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The new comparative economics

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In recent years, the field of comparative economics refocused on the comparison of capitalist economies. The theme of the new research is that institutions exert a profound influence on economic development. We argue that, to understand capitalist institutions, one needs to understand the basic tradeoff between the costs of disorder and those of dictatorship. We apply this logic to study the structure of efficient institutions, the consequences of colonial transplantation, and the politics of institutional choice. *Journal of Comparative Economics* 31 (4) (2003) 595–619. World Bank, Washington, DC 20433, USA; Harvard University, Cambridge, MA 02138, USA; Dartmouth College, Hanover, NH 03755, USA; Yale University, New Haven, CT 06520, USA.

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1. Introduction

The traditional field of comparative economics dealt mostly with the comparison of socialism and capitalism.¹ Under socialism, the principal mechanism of resource

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¹ This field has its own category in the *Journal of Economic Literature*, called Economic Systems. The subcategories are capitalist systems, socialist systems, socialist institutions, other economic systems, and comparative economic systems.

allocation is central planning. Under capitalism, this mechanism is the market. Traditional comparative economics, which dates back at least to the discussions of market socialism in the 1930s, studied under what circumstances either the plan or the market delivers greater economic efficiency.

By the time socialism collapsed in Eastern Europe and the Soviet Union, this question lost much of its appeal. Socialism produced misery and inefficiency, not to mention mass murder by several communist dictators who practiced it. Capitalism, in contrast, typically produced growth and wealth. If capitalism is triumphant, is comparative economics dead?

As this paper and the others in the symposium show, traditional comparative economics is evolving into a new field. This field shares with its predecessor the notion that, by comparing alternative economic systems, we can understand better what makes each of them work. However, the key comparisons are those of alternative capitalist models prevailing in different countries. Each capitalist economy has many public and private institutions. These institutions function to select political leaders, to secure property rights, to redistribute wealth, to resolve disputes, to govern firms, to allocate credit, etc. Political economy over the last two centuries, as well as recent empirical research, demonstrates that these institutions differ tremendously and systematically among countries. These differences and their consequences for economic performance are the subject of the new comparative economics.

Since the days of the Enlightenment, economists have agreed that good economic institutions must secure property rights, enabling people to keep the returns on their investment, make contracts, and resolve disputes. By encouraging people to invest in themselves and in physical capital, such security fosters economic growth. As Smith (1776, pp. 284–285) wrote, “in all countries where there is tolerable security [of property], every man of common understanding will endeavor to employ whatever [capital] stock he can command. . . In those unfortunate countries. . . where men are continually afraid of the violence of their superiors, they frequently bury and conceal a great part of their [capital] stock. . . in case of their being threatened with any of those disasters to which they consider themselves as at all times exposed.”

There are two sides to the security of property rights. On the one hand, investment must be secured, typically by the government, from the expropriation by thieves, competitors, or tort-feasors. For Hobbes (1651), controlling private disorder, which he called the war of all against all, is the central concern of the state. The problems of disorder, including war, crime, ethnic violence, squatter takings, torts, monopoly, bribery, and investor expropriation, continue to plague modern developing countries. On the other hand, a government capable of protecting property against private infringement can itself become the violator and thief. Smith refers to the violence from superiors. Montesquieu (1748, p. 343) is even more explicit: “Great enterprises in commerce are not found in monarchical, but republican governments. . . An opinion of greater certainty as to the possession of property in these [republican] states makes [merchants] undertake everything. . . Thinking themselves sure of what they have already acquired, they boldly expose it in order to acquire more. . . A general rule: A nation in slavery labors more to preserve than to acquire; a free nation, more to acquire than to preserve.” In Enlightenment thinking, a crucial risk to property rights is taking by the government, which we call dictatorship.

A fundamental problem of institutional design is the conflict between the twin goals of controlling disorder and dictatorship. Fearful of disorder, Hobbes favored absolutism. The framers of the US constitution recognized, however, that dealing with disorder and localism through a more powerful central government conflicts directly with the objective of restraining the sovereign (Hamilton et al., 1788). This concern with institutional design continues in modern writing, most importantly in institutional economics, e.g., Hayek (1960), Olson (1965, 2000), Demsetz (1967), North (1981, 1990), North and Weingast (1989), and in public choice, e.g., Buchanan and Tullock (1962). In addition, empirical studies confirm the close relationship between good institutions and economic development, e.g., De Soto (1989), De Long and Shleifer (1993), Besley (1995), Easterly and Levine (1997, 2003), Knack and Keefer (1995), Acemoglu et al. (2001), and Rodrik et al. (2002).

The interest in institutions revived with the collapse of socialism and the transition of the economies in Eastern Europe, the former Soviet Union, and China to capitalism. This experience has been diverse, ranging from rapid growth in China and Poland, to a sharp decline followed by recovery in Russia, to stagnation with limited reform in Belarus and Uzbekistan. Early debates on transition focused on the speed of reforms as a crucial determinant of performance. Although it is now clear that the absence of reform, as in the Ukraine and Cuba, is associated with both economic and political stagnation, the emphasis on speed turned out to be excessive. As Murrell (1995) argues, important differences among countries had more to do with the effectiveness of the newly created institutions. Many countries of Central Europe succeeded in building both democracy and a market economy. Having moved as fast or faster on many of its reforms, Russia established democratic government, but faced greater problems of corruption and capture, and began growing rapidly only since the late 1990s.

These divergent experiences raise many questions. Some of them deal with controlling disorder. How much government ownership is desirable? Poland, the Czech Republic, and Russia privatized extensively; China retained large state industries, yet grew the fastest. How much should governments regulate? Transition saw both successful regulation and the degeneration of regulation into corruption and selective abuse of new business (Frye and Shleifer, 1997; Hellman et al., 2003; McKinsey Global Institute, 1999). How hard should the government fight disorder? McMillan and Woodruff (1999), Johnson et al. (2002), Allen et al. (2002), and Murrell (2003) see public institutions as having limited use and stress private orderings as the means of securing property and trade.

Other questions focus on dictatorship. Is democracy the best political system for economic reform or is dictatorship efficient when radical change is required? China's economic success under communism contrasted with the difficulties of Yeltsin's democracy in Russia animated the advocates of one party rule. The success of democracies of Central Europe points in the opposite direction. Within democracies, do reforms proceed better under divided or consolidated governments? Many economists assume that consolidated government is better for reforms, yet, according to Hellman (1998), the deeply divided governments of Central Europe had the most success with reform. Is a federal structure desirable from the viewpoint of economic transformation? Students of China, such as Jin and Qian (1998) and Roland (2000), credit its federalism and the resulting competition among regions with the success of reforms. Students of Russia, such as Shleifer and Treisman

(2000), Blanchard and Shleifer (2001), and Zhuravskaya (2000), see its federalism and the resulting conflict between the regions and the center as a key obstacle to stability.

These questions reflect a common tradeoff. On the one hand, there is the objective of controlling disorder, which pushes toward greater dictatorship. On the other hand, there is the goal of controlling the abuses of state intervention, which pushes against dictatorship. In this paper, we present a framework describing the tradeoff between dictatorship and disorder, and apply it to the problem of the social control of business. We argue that the four common strategies of such control, namely private orderings, private litigation, regulation, and state ownership, can be viewed as points on the institutional possibility frontier, ranked in terms of increasing state powers. These strategies are associated with progressively diminishing social costs of disorder and progressively rising social costs of dictatorship. We use this framework to analyze both efficient institutional choice and a number of historical episodes.

Efficiency is not the only way to think about institutional choice. A key reason for institutional inefficiency is the transplantation of institutions through conquest and colonization. An institution that respects the delicate tradeoff between dictatorship and disorder in the origin country may not remain efficient once transplanted to a colony. This view of transplantation sheds light both on the consistency with which a given country regulates different activities and on some institutional pathologies. In addition, as both the Marxist and the public choice literature have long recognized, politicians choose policies and institutions to stay in power and to get rich. The politics of institutional choice may also explain the observed inefficiencies.

Our paper is organized as follows. We describe our framework in Section 2 and illustrate it in Section 3. Section 4 focuses on transplantation, and Section 5 on politics. Section 6 concludes.

2. Basic framework

The two central dangers that any society faces are disorder and dictatorship. Disorder refers to the risk to individuals and their property of private expropriation in such forms as banditry, murder, theft, violation of agreements, torts, or monopoly pricing. Disorder is also reflected in the private subversion of public institutions, such as courts, through bribes and threats, which allows private violators to escape penalties. Dictatorship refers to the risk to individuals and their property of expropriation by the state and its agents in such forms as murder, taxation, or violation of property. Dictatorship is also reflected in expropriation through, rather than just by, the state, such as occurs when state regulators help firms to restrict competitive entry. Some phenomena, such as corruption, reflect both disorder and dictatorship. When individuals pay bribes to avoid penalties for harmful conduct, corruption is a reflection of disorder. When officials create harmful rules to collect bribes from individuals seeking to circumvent them, corruption is a cost of dictatorship.²

Institutions function to control these twin dangers of dictatorship and disorder. We focus on a fundamental tradeoff inherent in such control. Specifically, a state that has

² Our discussion of dictatorship and disorder is related to the literature on rent-seeking and corruption, e.g., Tullock (1967), Posner (1974), Shleifer and Vishny (1993, 1998), and Ades and Di Tella (1997).

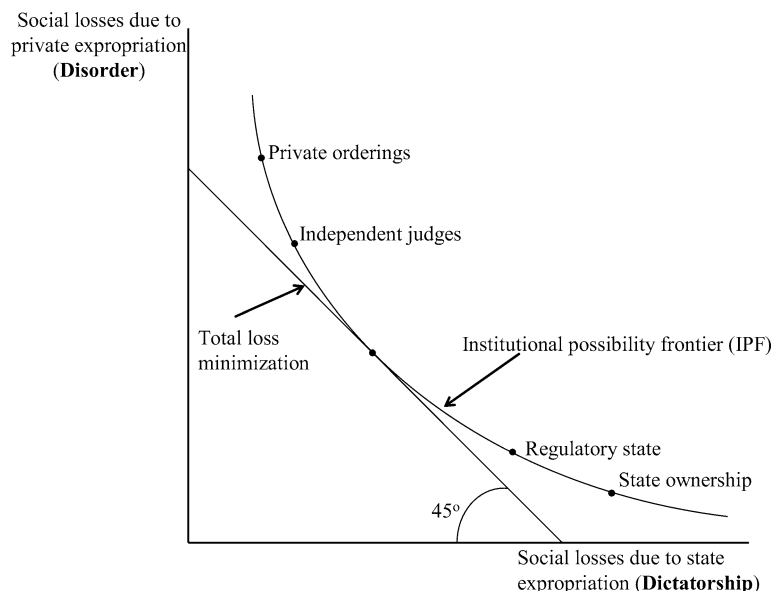


Fig. 1. Institutional possibilities.

more powers to control disorder also has more for dictatorial abuse. Figure 1 depicts the Institutional Possibility Frontier (IPF) for a society or a sector within it. On the x -axis, the social losses from dictatorship, as opposed to the gross amounts of such activities as taxation and government expropriation, are measured relative to a world with perfect property rights. On the y -axis, the social losses from disorder are measured relative to a perfect property rights benchmark. We measure the costs of dictatorship and disorder in the same units to examine the tradeoff. The IPF reflects the institutional possibilities of the society, i.e., how much disorder can be reduced with an incremental increase in the power of the state. A point on the IPF is an institution such that disorder in a given society or industry cannot be reduced without increasing dictatorship.

In Fig. 1, the IPF is assumed to be convex to the origin. This matches the standard neoclassical assumption that marginal increases in dictatorship produce progressively smaller reductions in disorder. This assumption need not hold. For example, price controls increase dictatorship by encouraging selective and politicized price-setting by government agents. They also increase disorder by stimulating bribery and queues. If the IPF is not convex, the analysis can be modified, but efficient institutions would obviously never lie in the non-convex region.

In the analysis of institutions, economists usually distinguish between written rules and their enforcement. In our framework, this separation disappears because each law or regulation has its own enforcement properties, reflected in the equilibrium degree of dictatorship and disorder arising from its use (see also Hay et al., 1996; Hay and Shleifer, 1998; Glaeser and Shleifer, 2001, 2002a). If Russia regulates its monopolies through an anti-trust agency, equilibrium disorder will still be present due to the waste from actual monopolists escaping the law to exercise their market power and bribing the regulators

to let them do so. Equilibrium dictatorship will also remain, due to monopolists' use of the regulator to restrict entry by competitors and the agency's officials charging non-monopolists bribes in exchange for agreeing not to harass them. As argued by Coase (1960), no rules are fully enforced, and no institution fully eliminates the transaction costs of dictatorship and disorder.

The downward sloping 45 degree line in Fig. 1 holds constant the total social costs of dictatorship and disorder. Its point of tangency with the IPF is the efficient institutional choice for a given society or a sector within a society. Efficient institutions are of interest for both policy advice and positive economics. They could evolve from democratic pressures (Wittman, 1989), from the influence of growth-seeking interest groups such as merchants (De Long and Shleifer, 1993), from a Coasean negotiation among the members of the elite, such as the Magna Carta or the American Constitutional bargain (Becker, 1983), or from the evolutionary process of long term survival of the fittest institutions (Hayek, 1960).

The location and the shape of the IPF, and hence the efficient choice, are determined by a number of factors. The location of the IPF varies most dramatically across societies. The institutional possibilities of modern Sweden, or even China, are far superior to those of Albania or Congo. Sweden can pursue either extreme laissez-faire policies or experiment with socialism and still achieve decent outcomes; Albania can choose a perfect balance of dictatorship and disorder for its IPF, but property rights would remain insecure. We refer to the location of the IPF as civic capital. Societies with more such capital, and an IPF closer to the origin, are more capable of achieving cooperation among their members. The term civic capital is related to social capital, but, as we explain below, is broader.

Recent historical research considers the determinants of civic capital. Landes (1998) stresses the influence of culture. Easterly and Levine (1997) and Alesina et al. (1999) show how ethnic heterogeneity, and the resulting ethnic strife, reduce institutional quality. Diamond (1997) and Engerman and Sokoloff (1991, 2002) stress the role of factor endowments and of the physical environment in shaping and limiting the institutional opportunities of a society. For example, the environment of Latin America, unlike that of North America, was hospitable to large scale agricultural technologies that bred significant economic and social inequalities and caused a long-lasting damage to the regions' institutions. Acemoglu et al. (2001) argue that the mortality of European settlers crucially shaped settlement patterns, and institutional outcomes. Putnam (1993) maintains that the long run history of cooperation in a community, its social capital, determines the ability of its members to cooperate in the production of public goods.

Other, more prosaic, determinants of civic capital are also important. The technology of production matters. When the scale of production and the pace of interaction among individuals rise, the opportunities for private expropriation expand, moving the IPF out, as well as changing its slope. The efficiency of tax extraction influences both the location and the slope of the IPF because it determines how much dictatorship is needed to reduce disorder both on average and at the margin. Finally, the level of human capital in the society also determines the location of the IPF because better educated and more informed people are more likely to solve problems without violence. Many of these determinants of civic capital have been measured, and some can be changed in the medium term through public policy. For many policies, however, including social control of business, the location of the

IPF is fixed, civic capital is a constraint rather than a choice, and optimality is determined by the shape of the IPF.

To examine the shape of the IPF and institutional choices in more concrete terms, consider the problem of social control of business. Suppose that the society wishes to reduce disorder from monopoly pricing, torts, or predatory tactics. As shown in Fig. 1, the four distinct strategies of such control, involving increasing powers of the officials vis-à-vis private individuals, are market discipline, private legal action through courts, public enforcement through regulation, and state ownership. These four strategies are not mutually exclusive. Competition and regulation often operate in the same market, as do private litigation and public regulation. Moreover, intermediate strategies of social control of business, such as private litigation to enforce public rules, are available. Nonetheless, these four categories provide a useful analytical classification.

To illustrate these categories, take the example of social control of securities issues. Suppose that society wants to have broad and liquid securities markets and, to this end, deems it desirable that firms issuing equity disclose accurate information about their circumstances. This society has four basic institutional strategies for the enforcement of good conduct. First, the market discipline solution relies on the incentives of issuers themselves, or of their underwriters, to disclose the truth about the securities because they need to establish a reputation for credibility to raise funds in the future. Second, the society can rely on private suits by buyers of securities who feel that they have been cheated by the issuers, under the general doctrines of contract or tort. For this, the society needs a court and a judge. The question for the court is whether the issuer disclosed inaccurate information or failed to disclose material information. Third, the society can designate a public regulatory agency, which mandates what should be disclosed by security issuers, inspects their books and disclosures, and penalizes issuers and underwriters who break its rules. Between private litigation and full-scale regulation, the regulator can establish the rules for security issuance, but leave the enforcement of these rules to private litigation by the wronged investors. Fourth, the society can nationalize security issuance. A company wishing to raise capital must relinquish the inspection, disclosure, and sale of securities to the state.

These four basic strategies differ in the degree of public control. No public involvement is required with competition and private orderings. Courts employ impartial judges enforcing the rules of good behavior. These rules do not even need to come from legislation; rather, they may derive from custom or from judge-made common law. Even in this case, the judge is a public agent with decision-making authority. With regulators, the state writes the rules, inspects the product before it is sold, and penalizes sellers for delivering a bad product. Both the scope of government activity and its centralization are increased relative to independent courts. Finally, with state ownership, the government takes complete control over an activity.

From the perspective of efficiency, the question is how much of a reduction in disorder is bought by more dictatorship. The principal strength of market discipline is the absence of public enforcers, and therefore of dictatorship. The case for this strategy is often compelling (Dixit, 2003). Neighbors resolve disputes among themselves, without any government intervention, because they must get along with each other over long stretches of time (Ellickson, 1991). Industries form associations that assure quality for consumers

and penalize cheaters among themselves to assure that consumers continue to patronize the industry (Greif, 1989, 1993, 1994; Bernstein, 1992). Families, cities, and ethnic groups establish reputations in the marketplace and penalize reputation-threatening misconduct by their members. To the extent that market discipline can control disorder, regulation and courts are unnecessary.

However, market discipline does not always work. Market pressures may not eliminate monopolies. Employers may underinvest in safety and blame accidents on an injured worker's own carelessness (Fishback and Kantor, 2000). A fraudulent stock issuer can undermine confidence in markets by stealing money from investors. In the extreme, the much-admired private orderings turn into mafia murders. In these instances, societies may efficiently accept a higher level of government intervention to limit disorder.

The traditional libertarian response to these problems is to move slightly toward more dictatorship by turning to the enforcement of good conduct through private litigation over contracts and torts. Injured employees can sue their employers for harm. Investors can sue issuers and underwriters for damages when they believe that representations about securities were false or incomplete. Ideally, a judge would recognize quickly whether investors have been misled, and compel the issuer to compensate investors for their losses. Such judicial enforcement of contracts and torts is seen by libertarians as a sufficient guarantee of security of property. In principle, such litigation is of no special interest to the government; hence, disputes can be resolved apolitically with no favors to influential parties. Judges may also develop expertise in contract enforcement as well as in handling tort cases; hence they can resolve disputes efficiently and expeditiously. Coase (1960), Nozick (1974), and Posner (1995) have these advantages in mind when they make the case for courts.

Unfortunately, the reality of litigation is not so perfect, both because disorder may remain high and because dictatorship is increased. As with private orderings, the powerful and not the just often get their way in court (Galanter, 1974). Some mechanisms for influencing courts, such as hiring good lawyers, delaying proceedings, and seeking political help, are entirely legal. But judges are also bribed with cash, benefits, or promises of promotion, as well as threatened with violence if they do not favor the strong (Dal Bó et al., 2002). When the rich and the politically connected influence the path of justice, litigation does not reduce disorder efficiently (Glaeser et al., 2003).

A common way of protecting judges from influence is to formalize laws and procedures through codes so as to minimize judicial discretion and the potential for subversion. Such strategies involve moving down the IPF because they reduce disorder but also offer the state more control over the outcomes of litigation. A related mechanism for controlling private subversion of the courts is to make judges employees of the state, so that career concerns protect them from succumbing to outside influence. But as judges become more dependent on the state, the risk of politicization of their decisions, and the social losses from dictatorship, also increase.

The third strategy for enforcing good conduct, government regulation, has been an anathema to libertarians, who see a sharp contrast between the enforcement of rules by judges and by regulators. In fact, the change to a higher level of dictatorship is incremental, and no profound conceptual distinction exists between litigation and regulation. To clarify this continuity, consider an intermediate strategy of private enforcement of public rules.

The government can create rules governing private conduct and leave their enforcement to private litigation. Private enforcement of such specific statutes through litigation is often cheaper than that of contracts or tort claims. For example, it may be efficient for the government to specify appropriate safety standards but to let workers or consumers sue when they feel that these standards have been violated. Likewise, the government can mandate specific disclosures by a company issuing shares, but then leave litigation to investors. It may be cheaper for investors to establish in a trial that the company has failed to reveal specific information, whose disclosure was mandated by law, than to prove the issuer's negligence in the absence of a statute.

Private enforcement of public statutes addresses a number of problems inherent in pure litigation. First, the burden on the courts and the plaintiffs of proving liability or the lack thereof declines if the statutes describe precisely what facts need to be established. Second, subversion of judges becomes more difficult when they lose discretion. It may be relatively easy to convince a judge, by persuasion or bribery, that a security issuer who concealed information from investors is not liable when there are no specific disclosure rules. It is harder to convince the same judge of the issuer's innocence when the law states specifically what must be disclosed. For these reasons, private enforcement of public rules may be an efficient strategy of enforcing good conduct in certain situations, as argued by Black and Kraakman (1996) and Hay et al. (1996). Two areas where this strategy appears to be particularly beneficial empirically is securities issuance and bank regulation (La Porta et al., 2003, Barth et al., 2003).

At the same time, the creation of public rules, even rules that are enforced privately, raises the risks of dictatorship. Such rules can be used to expropriate politically weak groups and to favor politically strong ones. Mandatory safety precautions in factories, mines, and meat-packing plants during the progressive era in the US at the beginning of the 20th century are sometimes interpreted as an attempt by large firms to restrict the entry of smaller rivals by raising these rivals' costs of regulatory compliance (Libecap, 1992; Coppin and High, 1999).

Compared to market discipline and litigation, public regulation has a number of advantages in controlling disorder. First, unlike judges, public regulators can be experts who are motivated to pursue social objectives in specific areas. Landis (1938) and Glaeser et al. (2001) see this as the principal argument for public regulation of securities markets. Second, regulators can act preemptively (Pistor and Xu, 2002). Third, because regulators are provided with incentives to enforce social policy, they may be more difficult to subvert than the disinterested judges with either persuasion or bribes (Glaeser and Shleifer, 2003). These differences render public enforcement more efficient than private enforcement in certain cases.

Still, public regulation suffers from the obvious problem of public abuse of market participants by officials who are either pursuing their own interests or are captured by a particular group, including the regulated industry itself (Stigler, 1971). Although motivated regulators might be more difficult to subvert than judges, regulated industries have developed a range of techniques for protecting industry rents rather than public welfare. With regulation, the risks from dictatorship clearly rise as those from disorder decline.

The basic implication of this theory is that regulation is needed only if disorder is too high for private orderings or courts to counter successfully. The case for regulation is most compelling when the inequality of weapons among the private parties involved in a transaction is severe. Securities issuance is one such instance; workplace safety is perhaps another. In contrast, the entry of new firms into competitive markets is unlikely to require regulatory control, as De Soto (1989) and Djankov et al. (2002) show. Most regulations of competitive labor markets are also difficult to justify on efficiency grounds, as Botero et al. (2003) show.

In some situations, only government ownership can eliminate disorder. If monopolies cannot be tamed by competition or regulation, if quality is essential but cannot be assured by regulation, if public safety is jeopardized, a plausible case for state ownership can be made. Hart et al. (1997) argue that prisons should be publicly-owned because the risk that private jailers mistreat inmates is too high. Because inmates have traditionally had few legal rights, they could not count on the market, the courts, or even the regulators to protect them. Similarly, the military and the police tend to be state-controlled because the cost of disorder from private control is too high.

Although the case for state ownership as a means of dealing with disorder is compelling in some instances, the poor performance record of public enterprises illustrates its limitations (Lopez-de-Silanes, 1997; Shleifer, 1998; La Porta et al., 1999; Megginson and Netter, 2001, Djankov and Murrell, 2002). The failure of state socialism as an economic system reveals most dramatically the consequences of taking dictatorship to an extreme, in which all economic policy is a tool used to maintain the political control by the Communist party (Kornai, 1992).

In summary, our framework enables us to discuss systematically the alternative forms of social control of business. The efficient choice is determined by the slope of the IPF, which varies across countries and industries. In places with more effective government, greater transparency, and greater freedom of the press, for example, an increase in the scope of government to control disorder leads to fewer social losses. In such places, the slope will be steeper, allowing for more state intervention at the efficient choice. In sectors with more effective market discipline, lower inequality of resources among participants, and weaker tendency toward monopoly, increasing dictatorship will yield smaller reductions in disorder. In these sectors, the slope of the IPF will be flatter, and less intervention will be consistent with efficiency. Ultimately, efficient institutional design depends on specific characteristics of countries and sectors, which can only be ascertained empirically. In the next few sections, we illustrate how empirical and historical analysis can inform the application of this framework.

3. Applications: institutional design

We examine three episodes of institutional design: the divergence between France and England in the 12th and 13th centuries in their choices of legal systems, the rise of the regulatory state during the progressive era in the US, and post-communist transition. In all three instances, we focus on efficient institutional choice given the institutional possibilities of a country.

3.1. Legal origins

In the 12th and 13th centuries, England and France established the foundations of their modern legal systems, which took quite different forms. England developed a system of common law, characterized by fact-finding by juries, relatively independent judges, infrequent appeals, and the reliance on precedents and judge-made law rather than on strict codes in reaching decisions. Following the Roman tradition, France adopted a system of civil law, characterized by fact-finding by state-employed judges, automatic superior review of decisions, and later the reliance on procedural and substantive codes rather than judicial discretion. Over the centuries, some of these differences have been emasculated and others reinforced, but the basic differences between the two legal systems have survived to this day.

Glaeser and Shleifer (2002a) argue that a crucial feature of any legal system is its vulnerability to subversion by powerful litigants. The greater are the pressures on courts to rule for the strong rather than the just, the more centralization is needed to counter these pressures. On the other hand, greater centralization raises the cost of dictatorship because sovereigns decide cases according to their own preferences and biases rather than the community standards or laws. In the 12th and 13th centuries, France was relatively decentralized and disorderly, with local notables successfully able to subvert all local institutions to their own advantage. In contrast, England was relatively peaceful and the king maintained control over the entire country. To counter disorder, it was efficient for France to adopt a legal system with more dictatorship than England's, even at the cost of greater scope for sovereign abuse of the law.

Figure 2 illustrates the relevant choices. The French IPF is a shift out of the English IPF, but also a change in its slope. The IPF is steeper in France because greater inequality and

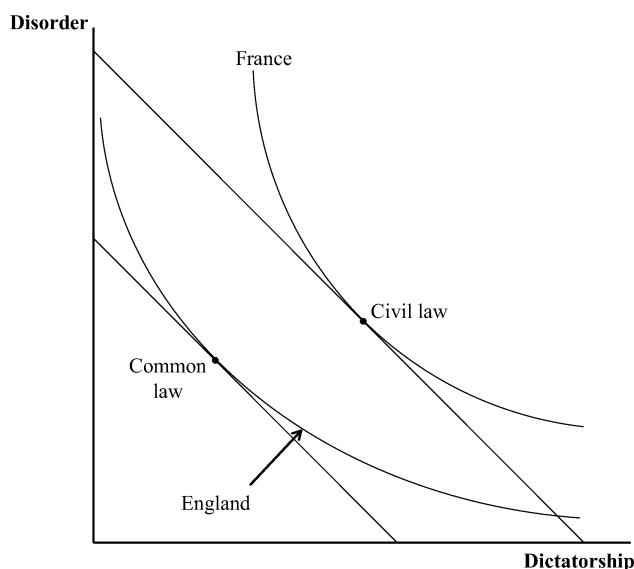


Fig. 2. Legal origins.

constant warfare increased the ability of some private citizens to expropriate others without being punished. In contrast, the ability of private citizens to restrain royal expropriation was similar in the two countries, rendering state intervention comparatively more efficient in France. As a consequence, the efficient choice for France was a legal system with a higher level of dictatorship. In equilibrium, France had a higher level of disorder as well because its institutional possibilities were less attractive than those of England. Glaeser and Shleifer (2002a) also show that state-employed judges, reluctance to rely on independent jurors, codification of rules and procedures, and nearly-automatic appeals are all complementary aspects of this choice of greater centralization and dictatorship to counter the problems of disorder.

The model of Glaeser and Shleifer (2002a) illustrates a more general point, namely that the choice of legal rules crucially depends on the enforcement environment. England adopted common law because decentralized adjudication could be successfully enforced. France adopted civil law, sacrificing of the benefits of local knowledge, because only more centralized dispute resolution was enforceable. In many other contexts as well, the choice of legal rules is shaped by the costs of enforcement that vary across both jurisdictions and the rules themselves.

3.2. *The rise of the regulatory state*

Before 1900, significant commercial disputes in the United States were resolved by private litigation over contracts and torts. Courts ruled on corporate liability in industrial accidents, on anti-competitive practices such as railroad rebates, on safety of foods and medicines, and even on the constitutionality of the income tax. Between 1887, when Congress passed the Interstate Commerce Act, and 1917, when participation in the war put an end to the progressive movement, this situation changed radically. Over thirty years, reformers eroded the 19th century belief that private litigation was the only appropriate response to social wrongs. During the progressive era, regulatory agencies at both the state and the federal level took over the social control of competition, antitrust policy, railroad pricing, food and drug safety, workplace safety, and many other areas. The regulatory state was born in the US.

Glaeser and Shleifer (2003) interpret this experience using a model closely related to the framework of this paper. They argue that the pre-Civil-War US was a relatively stable country, without great inequality among the potential litigants. In this environment, private litigation was an efficient strategy of social control of business. After the Civil War, industrialization and commercialization of the American economy undermined the courts as the sole institution securing property rights. The rise of railroads and large firms increased disorder; these firms maimed passengers and workers, destroyed their competitors through aggressive and possibly wasteful tactics, and occasionally poisoned and deceived customers. The growth in disorder shifted the IPF outward, rendering the reliance on courts inefficient. The robber barons commanded economic and political resources that overwhelmed consumers, workers, or competitors who complained in court. They did so both legally, by hiring superior lawyers, and illegally, by bribing judges and legislators.

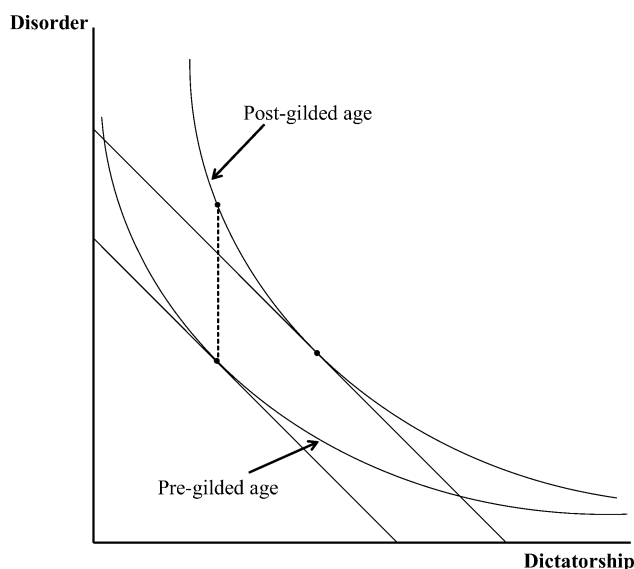


Fig. 3. Progressive reforms.

Figure 3 illustrates the changes in the US economy during the post-civil-war era and the resulting regulatory reform. Technological change shifted the IPF outward and also changed its slope so that the reduction in disorder from a marginal rise in dictatorship increased. When courts were subverted, marginal regulation was relatively productive, especially because the government was becoming more open and transparent during this period. As Fig. 3 shows, the efficient institutional choice in the American economy in response to this shift in the IPF required more regulation to provide the countervailing power to big business.

Glaeser and Shleifer (2003) interpret the rise of both regulation and litigation over statutes rather than contracts and torts, as well as many other reforms in the US economy during the progressive era, as such a shift toward the newly-efficient system of social control of business. In equilibrium, disorder may have increased relative to the mid-19th century, but this by itself does not imply that the progressive reforms were ineffective. As noted by Stigler (1971) and his followers, dictatorship increased as well. The greater power of the state led to greater benefits of state capture, and thus to more capture in equilibrium. Nonetheless, the reforms moved the US economy to a better point than in 1880, as much of the evidence on economic and social progress during the reform period indicates.

3.3. Institutions in transition

At least some aspects of the transition of Eastern Europe and the Former Soviet Union from socialism to capitalism can be interpreted using our framework. The crucial aspect of the transition is the collapse of Communism, and the subsequent decline in dictatorship through most of the region. Figure 4 presents our interpretation of transition in Russia, East European countries, and the FSU non-reformers, with Belarus taken as an example, in the

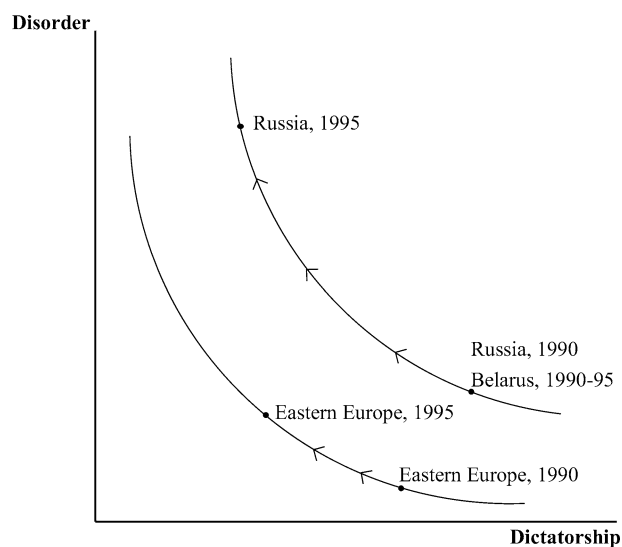


Fig. 4. Transition.

early 1990s. Two crucial factors separate Russia from the FSU non-reformers, on the one hand, and from East European reformers, on the other. First, Russia experienced a more dramatic decline in dictatorship and a more significant increase in disorder than countries like Belarus and Uzbekistan. Second, Russia's IPF was further from the origin than that of the East European countries and its shift up the IPF was probably greater. We would argue that, in the 1990s, Russia stayed on its Institutional Possibility Frontier.

According to Kornai (1992), the Communist party is the critical mechanism for keeping economic, political, and social order in socialist countries. Such police order comes at the expense of personal, economic, and political freedom, but it is order nonetheless. As the Communist control of the Russian economy and society was eliminated by Gorbachev and Yeltsin, so were the mechanisms for keeping order. The immediate benefits of freedom, such as the free press, the growth of entrepreneurship, the tremendous rise of ties to the rest of the world, were apparent, but so were the costs. The initial impact of the fall of economic dictatorship in Russia was extreme economic disorganization, as Murrell (1992), Murphy et al. (1991), and Blanchard and Kremer (1997) argue. Even as markets began to work, disorder was manifest. Johnson et al. (1997) show that the unofficial economy reached perhaps as much as 40% of total economic activity in Russia. The nascent public institutions were subverted by the powerful through crime, corruption and political influence (Shleifer, 1997; Hellman et al., 2003; Sonin, 2003). Most importantly, the USSR disintegrated and Russia itself, like the US prior to the adoption of its constitution and Argentina today, experienced severe problems of localism, with regional governments undermining both national finances and law and order (Shleifer and Treisman, 2000; Zhuravskaya, 2000). Russia's experience with the collapse of communism can be described as a sharp move up along its IPF.

This experience can be contrasted with that of non-reforming Belarus, in which the Communist dictatorship was replaced by a personal dictatorship, but many of the controlling institutions of the Communist state remained intact. Belarus still utterly lacks freedom, but it did not suffer as sharp a rise in disorder, decline in official output, or growth in the unofficial economy (Johnson et al., 1997). By preserving the benefits of authoritarian order, Belarus failed to reap the benefits of the economic and political transition from Communism, which allowed the more aggressive reformers to move on to rapid growth.

Compared to Russia, East European countries started with IPFs closer to the origin. These countries experienced a shorter spell of Communism, and had, in the cases of the Czech Republic, Hungary, and Poland, rebelled against their Soviet occupiers and local dictators. These countries had many more independent organizations and, in the case of Poland, an independent Catholic Church. They were also more integrated into Western Europe and anxious to join the European Community, which imposes rules of cooperation restricting dictatorship and disorder. Compared to Russia, East European countries also did not move as far up their IPFs, perhaps because they did not face severe problems of decentralization and localism. As a consequence, the East European countries experienced relatively short initial recessions, and quickly transitioned to rapid economic growth. Russia, in contrast, had a longer and deeper recession, and initiated rapid economic growth only in the late 1990s, following an economic crisis and a number of order-restoring reforms under president Putin. The general point is that economic and social change in each country should be considered in light of its own institutional possibilities, rather than some idealized view of a rich capitalist democracy.

4. Transplantation of institutions

Although some institutional diversity can be explained by focusing on efficient choices, transplantation is a dramatic deviation from this approach. As European powers conquered much of the world in the 19th century, they brought with them their institutions, including their laws. A significant portion of the institutional variation among countries, especially with regard to legal systems, can be accounted for by transplantation.

During his wars, Napoleon exported the French legal system to Spain, Portugal, and Holland. Through his and their colonial conquests, it was transplanted to Latin America, to large parts of Europe and North and West Africa, and to parts of the Caribbean and Asia. The common law tradition was transplanted by England to the US, Canada, Australia, New Zealand, East Africa, to large parts of Asia, including India, and to parts of the Caribbean. Two other legal traditions—German civil law and socialist law—were also transplanted. The German legal system was voluntarily adopted by Switzerland, by Austro-Hungary, and later by Japan; through Japan German civil law influenced the legal systems of Korea, Taiwan, and China. The USSR transplanted its legal system to socialist countries. These channels of both voluntary and colonial transplantation have led to systematic variation in legal systems among countries.

La Porta et al. (1997, 1998) find strong evidence of the importance of legal transplantation. Using a sample of 49 countries, the authors examine the laws governing the protection of investors, including shareholders and creditors, from expropriation by

corporate insiders. They find that, in general, common law countries protect shareholders better than do civil law countries and especially better than French civil law countries. They also find that common and German civil law countries protect creditors better than do French civil law countries. La Porta et al. (1997, 1998) and the subsequent studies demonstrate that both legal origin and investor protection are strongly correlated with various aspects of financial development (Demirgüç-Kunt and Levine, 2001; Johnson et al., 2000a, 2000b; Wurgler, 2000; Beck et al., 2003a, 2003b; Friedman et al., 2003; La Porta et al., 2000, 2002).

Djankov et al. (2002, 2003) and Botero et al. (2003) examine the variation across countries in government regulation of entry by new firms, of judicial procedures in courts, and of labor markets. Although the data for each of these studies were collected using different procedures and they cover somewhat different samples of countries, some systematic patterns emerge. Countries have pronounced styles of social control of business that are closely related to the origin of their laws. In all three areas, i.e., entry, courts, and labor markets, socialist and French legal origin countries regulate much more heavily than do the common law countries. On average, the same countries that regulate entry, also regulate courts and labor markets; these correlations are at least partly driven by legal origin. Likewise, compared to common law countries, socialist and French legal origin countries have higher government ownership of banks (La Porta et al., 2002) and state-owned enterprises play a greater role in their economies (La Porta et al., 1999). These results suggest that transplantation, rather than local conditions, exerts a profound influence on national modes of social control of business, including both state ownership and regulation. This evidence poses a challenge to standard theories of regulation, which emphasize local industry conditions and the power of interest groups to explain regulatory practice.

The fact that colonial transplantation is such a significant determinant of institutional design suggests that the observed institutional choices may be inefficient. A legal and regulatory system that is perfectly suitable to France may yield inefficiently high levels of regulation and state ownership when transplanted to countries with lower civic capital. Likewise, a system of independent courts that works in Australia or the US may fail in Malaysia or Zimbabwe.

To explore how colonial transplantation can go awry, we apply our theoretical framework to transplantation. As we discussed above (Fig. 2), common law has historically evolved in England as a system more accepting of disorder relative to dictatorship than the French civil law. Accordingly, we think of a legal system as delivering dictatorship and disorder in fixed proportions, with common law corresponding to the proportionately higher loading of disorder. This is not exactly right, since the legal system deals with “inputs” into law and order, whereas our figures reflect “outputs,” but captures the fundamental difference among legal systems.

As Fig. 5 shows, a country’s legal system is the intersection of the ray emanating from the origin characterizing these proportions with its own IPF. We assume that, as the IPFs shift outward from developed to developing countries, they flatten out. Because the developing countries often lack government transparency, press freedom, and bureaucratic efficiency (Djankov et al., 2003; La Porta et al., 1999), the marginal productivity of dictatorship in reducing disorder is lower than in developed countries. As a consequence,

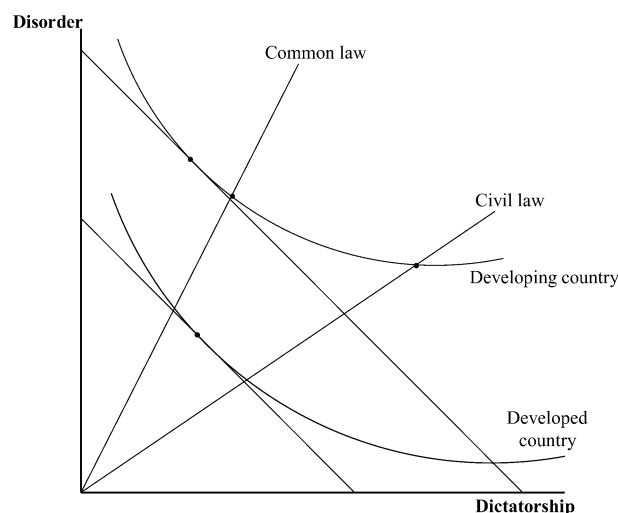


Fig. 5. Transplantation of laws.

developing countries efficiently need relatively less dictatorship. As Fig. 5 shows, whether common or civil law is transplanted, the equilibrium dictatorship and disorder increase because the institutional possibilities are less attractive. Relative to the efficient choice for a developing country's IPF, transplantation leads to excessive intervention and regulation, and relatively more so in civil than in common law countries. Because of the substantial risks of public abuse of business, developing countries need less regulation for efficiency. But when legal systems are transplanted, they end with as much relatively speaking, and more in absolute terms, than do the origin countries. This problem is most severe in civil law countries, which end up being especially over-regulated relative to efficiency.

Consistent with Fig. 5, the evidence shows that the levels of regulation are generally excessive in developing countries. Higher levels of regulation of entry are associated with larger unofficial economies and no measurable benefits in terms of product quality (Djankov et al., 2002). Higher level of regulation of judicial procedure are associated with higher costs and longer delays, without offsetting benefits in terms of perceived justice (Djankov et al., 2003). Heavier regulation of labor is associated with larger unofficial economies, higher unemployment, and lower labor force participation (Botero et al., 2003). In all these cases, the transplanted regulatory systems appear excessive for the countries that use them.

This evidence points to some tangible ways in which the existing institutions fall short of their potential, and suggests some possible directions for reform. Developing countries should deregulate activities in which market discipline is potentially very effective and the marginal benefits of greater intervention are low, such as entry and labor markets. Because public regulators so often abuse their powers, deregulation is likely to diminish the costs of dictatorship without a significant increase in disorder. The evidence also points to some pitfalls of reform. For example, highly formalized general jurisdiction courts cannot be presumed to resolve disputes in developing civil law countries efficiently. In the most

attractive areas for deregulation, competition and market discipline, rather than courts, must be counted on to control disorder. In contrast, in the developed countries, specialized courts are becoming an increasingly attractive alternative to regulation.

Legal origin as we discussed it proxies for the strategy of social control of business. As such, it reflects the location of a transplanted institution on a country's IPF, rather than the location of the IPF itself. This approach may be too narrow. For example, La Porta et al. (2004) examine constitutional checks and balances in 71 countries. They find that constitutional guarantees of judicial independence are correlated with both common law legal origin and the security of property rights. The transplantation of common law might thus influence the location of the IPF and not just the regulatory stance.

To this point, we have focused on the transplantation of the legal and regulatory regimes; however, other institutions are obviously also transplanted. How they are transplanted also matters. Berkowitz et al. (2003) and Pistor et al. (2002, 2003) stress the importance of receptivity for the success of transplanted legal systems. Acemoglu et al. (2001) argue that the quality of institutional transplantation depends on whether the colonizers settled in the occupied land, as they did in the US or New Zealand, or only set up trading posts and exploited the colonies, as they did in many African states. Understanding the consequences of transplantation is a crucial challenge for the new comparative economics.

5. Politics

Politics has a bad name in economics. From Marx (1872), to the Austrians (von Mises, 1949; Hayek, 1960), to institutional economists (Olson, 1965, 1982; North, 1990), to public choice scholars (Buchanan and Tullock, 1962; Brennan and Buchanan, 1980), to regulation economists (Stigler, 1971), to political historians (Finer, 1997), students of institutions have maintained that political choice is often responsible for institutional inefficiency. Generals, dictators, ascendant social classes, democratic majorities, and favored interest groups all choose institutions that entrench them in power so that they can collect political and economic rents. Olson (1993), Rajan and Zingales (2000), Acemoglu and Robinson (2000, 2002), Aghion et al. (2002), and Glaeser and Shleifer (2002b) present models examining these phenomena.

In our framework, inefficiency can take two distinct forms. First, equilibrium might still lie on the IPF but reflect an inefficient political tradeoff between dictatorship and disorder. Second, equilibrium institutions may not even end up on the IPF, since Coasean negotiations often fail in politics (Coate and Morris, 1995; Olson, 2000; Acemoglu, 2003).³

The political perspective predicts that equilibrium institutions can be either excessively disorderly or excessively dictatorial. Recent research on Yelstin's Russia argues, for example, that the oligarchs who gained strong influence over the government preferred institutional disorder as a strategy for maximizing their rents (Black and Tarassova, 2003; Sonin, 2003). More typically, as those in power attempt to stay in power, they help

³ We do not discuss the large literature on comparative political institutions, e.g., Laffont (2000) and Persson and Tabellini (2000).

themselves and their supporters through excessive dictatorship. State ownership becomes a mechanism for dispensing patronage and for maintaining political support for the incumbent politicians (Shleifer and Vishny, 1994). Regulations with ostensibly benign goals actually protect incumbent firms from competition, and provide extensive corruption opportunities to their enforcers (Stigler, 1971; De Soto, 1989; Djankov et al., 2002; Bertrand and Kramarz, 2002; Besley and Burgess, 2004; Rajan and Zingales, 2003). At the most basic level, the political perspective explains socialism as a system that concentrates all political power and economic decision making in the hands of a small elite and thereby provides this elite with the most powerful lever for perpetuating itself, namely making the entire population of a country dependent on the elite economically.

Still, not all institutional failure should be blamed on politics. In fact, politics often moves societies toward institutional efficiency rather than away from it. There are at least four significant ways in which the political process moves institutions toward efficiency. First, as Hayek (1960) argued for the case of common law, some institutions evolve over time into more efficient forms as they confront new circumstances. Second, governments are often captured by interest groups that favor efficiency. De Long and Shleifer (1993) show that, over the last millennium, the regions of Europe that were governed by merchants established good institutions and experienced rapid urban growth, in contrast to the regions governed by absolutist princes. Third, even when some interest groups obstruct change, Coasean bargaining often leads to efficient institutional choice (Becker, 1983). The adoption of the Magna Carta in England and of the US Constitution are the most famous examples of such bargaining. Finally, despite the risks of the tyranny of the majority stressed by Buchanan and Tullock (1962), voting is often a powerful force toward more efficient institutions (Wittman, 1989). The substantial rise in the world's prosperity in the 20th century may be the best evidence of the virtues of democratic politics.

Not all efficiency-enhancing bargains have the sweet smell of the Magna Carta or the US Constitution, but they may still improve welfare. During the 1990s, Russia's president Yeltsin fought both the possible return of the Communist dictatorship and the extreme disorder arising from decentralized federalism and economic disorganization. Yeltsin's battles often involved political bargains, which to the uninformed observers appeared as failures of democratic rule. Privatization required deep concessions to enterprise insiders, the defeat of the Communists at the polls in 1996 necessitated a purchase of political support from the oligarchs, and the preservation of the federation demanded massive giveaways to independent regions (Boycko et al., 1995; Shleifer and Treisman, 2000). By the year 2000, Russia emerged as a democratic, capitalist economy, with much stronger institutions than it had at the beginning of the decade. Yeltsin's successor was able to continue his program and reap the considerable benefits of stability and economic growth. In retrospect, many of Yeltsin's policies appear as welfare-improving strategies for combating dictatorship and disorder.

To develop this point further, consider the even more extreme example of Peru's president Fujimori and his director of the Central Intelligence Agency, Vladimiro Montesinos. Montesinos was Fujimori's right-hand man; he managed the president's relations with other politicians, judges, business people, the media, foreign governments, and civil society. To this end, Montesinos routinely exchanged favors and bribes with key members of the elite. Unfortunately for Montesinos, he taped his conversations and

exchanges. When Fujimori eventually fled the country, the tapes became public. Ocampo (2003) reviews the tapes, and documents the corrupt deals between Montesinos and over 100 members of the Peruvian elite.

On the one hand, what emerges is a story of obscene dictatorship and corruption. On the other hand, these deals were instrumental to restoring order in Peru. Before Fujimori was elected, Peru was in a state of anarchy, with negative growth, continuous and murderous threat from the left-wing guerillas, the Shining Path, and incessant political battles among the elite. Fujimori restored order, destroyed the Shining Path, and attained significant economic growth during his rule. He achieved these goals by reducing conflict among the elites and entrenching himself in power through Montesinos' corrupt deals. From the perspective of Peruvian institutions, these deals reflect a move to eliminate disorder and increase dictatorship, which was probably efficient. Although this move is not attractive, neither were the tradeoffs that Peru faced. Eventually, as Fujimori tried to consolidate his dictatorship, the democratic process worked and he was driven out of the country. Not surprisingly, disorder increased as well.

The often benign influence of politics is subject to an important caveat. Politics is fundamentally a negotiation between different interests. The success of political negotiation relies crucially on the civic capital in the society, the capacity of its members to cooperate. Countries with higher civic capital, and thus more attractive IPFs, are more likely to have successful political negotiations and to choose an efficient point on the IPF. In this important way, the location of the IPF and the political choice of a point on it are not independent. Even so, it would be incorrect to blame all poor institutional outcomes on politics because the failures of political negotiation are rooted in many of the same factors that undermine institutional opportunities in the first place.

6. Conclusion: appropriate institutions

At least since the 18th century, economists have recognized that institutions that secure property rights are conducive to good economic performance. The challenges of transition and development, and the growth of empirical knowledge, increased our appreciation of the benefits of good institutions. Now economic analysis can move further by recognizing that different institutions are appropriate in different circumstances. The new comparative economics deals with the positive and normative aspects of institutional diversity.

Such diversity, we argue, can be understood in terms of the fundamental tradeoff between controlling dictatorship and disorder. We have employed this tradeoff to shed light on a range of historical experiences, including the origin of legal systems, colonial transplanted, the rise of the regulatory state, and the transition from socialism. It can perhaps also illuminate other historical instances in which dictatorship was used—and abused—to control disorder, such as state formation as a counterweight to localism and civil war, the shift to central planning during wartime, and the abrogation of civil rights in a fight against terrorism.

The tradeoff between dictatorship and disorder also has normative implications, as it suggests that a crucial determinant of institutional efficiency is the marginal effectiveness of dictatorship in reducing disorder. A corollary of this result is that reforms in each country

must be evaluated relative to its own institutional opportunities, rather than some idealized benchmark of perfect government and markets. In particular, government interventions that are appropriate in richer countries, which have high levels of public accountability and transparency, may be inappropriate for the less developed economies.

The tradeoff between dictatorship and disorder could perhaps also be brought, at the micro-level, to understand which activities belong inside, and which belong outside a firm (Coase, 1937). For the owners of a firm, using either command inside the firm or the market outside the firm results in losses of value. The cost of command, also known as the agency cost, is similar to the cost of dictatorship in that employees can use the assets of the firm to pursue their personal goals rather than the owners' interests. The cost of the market is similar to the cost of disorder in that the firm's trading partners can hold it up when contracts are incomplete (Grossman and Hart, 1986). The choice of which activities belong in-house and which should be contracted out depends on how much contractual holdup is reduced by an increase in delegated command.

The field of comparative economics has entered a fascinating new phase. The extraordinary turbulence in the world during the last decade, from post-communist transition, to Asian and Latin American financial crises, to Africa's economic and social devastation, has flagged the centrality of institutional reforms, but also uncovered the many pitfalls along the way. Although we are all humbler and wiser now, we are also keenly aware that the comparative perspective, which identifies both the possibilities and the limitations of individual societies, serves as a useful framework for future progress.

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