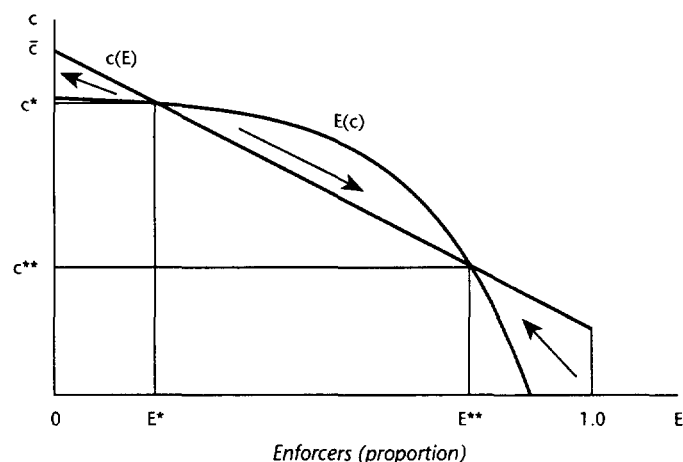
ble equilibria characterize the rule of state law. The directional arrows indicate that any slight movement away from the unstable equilibrium (at E^*, c^*) will send the system either to the lower corner, denoted by $0.8, \underline{c}$, or to the upper corner, denoted by $0, \bar{c}$. In the lower corner everyone who internalizes the norm enforces it; in the upper corner no one enforces it.

The chaos that followed the breakup of the Soviet Union can be explained in terms of the model. The Soviet Union exemplified the rule of state law, as depicted by the unstable equilibrium in figure 6. Because state law did not correspond to morality, spontaneous support for law by citizens was weak. Citizens of the former Soviet Union, who were accustomed to a low level of spontaneous support for law, must have expected this tradition to continue after the Soviet government collapsed. These expectations created a self-fulfilling prophecy and caused the system to equilibrate at a level at which private support for state law was low, thereby making state law ineffective.

In formal terms, stability occurs when the enforcer's curve, $E(c)$, intersects the cost curve, $c(E)$, from above, as in figure 5; instability occurs when the enforcer's curve intersects the cost curve from below, as in figure 6. Instability is more likely when a small increase in the number of enforcers causes a large decrease in the cost of enforcement, sharply increasing the slope of $c(E)$, and when a small decrease in the cost of enforcement causes a large increase in the number of enforcers, flattening the slope of $E(c)$.

Stability and instability combine in many ways, depending on the shapes of the curves. In figure 7, for example, most people enforce the norm, unless enforcement falls below the tipping value E^*, c^* , in which case few people enforce it. If the system has "tipped out," a policy that causes the system to "tip in" causes a dramatic increase in enforcement up to the level E^{**}, c^{**} .

The actual values of E and c at any point in time may be subject to random shocks, which can have a dramatic effect. Assume that the system begins at the point on the vertical axis $0, \bar{c}$, where the cost of enforcement exceeds the amount enforcers

Figure 7. Most Conform or Few Conform*Cost of an act of enforcement*

are willing to pay. Now assume that a random shock causes the cost of enforcement to fall below the tipping value E^*, c^* . The system will follow the directional arrows in figure 7 and move to the new equilibrium E^{**}, c^{**} , where the cost of enforcement is low and many people enforce the law.

The Rule of Law

The preceding analysis of the costs of informal enforcement provides the foundation for understanding how state law can respond to social norms. According to Locke (1961 [1690]), the state can provide more certain and secure enforcement of social norms. State enforcement is more certain than private enforcement because a written law provides a canonical formulation of the underlying obligation and, in an ideal situation, courts apply the rule with impartiality. State enforcement is more secure than informal enforcement because of the state's monopoly on the official use of force.

Private enforcement and state enforcement typically complement each other. The cooperation of citizens with officials increases the effectiveness of state enforcement and lowers its costs; the backing of state officials increases the effectiveness of private enforcement and lowers its risks. Thus the enactment of a social norm into law and its enforcement by the state shifts the private cost curve $c(E)$ down in figures 5, 6, and 7.

In the stable equilibrium depicted in figure 5, a downward shift in the cost curve pushes the equilibrium to a higher level of private enforcement, as public enforcement "pulls in" more private enforcement. In the unstable situation depicted in figure 6, a downward shift in the cost curve increases the probability that random shocks will cause the system to reach the corner solution characterized by a high level of enforcement rather than the corner solution characterized by a low level of enforcement.

In the complex situation depicted in figure 7, a downward shift in the cost curve has both effects: the stable internal equilibrium shifts to a higher level of private

enforcement and the probability increases that random shocks will cause the system to settle at a high level of enforcement. If most citizens believe that most citizens will enforce the social norm, the system will move to the stable internal equilibrium with a high level of enforcement. But if most citizens believe that few citizens will enforce the social norm, the system will move to the unstable corner equilibrium with a low level of enforcement. Figure 7 thus depicts a self-fulfilling prophecy. In such a social system state enactment can sometimes tip society into conformity with the law merely by causing citizens to believe that most of them will enforce it.

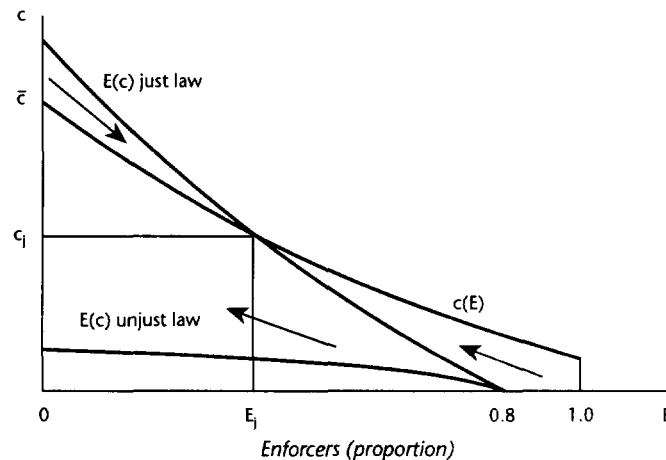
For example, the City of Berkeley, California recently enacted an ordinance requiring owners to clean up after their dogs. Enactment of the law formalized vague social norms. After the law's passage people became more aggressive toward dog owners who ignored the law, suggesting that many people find it easier to enforce a law than a social norm. Enacting the law apparently caused the system to tip from an equilibrium in which there was little private enforcement to a new equilibrium in which many people are willing to enforce the law privately. A similar phenomenon can be observed in the prohibition of smoking in public buildings. Although officials almost never enforce the ban on smoking, signs prohibiting smoking lower the perceived risk to nonsmokers who complain to smokers. (For an interesting collection of studies on public policy toward smoking, see Rabin and Sugarman 1993.)

Consider now what happens when the state imposes laws that contradict social norms. For example, assume that the state punishes people who privately enforce a social norm, which causes the cost curve $c(E)$ to shift up. In figure 5 an upward shift in the cost curve moves the equilibrium to a lower level of private enforcement. In the unstable situation depicted in figure 6 an upward shift in the cost curve increases the probability that random shocks will cause the system to reach the corner solution characterized by a low level of enforcement. In the complex situation depicted in figure 7 both effects operate. In general, the state can undermine obedience to social norms by raising private enforcement costs.

Corruption

Laws that are consistent with social norms appear to be relevant and just to many citizens, who help the state enforce these laws. State enforcement of law, including detecting and punishing officials who accept bribes in exchange for breaking the law, is more effective when supplemented by informal enforcement, as shown in figure 8. Recall that the willingness of private citizens to bear high enforcement costs makes the $E(c)$ curve relatively steep. A relatively steep $E(c)$ curve like the one labeled "just law" in figure 8 stabilizes the system by reaching an equilibrium at E_p, c_p . Private enforcement supplements public enforcement, and the system settles into an equilibrium with effective deterrence of bribes.

Conversely, laws that are inconsistent with social norms are perceived as irrelevant or unjust by many citizens, who are reluctant to help the state detect and punish officials who corrupt such laws. This situation is depicted in figure 8 by the curve labeled "unjust law." Recall that the unwillingness of private citizens to bear high enforce-

Figure 8. Corruption*Cost of an act of enforcement*

ment costs makes the $E(c)$ curve low and relatively flat. A low, relatively flat $E(c)$ curve destabilizes the system and creates a corner solution at $0, \bar{c}$ in which private enforcement is minimal. With minimal private enforcement, corruption flourishes because state officials lack the information required for effective public enforcement.

Suppressing corruption requires help from private citizens, which in turn depends on the responsiveness of the law to social norms. A bribe is the price paid illegally to an official for a service, such as overlooking a regulation or awarding a contract.¹² The willingness of citizens to suppress the corruption of a state regulation depends on whether a social norm will support regulation. I have argued that social norms typically arise in a business community when the public good aligns with individual incentives for signaling. If a regulation reduces external costs, the community would benefit from a social norm supporting the regulation. If most individuals have an incentive to signal conformity with such a norm, the norm will probably emerge. For example, if sound accounting practices could benefit government contractors as a group, and if each contractor with the government wants to proclaim fidelity to sound accounting practices, the business community may develop a norm requiring sound accounting practices. If the social norm emerges, then a law aligned with it will appear to be relevant and just to most people. Consequently, citizens will cooperate in enforcing the law and punishing officials who corrupt the law by accepting bribes. Private enforcement will equilibrate at a high level, as depicted in figure 8, which will make public enforcement cheap and effective.

Now consider the situation in which the state prohibits an activity that creates external benefits. The community will not develop a social norm to support such a regulation. Regulations that restrict competition for the benefit of politically favored groups, for example, will seem unjust to many people, so few people will run risks to help officials enforce such laws. Private enforcement will, consequently, equilibrate at a low level, as depicted in figure 8 for the unjust law. The absence of pri-

vate enforcement will make public enforcement expensive and ineffective, and many officials will take bribes in exchange for not enforcing the prohibition.

The suppression of corruption requires that private citizens believe correctly that a large proportion of them will bear modest costs to punish corruption. The proliferation of regulations inhibits this process by sharply increasing the risk to whistle blowers. The risk increases sharply because prolix regulations require everyone to break the law from time to time. When everyone breaks the law, anyone who reports someone else is vulnerable to counter charges. Thus the proliferation of regulations sharply increases the likelihood that the system will settle in an equilibrium in which few private citizens punish corruption.

Even if private enforcement costs are low, regulations that inhibit competition are unlikely to command much respect. For example, pious legislators from India to Italy have burdened the employment contract with compulsory benefits. In many circumstances not complying with such rules benefits employers and employees without harming anyone else, and black market and gray market jobs that circumvent these regulations flourish. Suppressing these markets is especially difficult because so many people see nothing harmful in them.

Every legal obligation provides a potential source of bribes to officials who enforce it. The more highly regulated is the economy, the greater is the scope for bribes. Thus economies that are just emerging from central planning provide many opportunities for officials to extract bribes. Ideally, inefficient regulations should be repealed, leaving only efficient regulations in place. Public officials, however, show little enthusiasm for repealing laws that provide them with illegal income.

Broad taxes raise more revenue at less cost to the economy than do narrow taxes. In effect, bribes are very narrow taxes assessed against a particular beneficiary of a state service. Consequently, public officials as a whole can obtain higher incomes by honestly administering general taxes than by extracting bribes for particular services. Although officials as a group would benefit from replacing bribes with regular salaries paid out of general taxes, each individual official may benefit from taking bribes. This collective action problem explains why most officials who take bribes in corrupt countries receive low incomes.

Sources of Law for Development

This theory of social norms can be applied to the sources of law for economic development. First I discuss the sources of legal modernization in the West, and then I move on to the problem of the emergence of law from chaos and the stabilization of democracy.

Legal Modernization in the West

Legal modernization in the West began in the eighteenth century, when developments in science and industry greatly accelerated the pace of social change. These social changes prompted rapid changes in law. The law had to recognize the corpo-

rate form of organization, clarify the meaning of “property” for industrial organizations, extend contracts to new financial instruments, develop patent protection for new types of inventions, extend accident law to dangers posed by new technology, allocate losses from bankruptcies in new types of organizations, and develop regulations to protect the environment from new pollutants. I describe four processes by which legal modernization occurred in the West.

COMMON LAW. English common law has a history dating to the medieval period. Throughout most of its history English common law developed as a close-knit community of professional lawyers and judges ruled on cases. According to the legal historian Brian Simpson (1973, 1975), the common law has been more of an institution than a collection of rules. Not until the eighteenth century did Blackstone first organize the leading cases of the common law into modern legal categories.

The common law had to evolve quickly in the eighteenth century to keep pace with changes in business. The use of notes and bills of exchange, which circulated among eighteenth-century merchants as a means of payment and credit, raised new questions about risk allocation. Such questions became acute with the rapid expansion of commerce in the eighteenth century. Lord Mansfield, one of the architects of eighteenth-century common law, recognized that he did not fully understand how businesses used financial instruments. He conducted careful inquiries, scrutinized businesses, and tried to identify and enforce the best financial practices.¹³ His elegant solutions continued to be taught in courses on commercial law long after the relevant financial instruments ceased circulating.

In common law systems, intensive litigation alerts judges to the need to change the law. Judges respond to a proliferation of novel disputes by making new law (Eisenberg 1988). Not only do disputes cause precedents, but new precedents may cause disputes (Priest 1987; Cooter 1987).

According to an old principle in jurisprudence, judges must discover common law in social norms rather than invent law in light of their own preferences.¹⁴ To the extent that judges follow this strategy, the common law reflects social norms. Since the eighteenth century new institutions have developed in common law countries to advance this process. Organizations conduct studies to scrutinize current law and issue reports recommending changes to it. In the United Kingdom law commissions perform these tasks. In the United States these tasks are handled by the American Laws Institute (ALI) and the National Commission on Uniform State Laws (NCUSL), which try to keep the law current with developments in business communities (Ogus 1995; Schwartz and Scott 1995).

Although judges’ decisions seldom cite economic efficiency, analysis of common law rules reveals that common law is economically efficient (Posner 1979). Since the law and economics first demonstrated this fact, scholars have tried to uncover the “hidden hand” that directs the common law toward efficiency (Rubin 1977; Cooter and Kornhauser 1980). The most compelling explanation is that social norms evolve toward efficiency and that common law promotes efficiency by reflecting social norms.

CIVIL LAW. As early as the eighteenth century legal scholars in England were debating whether common law was appropriate to modern life or an archaic compendium of obsolete practices (Posner 1979). In continental Europe common law was identified with the losing side in the revolutions that brought Napoleon and his followers to power. The victorious revolutionaries, who regarded judges with suspicion for having upheld the old regime, wanted to root out “medieval” practices and replace them with “rational” ones (Dawson 1972). In their view law derives its authority from the popular will as expressed through legislators, not from social norms “uncovered” by judges. The popular will was identified with rationality, whereas social norms were identified with habits. Commissions were appointed to draft codes to supersede the common law. Scholars on the commissions examined pre-Revolutionary law with a critical eye, retaining some parts of it and rejecting the rest (David and Brierley 1985; Dawson 1972; Merryman 1985; and Zweigert and Kotz 1992). Legislators enacted the codes into law.

In theory, judges in civil systems interpret law but do not make it. Codifiers in civil law countries thus appear to have more influence and judges less influence than in common law countries. Whether the apparent difference between the two systems is real or illusory is difficult to resolve because neither system exists as a pure type. In common law countries restatements and codes have legal authority; in civil law countries judges are influenced by social norms. (For alternative views, see Kirchner 1991; Mattei and Pardolesi 1991; and Cooter and Gordley 1991.).

Interpreting some codes, however, looks a lot like uncovering social norms. Both common law and civil codes rely heavily on broad principles that apply in many different circumstances. Ideally, these principles are derived from practices, and the practices give specific content to the principles. The common law of torts, for example, typically holds injurers liable for accidents caused by their negligence; this general principle receives specific content from the actual standards by which particular communities evaluate accidents. When judges apply the negligence principle, they often find the specific standard applicable to the case by identifying the best practices in the relevant community. Civil law judges can proceed on similar lines when interpreting general principles in a code. By relying on judges to use specific practices to interpret general principles, both systems of law empower judges to enforce social norms.

Some codes are based directly on social norms. In drafting the Uniform Commercial Code (UCC) of the United States, which applies to bankruptcy, financial instruments, and contracts between merchants, Professor Karl Llewellyn and his staff tried to identify and articulate the best commercial practices in contemporary business communities, much as Lord Mansfield did when he modernized British commercial law (Hillinger 1985). After Llewellyn’s committees completed their work, the UCC was presented to the state legislatures, which enacted it into law. Judges continue to make commercial law in the United States by interpreting the UCC.

Before Napoleon came to power, countries in continental Europe shared a kind of common law called the *ius commune*. Scholars and judges developed the *ius*

commune by interpreting Roman law in light of local traditions and contemporary realities. Some European legal scholars today hope to unify European private law by building on the *ius commune* (Zimmermann 1990).

THE REGULATORY STATE. Some economic and social problems require public policies, not just social norms. For example, a modern economy cannot spontaneously generate effective norms restraining environmental degradation by competitive industries; social norms cannot ensure adequate expenditures on public goods, health programs, or basic scientific research. In the twentieth century countries in Europe and North America addressed these problems by enacting new laws, thereby creating the regulatory state.

A community of scholars, lawyers, and judges typically produces the common law and much of the civil law. In contrast, politicians and administrators have greater influence on regulations. Regulations can take the form of statutes enacted by the legislature, orders issued by the executive, or rules promulgated by ministries. Ministries usually follow procedures prescribed in legislation. Thus when U.S. agencies create new regulations, they must follow procedures stipulated in the legislation conveying authority to them; in the absence of such stipulations, they must follow procedures prescribed in the Administrative Procedures Act.

Because the common law reflects social norms, it can articulate general principles whose specific content comes from community practices. In contrast, regulations often lack a foundation in social norms. Regulators would thus create uncertainty by promulgating general principles rather than detailed instructions. Accordingly, regulations tend to be more specific and detailed than is common law or codes.

Legal principles dictate that legislation trumps the common law whenever the two conflict. When public law crowds out private law, the state takes control of resource allocation.

COMMUNISM. The most complete legal reforms in the twentieth century were carried out by communist revolutionaries, who replaced the law, politics, and economics of the old regimes with central planning. Central planning is a way of making law and goods that combines state planning of the economy and political dictatorship. In communist countries the state repealed or emasculated private law on employment relations, land ownership, antitrust, consumer product liability, and worker safety. Once the legal impediments were removed, officials ruled by decree. Under central planning, government officials formulated the state's goals for the production of commodities, embodied the goals in production targets, and ordered people to meet them. Central planning produced remarkably similar results in vastly different countries, such as Cuba, the Democratic People's Republic of Korea, and Poland, consistently failing to produce consumer goods in abundant quantity or of high quality.

Some formerly communist countries are trying to reinstate lost legal traditions. With funding and prodding from international and foreign agencies, national and foreign scholars are drafting new laws for the formerly communist countries. In Eastern Europe it seems that each country is trying to recreate private law based on

its precommunist codes and on the law of the country that is funding its legal reform (Cadwell 1995; Stephan 1995).

CONSENSUS OR MAJORITY RULE. Four sources of economic law in the West have been described: common law, civil law, the regulatory state, and communism. Ideally, common law responds to social norms, as required by the rule of law. In contrast, the regulatory state imposes rules that depart from social norms. Communism takes the regulatory state to its logical extreme by adopting central planning. Civil law codes can either enforce social norms or impose obligations that are inconsistent with social norms.

A social norm exists when it is effective in a community; it is effective when a sufficient number of community members enforce it. The emergence of a social norm usually requires consensus in the community that people ought to obey the norm. This consensus provides the justification for coercion when the state enforces social norms. In contrast, the existence of a regulation depends on its enactment or promulgation. In a democracy the legislature enacts regulations and the executive branch promulgates them. Democratic elections typically follow the principle of majority rule, which provides the justification for coercion when the state enforces regulations.

Arrow's impossibility theorem and its extensions created skepticism about the ability of majorities to produce coherent laws (Arrow 1963; McKelvey 1979). Without coherence the law cannot be efficient. Empirical research has shown that in democratic states the politics of redistribution often dominates the economics of production (Stigler 1972). Rent seeking is so endemic in democracies that one school of thought holds that companies in regulated industries typically "capture" their regulator and use its powers to restrict competition (Stigler 1975; Kolko 1967). Recent attempts by scholars to rehabilitate majority rule have had limited success (Wittman 1989; Waldron 1993).

Some conservative law and economics scholars believe that there is a stronger case for selectively enforcing social norms than for making law by majorities. The case for law as a selective enforcer of social norms is strongest when applied to business norms that evolve in a system of open competition. The case is weakest when applied to business norms that evolve under noncompetitive conditions; to public goods, such as pollution; to issues of critical morality, such as the suppression of women; or to "evolutionary traps," such as blood feuds. In these situations social norms may be oppressive or missing. Some progressive law and economics scholars remain optimistic about majority rule and regulation. The most optimistic of these progressive theories of democracy rest on such ideas as civic virtue and political discourse, which few economists analyze and some dismiss.

Usurpation, Chaos, and the Emergence of Stable Property Rights

Having discussed sources of law in stable states, I now consider the emergence and stabilization of democracy. Democracy is a system of competition for control of the

state, which has a monopoly on the official use of force. In many countries the state's monopoly on official force is abused, and the government periodically breaks the law or suspends the constitution. Such an assertion of illegal powers by state officials can be deterred, however, and stable power can be created out of chaos.

Many citizens who believe in democracy will monitor officials and censure violations of the constitution, even at some cost to themselves. Recall that the willingness of private citizens to bear high enforcement costs makes the $E(c)$ curve relatively steep, which tends to make the system stable. Another factor, however, destabilizes constitutional monitoring by citizens. The tyrant who successfully usurps power punishes resistance harshly. Thus citizens' willingness to resist depends on their confidence of success, since citizens who resist unsuccessfully pay a heavy price. Recall that when a small decline in the proportion of enforcers causes a sharp increase in enforcement costs, the $c(E)$ curve is relatively steep, which tends to make the system unstable.

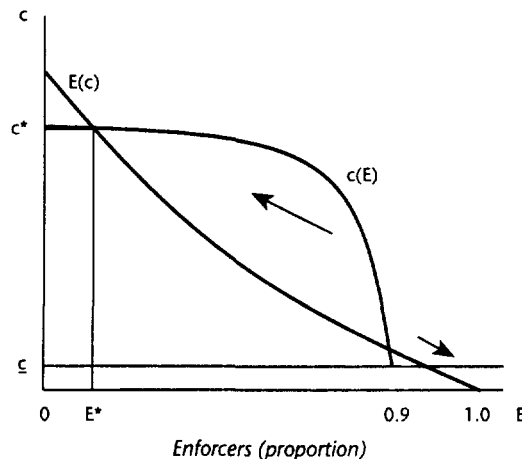
Figure 9 captures the phenomenon of resistance to tyrants. Either 90 percent of private citizens resist tyranny and resistance succeeds, in which case they each pay the minimum price \underline{c} and the system equilibrates at 0.9, \underline{c} , or few private citizens resist tyranny and resistance fails, in which case resisters pay the heavy price, c^* , and the system equilibrates at E^* , c^* .¹⁵

To overcome this instability, private citizens need to resist tyranny collectively. Two such sources of protection—the separation of powers in the constitution and the fragmentation of political parties—are examined here.

Antitrust theorists sometimes quip that the only interesting numbers are one, two, three, and four, suggesting that four or more competing firms achieve much the same results as perfect competition. The U.S. Constitution works much like antitrust law in that it divides government into four institutions—the executive branch, the House of Representatives, the Senate, and the Supreme Court—that

Figure 9. Usurpation

Cost of an act of enforcement



compete for state power. The threat of usurpation comes from the president, who directs the armed forces and the bureaucracy. The armed forces and the bureaucracy, however, would be reluctant to obey presidential commands that the Supreme Court declared illegal and that the two houses of Congress opposed; in order to usurp power, the president would probably need cooperation from the other three powers.

Constitutions that separate powers, however, do not prohibit a single political party from controlling more than one branch of government. A single dominant party may unify powers separated by the constitution. Empirical research comparing different countries shows that a dominant disciplined party in government reduces the power of the courts, whereas competition for office among political parties preserves the separation of powers (Cooter and Ginsburg 1996; Ramseyer 1994).

According to Duverger's law (Cooter forthcoming), two-party competition tends to emerge from single-district elections for the legislature that follow a winner-take-all rule, while proportional representation tends to result in multiparty systems. In some countries proportional representation results in stable, competitive government by coalition; elsewhere it causes legislative paralysis and, sometimes, government by executive decree.

ENCOMPASSING INTEREST. How do stable property rights emerge from chaos? Olson (1993) considers a situation in which roving bandits ravage a country. Eventually, one bandit dominates the others and expels them from the territory. The stationary bandit asserts an exclusive right to exploit the territory for economic gain, sometimes draping this power in legitimacy through self-declaration of divine kingship. Olson shows that rather than expropriate property, the rational stationary bandit will impose general taxes, because general taxes will raise far more revenue than can be obtained by expropriating the property of individuals. A rational stationary bandit will abandon expropriation, guarantee property rights, and set taxes at the level that maximizes state revenue.

Olson explains the difference between roving bandits and a stationary bandit in terms of the more "encompassing interest of the stationary bandit." Roving bandits maximize their wealth at a particular point in time; their interests do not encompass the future wealth of the territory. The stationary bandit strives to maximize long-run wealth; the bandit's interests thus encompass the future tax revenues yielded by the territory. The interests of a secure monarch in a family dynasty correspond to those of a stationary bandit. The interests of dictators, who are not usually able to pass on power to their children and who are often deposed, correspond to those of roving bandits.

Olson extends the argument to the transition from banditry to democracy. The stationary bandit sets the tax rate to maximize the state's revenue. In contrast, a democratic government ideally sets the tax rate to maximize the nation's wealth. Because the tax rate that maximizes the nation's wealth is lower than the tax rate that maximizes the state's revenue (Cooter and Helpman 1974), a change from

banditry to democracy results in lower taxes. In general, the more encompassing the state's interest, the closer it comes to maximizing the nation's wealth, which implies lower taxes. In practice, the government's interest does not encompass the wealth of the nation as a whole because special interests enjoy disproportionate influence in democracies. Nevertheless, Olson believes that a democratic government has a more encompassing interest than a stationary bandit.

INTERMEDIATE INSTITUTIONS. How does limited government arise from absolutism? The stationary bandit may initiate the change to increase state revenue. A stationary bandit can increase the state's income by guaranteeing property rights against appropriation and imposing general taxes. But an absolute power cannot guarantee anything against itself. To maximize state revenue, state power must be limited by guaranteeing property rights.

Besides taxes, the state obtains revenue by borrowing. North (1995) has observed that the borrowing ability of English kings increased greatly in the seventeenth century, when the rising power of Parliament provided some guarantee of repayment. This difference in borrowing ability tipped the balance in wars against Continental absolutists. In general, negotiating loans or bargaining successfully requires credibility, which presupposes limits on future action. Constitutional division of powers limits future action. Even without the constitutional division of power, however, political power may need to bargain with economic powers. As industries differentiate and grow, private centers of wealth emerge, whose support the government may need. Limited government may emerge—as it has in the rapidly industrializing economies of East Asia—because economic development requires the state to bargain with many distinct industries.

Private centers of wealth do not rely on spontaneous cooperation to protect their interests. Instead, they organize into intermediate institutions that establish rules by which members govern themselves. Do such institutions inhibit competition or facilitate exchange? Olson (1993) claims that as a society ages and the number of intermediate institutions increases, such institutions seek political rents with increasing effectiveness, until sclerosis clogs the arteries of economic competition. In contrast, Bernstein (1992, 1995) found that associations of commodity dealers (diamonds, grain, textiles) lower the transactions costs of wholesale buying and selling, thereby facilitating trade and cooperation by enforcing social norms.

In practice, an organization that seeks to maximize the wealth of its members will behave both monopolistically and efficiently. By fixing prices, establishing territories, and withholding information from the public, the organization will seek to create monopoly power for its members in dealing with nonmembers. The organization will also seek to minimize agency costs that members incur in dealing with each other. To minimize agency costs, the organization must establish efficient property rights and contracts among members. Thus a general principle of motivation for an intermediate organization can be stated as: monopoly for outsiders, efficiency for insiders. In the worst situation organizations form tight cartels to extract monopoly prices in local markets. In the best situation competition deprives an organization of

monopoly power over outsiders, thus limiting the role of the organization to promoting efficiency among insiders. Free trade makes business organizations virtuous in spite of themselves.

Conclusion

Social norms arise in a group when individuals benefit from representing themselves as conforming to a practice that benefits other members. In an environment of open competition business norms tend to evolve toward efficiency, and competition causes changes to occur rapidly. As an economy develops, constraints of information and motivation tighten on officials who make and enforce state law. To loosen these constraints, state law must be decentralized and modernized by reinforcing business practices rather than dictating what businesses do. Bottom-up lawmaking requires a community of judges, lawyers, and scholars to identify social norms, state them authoritatively, and enforce them selectively.

Sustaining a social norm requires that it be enforced by private individuals. Increasing returns to scale of private enforcement can destabilize the system, causing a society to “tip in” to a high level of private support for state law or “tip out” to a low level of private support. A high level of private support is more likely when the law is consistent with social norms, so that most citizens obey the law out of respect. A low level of private support is more likely when law contradicts morality or seems irrelevant. Laws that convey monopoly profits to politically favored groups by restricting competition seldom command respect.

This analysis can be applied to corruption. To suppress corruption, private citizens must believe correctly that many of them will bear modest costs to help punish corrupt officials. The cost to a private citizen of helping to punish corrupt officials decreases as the number of citizens who enforce the law increases. Consequently, a society may tip in to a high level of enforcement, or tip out to a low level of enforcement. As a group state officials could benefit by eliminating corruption and replacing their loss in bribes with higher salaries paid from general taxes. The faction with the most encompassing interest may oppose the corruption of more parochial officials.

The development of industry in many different sectors creates multiple centers of economic power with which the government may need to negotiate. To increase the credibility of its promises, government may limit its power by separating powers in the constitution and respecting property rights. Economic development thus provides government with an incentive to limit its powers.

The model presented here has implications for international organizations such as the World Bank that help countries develop legal infrastructure.¹⁶ The rule of law cannot come from top-down planning because central officials lack both sufficient information and the right motivation. Technical assistance should not focus primarily on establishing new codes and regulations. Instead technical assistance should help establish intermediate institutions and a community of judges, lawyers, and scholars that can shape the law so that it conforms to reality.

Notes

1. For evidence on the relationship between obedience and perceived justice, see Tyler (1990).
2. Fudenberg and Maskin (1986) have proved that in any game in which players maximize the discounted sum of single-period utilities, the discount rate is not too high, and the players can observe the history of moves in the game, any pair of payoffs that Pareto dominate the minimax can arise as average equilibrium payoffs of the repeated game. Thus repetition of the game makes a Pareto improvement possible. This theorem still leaves unexplained why the probability of a Pareto efficient solution is as high as empirical studies suggest it to be.
3. For an excellent review of these developments, see Bannerjee and Weibull (1993). For a discussion of the relationship between law and evolutionary theory, see Elliott (1985) and Elliott, Ackerman, and Millian (1985). For a pioneering article on evolutionary models of law, see Hirshleifer (1987); for a pioneering book on evolutionary models of economics, see Nelson and Winter (1982).
4. As the proportion of appropriating agents increases, more partnerships dissolve more often. Some of the principals released from these relationships look for new partners. Consequently, the release of principals from existing partnerships tends to lower the expected cost of a successful search by an agent for a partner. Another force works in the opposite direction, however. As the number of appropriators increases, investment becomes less profitable and some principals withdraw from the industry. Withdrawal of principals from the industry increases the expected cost of a successful search by an agent for a partner. On balance, the presence of more appropriators causes search costs to increase when the withdrawal effect dominates the release effect. Thus a stable equilibrium usually exists when the withdrawal effect dominates the release effect. For a similar formal model, see Schussler (1993).
5. Antiutilitarian philosophers typically reject the theory that conforming to a principle of morality involves weighing alternative reasons and balancing them. See, for example, the account of "exclusionary reasons" in Raz (1986) and Kant (1948 [1785]).
6. Arguing along similar lines, Pettit (1990) claims that norms will be "resilient" when nearly everyone approves of those that benefit others and disapproves of those that harm others.
7. For a similar account of the emergence of norms, expressed in the language of philosophy, see Gibbard (1990).
8. In discussing the problem of sanctioning wrongdoers through gossip, Pettit (1990) writes, "People do not have to identify violators intentionally; they just have to be around in sufficient numbers to make it likely that violators will be noticed. And equally, people do not have to discipline violators intentionally, going out of their way for example to rebuke them or report them to others; they just have to disapprove of them—or at least be assumed to disapprove of them—whether that attitude ever issues in intentional activity" (p. 739). Pettit's argument is based on the assumption that people are moved by a concern that others not think badly of them. For a more pessimistic assessment of informal sanction, see Heckathorn (1989). For a discussion of how overenforcement might arise from the interdependence of enforcement actions by private property owners, see de Meza and Gould (1992). For theories of ostracism, see Gruter and Masters (1986).
9. Here is a strict definition of terms for the enforcement function $E(c)$: the density function $f(s)$ over willingness to pay to enforce the social norm

$$E = 1 - \int_0^c f(s).$$
10. To be precise, an equilibrium is a pair of values E^* , c^* such that $E^* = E(c^*)$ and $c^* = c(E^*)$.
11. If $E(c)$ cuts $c(E)$ from below, the equilibrium is stable. If $E(c)$ cuts $c(E)$ from above, the equilibrium is unstable.
12. Either the official act is illegal, or the official act is legal and accepting payment for it is illegal. Bardhan (1996) provides an excellent review of the economic literature on corruption.
13. The process of assimilating bills of exchange and negotiable instruments into common law is well documented. The traditional theory is developed in Holden (1955). Holden is criticized in Baker (1979). A revised view, which stresses that Mansfield immersed himself in the minutiae of business practice in order to extract the best principles, is found in Rogers (forthcoming). I benefited from discussions on this point with Professors Dan Coquillette, James Gordley, and Jim Rogers.
14. For an exposition of this old view of lawmaking, see Davies (1986). Rubin (1995) cites Chodorow (1972), Fichtenau (1991), and Lewis (1954) in tracing this line of thought to a belief in medieval Europe that law is both divine and natural. This older view is reflected in the jurisprudence of Dworkin (1977), who asserts that courts should find rights and not make policy. The view that judges consult their own values to fill gaps in the law is developed by Hart (1961).
15. Weingast (1996) uses a two-person prisoners' dilemma game to reach similar conclusions about the instability of resistance to tyranny.
16. For a list of loans and lessons drawn from them, see World Bank Legal Department (1995).

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