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## The Economics Behind Law in a Market Economy: Alternatives to the Neoliberal Orthodoxy<sup>1</sup>

*Joseph E. Stiglitz*

We noted in the introduction that China, like developing countries all over the world, has been urged to adopt a set of institutions, typically described as “best practices” and thought to characterize the Anglo-American model of market economy. Underlying a successful market economy, it is argued, there exists a rule of law—and by *rule of law* what is meant is not just any legal framework, but a particular one, what we referred to in the introductory chapter as the “neoliberal orthodoxy,” based on “Chicago School” economics.<sup>2</sup> It is important to place this approach, which focuses on notions such as “secure property rights,” in perspective. It has long been the subject of intense debate among both economists and legal scholars. Although the Chicago School has had enormous influence in thinking about legal and other institutions, it no longer represents the *best* thinking about the relationship between law and economic policy—far from it. As we explained in the Introduction, as a matter of economics, many of the foundational premises of the Chicago School have been challenged. As a matter of law, the institutions thought necessary for market efficiency have been shown to be far more variable and contingent. And there is more to a successful economy than just efficiency. There is not a single best set of institutional arrangements that work for countries in different circumstances with different objectives. Countries face choices about their institutional arrangements, and the choices about strategy and institutional form are critical, particularly as China puts in place institutional arrangements that will have a long-term dynamic effect on the structure of the Chinese market economy. As China sets out to create a market economy with Chinese characteristics, as it sets out to advance its objectives of creating a harmonious society, as it thinks about institutional designs that provide the flexibility for changing course as it advances in its development (in accord with the principle of “crossing the river by feeling the stones”), it needs to think carefully about the full range of consequences of each of the alternatives—not only for efficiency and equity today, but for how current choices are likely to impact its future evolution.

This chapter explains the limitations both of the underlying economics upon which the neoliberal orthodoxy is based and of some of the associated legal principles.

## UNDERLYING ASSUMPTIONS AND ANALYSES AND THE CRITIQUES

Underlying the policy stances of the neoliberal law and economics tradition are certain analytics; and underlying those analytics are certain assumptions. In the past three decades, research has called into question the assumptions, showing that the results are not robust—even small changes in assumptions lead to major changes in conclusions, e.g., concerning the efficiency of markets. And events have called into question both the relevance of its underlying assumptions and the conclusions that follow from them.

Neoliberal analysis is predicated on assumptions of rational and well-informed consumers interacting with profit-maximizing firms in competitive markets in a world with perfect risk and capital markets. Under these assumptions (with a few additional ones—the absence of externalities, such as those associated with the environment, and the absence of public goods), markets are (Pareto)-efficient.<sup>3</sup> Subsequently, it was shown that whenever information is imperfect or risk markets incomplete—that is always—markets are not (constrained Pareto)-efficient (Greenwald and Stiglitz 1986).

The Chicago School responded with a variety of opposing arguments. In the case of externalities, it was argued that markets could and would efficiently “internalize” the externalities. Most influential was the work of Coase (1960), which suggested that in the absence of transaction costs, clear and unambiguous assignments of property rights lead to efficiency (the Coase Conjecture), even with externalities. If nonsmokers are given the rights to the air, then smokers will pay them to be allowed to smoke if and only if the value of what they gain from smoking exceeds the value of what the nonsmokers lose. If smokers are given the rights to the air, then nonsmokers will pay the smokers not to smoke, so long as the value of what they gain from having a smoke-free room exceeds the loss that smokers incur in not being able to smoke. Either system of assigning property rights could lead to economic efficiency in the absence of transaction costs. Where there are transaction costs, the efficiency gains from lowering these costs are often given primacy in determining desirable legal rules. There are, of course, distributional consequences to these alternative assignments of property rights, but these are typically not the focus of the analysis.<sup>4,5</sup>

In response to the critique that markets are often not competitive, Chicago School economists argued that the scope for anticompetitive behavior is limited. Even if there was only one firm, as is the case with a natural monopoly, potential competition was all that was needed to ensure that firms do not exploit their market power. Competition *for* the market replaced competition *in* the market. The implication was that there was little need for antitrust action (indeed, the risk is that government intervention would impede real competition in the market

place).<sup>6</sup> This was called the contestability doctrine (Panzar and Willig 1977; Baumol, Panzar, and Willig 1982). But then, like the other attempts to defend doctrines of market efficiency, this view too was debunked, as it was shown that markets would not be contestable so long as there were *any* sunk costs, no matter how small (Stiglitz 1988). The example highlighted by advocates of contestability—the airline industry—had outcomes that were *highly* noncompetitive.

The Chicago School never came up with responses to other critiques: the failure of markets to be efficient, for instance, when information is imperfect and asymmetric, or that markets are often imperfectly competitive, or that transactions costs are significant, in which case the assignment of property rights did make a difference.<sup>7</sup>

Chicago School economic analytics had some derivative implications, such as: individuals should be allowed to freely contract with each other; the government's only role is to enforce the contracts that have been made,<sup>8</sup> the stronger the intellectual property rights, the better. In this view, the role of government is limited to ensuring property rights and enforcing contracts that are “market-supporting” while avoiding regulation that seems to “distort” market prices. Individuals and firms will have an incentive to make use of assets efficiently and to make the set of contracts that works best for them; and in pursuing their private interests, they ensure the efficiency of the economy as a whole.

As we have noted, modern economic theory has questioned both the underlying assumptions and the derived economic propositions. Information is often imperfect and markets (including futures and risk markets) are never complete. Individuals and firms have been shown to be not fully rational. This was evident in the run up to the 2008 financial crisis—as it has been evident in the periodic bubbles and panics that have characterized market capitalism's history. The consequences of irrationalities and other market failures can be devastating. When profit-maximizing firms exploit these irrationalities, the outcomes are often especially unpleasant—again seen dramatically in the crisis, as banks exploited poor and less-educated borrowers through predatory lending practices. Other market failures are also hard to ignore: many of the major markets (finance, media, computer operating systems, applications, airlines, microprocessor manufacturing) are far from perfectly competitive.

Free contracting does not generally result in economic efficiency; in particular, problems arise when contracts between two parties affect third parties (e.g., a loan between parties A and B affects the likelihood of default with Party C). Competitive contracting equilibriums are also not efficient whenever there are signaling problems (e.g., bankruptcy provisions may be used as a costly and inefficient signal).

Strong property rights can even impede economic efficiency. Consider, in particular, intellectual property rights. Knowledge is a public good, and intellectual property rights (giving the knowledge producer exclusive rights over the use of the knowledge that he has produced) can introduce a static inefficiency in the economy.<sup>9</sup> Whether intellectual property rights is in general the best way of ensuring the efficient production of knowledge is a moot question; but poorly designed property rights, giving temporary monopoly power to a particular corporation or individual, can actually impede innovation and distort the short-run allocation of resources.

Since issues of efficiency and distribution cannot be separated (e.g., in the presence of agency costs),<sup>10</sup> then how property rights are assigned can affect the efficiency of the economic system.

Finally, societal well-being may be affected by distributional considerations—which may not be simply and easily altered by political processes. This has been a key point of legal critiques—the background rules will set the market running toward alternative equilibria.

## BEYOND THE CHICAGO SCHOOL LAW AND ECONOMICS TRADITION

This chapter explores the consequences of these realities for the key hypothesis of the Chicago law and economics tradition—that the role of government is simply to ensure clear property rights and that property rights and contracts are rigorously enforced. So far, we have argued that this underlying economic presumption is false, that if the government does this, market outcomes will not be efficient. Moreover, we have argued that even if the outcomes were efficient,<sup>11</sup> society cares about the distribution of income and redistributions are not costless.<sup>12</sup>

The purpose of the law is not just to ensure efficiency, but also to enable socially desirable outcomes (in China’s parlance, for instance, there is a concern about achieving *a harmonious society*). Indeed, society may be concerned not just with outcomes, but with the processes by which they are achieved.

The Chicago perspective failed not only in its view about the underlying economy, but also about the objectives of law. The two failures get intertwined in the Chicago School’s overly simplistic views of property and property rights, of what “security of property rights” might mean, and of what a good property rights system might look like.

### **Rights and obligations in an interdependent world**

As we have noted, the assertion that *all* the government should do is simply make sure that property rights are clearly assigned and enforced is wrong. Such an approach would unbalance the economic system, deferring equity issues while consolidating the authority of some over society’s resources. More importantly, however, this approach to property is simply incoherent. Property is not just about “rights.” Every right is matched by an enforceable duty upon other actors to respect that right—rights impose costs, and must be understood in relational terms.

*A fundamental problem for policy arises from the fact that what each individual does affects others.* If an individual smokes, it affects nonsmokers. A building next door may block my sunlight. A car driving down the road forces me to be more careful as I cross the street. A factory’s smoke makes life unpleasant for those living next door.

It is simply impossible to say, other than as a matter of political choice, who “caused” the “harm”—the factory that smokes up the house or the household that

wants to live smoke-free next door. There would be no “externality” if there were no house next door. Economists argue that individuals should pay the full costs of their actions. This is sometimes put in a temporal context. Assume a house has been constructed, a family has already taken up residence, and a firm is considering constructing a factory. Then the factory presumably should take into account the costs imposed on the adjacent family before it makes a decision to build. But this seems to assign property rights on a first-come-first-serve basis—and if sunk costs are low, there is no reason to believe that this will result in an efficient outcome. Moreover, it could induce an inefficient “race.” Consider two adjacent plots of land. If the homeowner builds first, he will receive compensation for the pollution, but not otherwise.

As a legal matter, one must “assign” responsibility somewhere and there ought to be a political or economic or ethical basis for doing so. What makes such an assignment so difficult is that, as Coase points out, there are often joint costs of a set of adjacent economic activities, and we need a larger perspective to assess the impact of various arrangements on the total value of production.<sup>13</sup> Western governments have settled on a set of principles that guide actions, but leave many questions unanswered. In the context of environmental externalities, there is widespread acceptance of the polluter-pays principle. A regulation restricting pollution is simply a more efficient way of inducing good behavior than forcing those engaging in pollution to compensate those who have been damaged. As a society, we have decided that individuals and firms should not have the right to emit air and water pollution. (Part of the reason may be that it would be hard to run a system in which individuals were paid *not* to pollute. Everyone who does not pollute might claim that he *could* and would pollute were he not to receive compensation.)

Most governments have decided that society as a whole should not pay compensation for the loss in market value as a result of the passage of a regulation (a so-called regulatory taking). In a sense, government has certain “residual rights” of control—one cannot restrict the ability of government to pursue the public interest.

Particularly problematic are definitions of rights, obligations, and constraints associated with social constructions, such as corporations and intellectual property.<sup>14</sup>

The legal framework affects the consequences of different actions and therefore frames the actions that will be taken.<sup>15</sup> It may do this in dozens of different ways: by criminal law, tax law, direct or indirect regulation, tort law, or by specifications of the rights, privileges, and duties comprising property law. Provisions may be mandatory, discretionary (with discretion given to the prosecutor or administrative authority), or may require action by the affected parties themselves. Penalties may be mandatory, discretionary (with the judge or other official), may be predetermined and fixed, or may vary with the impact of the injurious activity, or may be subject to bargaining by the affected parties. The law could prohibit a factory from polluting—sending the factory owner to jail if, say, his factory’s pollution exceeds a critical level. It can impose criminal penalties, as a strong inducement for the factory owner not to engage in activities that inflict harm on others. It may use zoning, not allowing houses to be built in the vicinity of the factory, so that no one will suffer the impacts of the factory’s pollution. It

might allow houses to be built, specifying that anyone moving in cannot sue the factory owner. Or it can allow the homeowner to sue for compensation for undoing the damage of the pollution. It can require the factory to pay a price for its pollution—and it can take some of the money received to compensate those who might be adversely affected.

Note that the bundle of entitlements we call “property” famously includes the legal privilege to injure (in certain particular ways) other economic actors without paying compensation. For example, I can set up a competing business on my property adjacent to yours even if it puts you out of business and forces you to sell your land.

There is no avoiding making regulatory choices in the design of a property rights regime which determines just how strict or lenient the duties on others will be—have they a duty to *never* trespass or only to avoid trespass absent an emergency? Must they respect your intellectual property no matter what, or might they make “fair use” of it? When, moreover, will the privilege to injure be limited—can I set up a noxious factory adjacent to your home or only a competing business? Though intellectual property rights give one a temporary monopoly power in the use of that knowledge, it does not give one the right to *abuse* that monopoly power by engaging in anticompetitive practices.

Accompanying “rights” are obligations. An owner of land may have the right to use his land, but he may also have the responsibility to make sure that no one uses his land to dump toxic waste that spoils the underlying ground water. Accompanying intellectual property rights is an obligation to disclose information so that others can build on the knowledge. The owner of a telephone company may have an obligation to provide interconnectivity.

Not only can these questions of policy not be avoided; there is, in general, no one best way to resolve them. There are, of course, efficiency arguments for the assignment of responsibilities (as well as rights): the landowner may be in the best position to monitor its usage; it is a natural by-product of other economic activities, including those associated with ensuring the value of the asset. In this view, it is “efficient” to assign to the owner the responsibility to ensure that his property does not become a toxic dumping site.

Under certain idealized circumstances (e.g., the absence of transactions costs), economic efficiency could be achieved under a variety of rules for assigning property rights, and there has developed a tradition that argues that property rights should be assigned in ways that minimize transactions costs. It would be very expensive for each individual to ascertain who might harm him or her by driving recklessly, seek the potential “harmers” out, and compensate them for not harming. It is accordingly more efficient to give individuals the right not to be harmed, imposing the responsibility of not having an accident on the driver. But such assignments have distributional consequences, and there are costs associated with undoing those distributional costs—which also need to be viewed as part of the “transaction costs” of the system. Thus, there is no way of *simply* focusing on efficiency, in a narrowly defined way.

In the end, how property rights are assigned does affect the nature of the equilibrium that emerges. There are (in the language of economists) wealth effects. The nature of the equilibrium that emerges today affects the equilibria that emerge in the future, which society may care about. These are societal choices, made through political processes.

In short, there *are* choices. One cannot simply devolve responsibility for these choices to economists, viewing them as “societal engineers,” looking for the “best design” (least cost) system.

## THE COMPLEX NATURE OF PROPERTY

We have argued that property rights and obligations are a social construction, and the task facing any society is how to construct the legal system (here we focus on property rights) in a way that advances societal objectives. The task of the social scientist is to help clarify the set of feasible choices and their consequences. One of the objections to the Chicago School’s approach is that it slid over the wide range of choices facing every society, pretending that there was only one “choice,” which effectively Pareto-dominated all others (i.e. makes all individuals as well or better off than any of the alternatives). We will look at several examples of these choices—in particular, how they are bundled and how rights can be changed.

### Alternative mechanisms for “regulating” behavior

The choices individuals make are affected, as we have noted, not just by property rights but also by regulations (which can in fact be viewed simply as restrictions on the use of property and thus as a part of the property rights system) and taxes. All of these change the opportunity set facing firms and individuals in ways that alter their behavior in order to induce behavior that is more congruent with social objectives. A fundamental result of modern economics is that tax policy can accomplish much of what regulatory policy can, i.e., by shaping the returns that individuals reap from various actions, tax policies shape the actions that individuals take. Thus, we see more holistically property rights, regulatory policies, and taxes as alternative instruments for structuring the behavior of individuals, households, firms, NGOs, etc., including their relationships with each other.

To take one example: one can induce individuals not to pollute either by imposing formal regulations, by taxing pollution, or by making individuals pay for the damage done by the pollution, through a liability system.

Once we recognize that what matters are the consequences, it becomes apparent that, indeed, there may be many functionally equivalent ways of achieving the same outcomes. One can have a mandate, say, that all individuals have health insurance. A mandate is a requirement, enforceable either by a large monetary or civil penalty. Assume there were a \$500 fine for *not* having health insurance, and assume health insurance costs \$2000. One could get the equivalent result by imposing a \$500 tax on everyone, but simultaneously, providing a tax credit of up to \$500 for anyone who purchased (qualified) health insurance.

Government can try to shape the behavior of individuals and firms, not only through *ex ante* interventions (affecting prices or imposing constraints *before* actions are undertaken) but also through *ex post* actions (imposing penalties *after* certain adverse consequences arise).

One can go even further: one can allow punitive damages, i.e., the wronged party collects more (sometimes much more) than the losses incurred. He is, in effect, rewarded for acting as a “private attorney general.” This provides strong incentives to private citizens to enforce the law and strong deterrence to potential offenders.<sup>16</sup>

Indeed, there is an even broader range of social decisions. One can have a system of taxes to induce “good” behavior or a system of regulations to require it; but society can choose to *supplement* such a system with a liability system. Individuals suffering injury may, under certain circumstances, be allowed to sue even though there is a regulatory or tax system in place; or they may not. Regulating the use of tobacco (a poisonous substance) may relieve tobacco companies of the liability for the harm done by their product and their failure to adequately represent those risks, or it may not.

Each of these regimes has distributional and efficiency costs (broadly defined, to include transaction costs).

One of the problems with many liability systems is that they intertwine the design of incentive systems with compensation systems. The liability penalties that are imposed on individuals when they have an accident to compensate those who have been injured generally do not equal the penalties that we might impose if our objective was to induce individuals to take the appropriate amount of care while driving. An argument can be made for the separation of these two functions. Some countries have adopted a no-fault approach to accidents: individuals are compensated for injury, and individuals who drive recklessly are punished. But there is no necessary link between the amount paid by one party and that received by the other.

Liability systems are thus part of a property rights system: The individual has a right not to be injured, and those who injure him in a particular way are required to pay compensation. As we noted in the previous section, which “wrongs” are subject to compensation is a matter of policy. Of course, the choice of property rights regimes affects the “value” of different assets, both by restricting what can be done by the owners of those assets, changing the consequences of their actions, and by restricting what others can do that might affect the value of the asset (or changing their incentives in ways that alter actions that might affect the value of the asset).<sup>17</sup>

In general, the neoliberal orthodoxy has a strong preference for ex ante price interventions. This is based on the belief that markets, in general, work well, and one of the reasons that they work well is the price system, which effectively communicates information in a decentralized economy. Accordingly, if the government is to interfere with the market, it should do so in the most limited way. If prices don’t fully reflect social costs, then the best thing to do is to correct prices.<sup>18</sup> There is, in this view, a presumption against broader regulatory interventions.

Modern economic theory has shown that these presumptions are not, in fact valid, e.g., when information is imperfect and markets are incomplete, as they always are. Weitzman (1974) long ago showed that in the presence of uncertainty, quantity regulations may be superior to price interventions. Atkinson and Stiglitz (1976) showed that nonlinear taxation was superior to linear taxation when the government faced information constraints and distributive objectives. (For a textbook exposition of these ideas, see Atkinson and Stiglitz 1980.)

Similarly, consider the presumption discussed earlier against ex ante regulation. Liability systems attempt to alter behavior by inducing individuals to take into

account more fully the costs of their actions. With a fully articulated set of liability laws, regulations directed at least at negative externalities would be unnecessary. There would be no negative externalities; they would all be internalized. But such a system is likely to entail high administrative costs. Perhaps the worst example is provided by the US law concerning toxic wastes, where litigation costs represent more than a quarter of the amount spent on clean-up. It is often difficult to ascertain who is to blame for a particular problem (even with a well demarcated and well designed system of “rights”). And sometimes, it is difficult to ascertain how much the individual should be compensated—sometimes no amount of money would really adequately compensate an individual. Thus, in many cases, it is more efficient to rely on a system of *ex ante* regulations and inducements. Thus, just as the *assignment* of rights can affect transactions costs (as our earlier discussion emphasizes), so does the *mode of enforcement*.

We now turn to the broader issue of the assignment and definition of property rights.

### Slicing and dicing property rights

Property rights can be sliced and diced in different ways, and there may be efficiency consequences (e.g., arising from coordination problems) in how property rights are sliced and diced and how they are bundled. In many places, mineral rights have been separated from land-use rights; use rights to land are separated from rights to reassign those rights; air rights can be separated from land rights. In real estate, there are often covenants and rights-of-way, which impose limitations on the sale or use of the asset, and which give rights to others (such a right of passage). Sometimes rights of passage are assigned to particular individuals (such as those living in the neighboring house). Such rights might be transferable. But sometimes such rights are extended to everyone within a wider class.

More broadly, an ownership right in a corporation or other property can entail a right to an income and a *control* right, that is, a right to determine what can be done with the asset, including rights concerning the transferring of rights. But these two sets of rights are not always bundled together. There are, for instance, nonvoting shares, which provide an entitlement to income, but no control rights. But the rights of the voting shares are circumscribed: they may not take actions which are considered “unfair” to minority shareholders or nonvoting shares. (In a world with perfect contracting, the minority shareholders would know what actions the majority would take before they bought the shares; restrictions would be imposed to protect the interests of the minority. In reality, there are no such protections; they would be impossible to write, and even more difficult and costly to enforce.<sup>19</sup>) Again, there is no avoiding the necessity for policy *choices* in the design of legal institutions for a market economy.

### The meaning of control and ownership

With many different individuals having rights relating to a particular asset, the question arises, who “owns” it? Language can often be misleading: It might be

better simply to say that many different individuals have rights, and they, in some sense, jointly own the asset. A well-specified ownership contract would say what happens when there is a conflict, when two different individuals (“owners”) have different views about what should be done. Often, though, contracts are ambiguous (a point to which we will return later), and the courts are left to resolve such conflicts on the basis of a set of principles and precedents. It should be clear that the way the legal system resolves such conflicts has efficiency and distributive consequences.

To avoid conflict, a particular party sometimes has “residual rights to control,” i.e., rights not specified to others belonging to that party. The person with those rights is sometimes described as *the* owner.<sup>20</sup> Typically, he has the right to transfer that right of control to others (the right to sell), but sometimes that right is circumscribed (the owner of a cooperative apartment can only sell it to someone who has been approved by the board of the cooperative). When he transfers his rights, though, the rights of the others in the asset continue.<sup>21</sup>

The problem with the concept of “residual rights to control” is that it is actually very difficult to specify completely what is meant by fully specified control rights (and therefore, what is meant by fully specified property rights); governments, at all levels, have some control rights in the sense they restrict the kinds of actions that firms can undertake. In the case of “real assets,” there are a myriad of constraints on the use of property, imposed by zoning laws, the Endangered Species Act,<sup>22</sup> etc. One can think of regulations more generally as constraints on property rights: they restrict and limit what individuals or firms can do with the assets that are under their control. Of course, every private contract imposes constraints on what individuals and firms can do. When a bank extends a loan, it can insist that a firm take certain action—the firm may have little choice but to accept these demands, especially if it has debt obligations that could force it into bankruptcy. (Advocates of unfettered markets often talk as if regulations are a deprivation of property rights. But regulations—restrictions on how property can be used—are better thought of as an essential part of the definition of the specification of property rights. Criticism of regulation should not be that it has deprived someone of a rightful property right, but rather that a particular restriction interferes with desirable outcomes. In the case of appropriately designed environmental regulations, it is clear that they lead to *better* outcomes.)

Ownership, as we have said, typically refers to the party that has residual rights—given all of these other constraints, there may still be some scope of choice, and the “owner” has the right to make a choice among this set. The issue, of course, is often not what actions are “allowed,” but the consequences of particular actions. There may be a law that prohibits polluting, but the firm can do it anyway if it pays a fine. More generally, others affect the opportunity set of firms, and thus affect what the firm chooses to do.

One aspect of “ownership” is the right to sell, but an individual’s willingness to exercise that right is affected by the returns he gets from the sale. A capital gains tax thus reduces an individual’s incentives to sell, though he retains the “right” to do so. A 100 percent tax on the receipts from a sale would be almost the functional equivalent of a prohibition on sale (not quite, because individuals might face obligations from the ownership of an asset, and selling would free owners of those obligations).

By the same token, the legal/regulatory framework not only affects behaviors of private parties, but also the behavior of government authorities. A law that requires the government to compensate firms for “regulatory takings,” for the decrease in the value of an asset as a result of a change in regulation, affects government’s incentives for regulating. Those who advocate regulatory takings provisions do so knowing that government is less likely to adopt environmental regulations if it has budgetary consequences. Discussions of regulatory takings highlight the intertwining of property rights and incentives, and the complexity of control.

### **Corporate governance: shareholder capitalism vs stakeholder capitalism**

Neoliberal legal doctrines are often associated with a particular form of corporate governance called shareholder capitalism. Corporations are told to maximize shareholder value. That, it is argued, will lead to economic efficiency and societal well-being. There are a large number of derivative propositions that follow. Rules governing takeovers should be designed to ensure shareholder value.

The legal framework on corporate governance provides a case study for what is wrong with the Chicago view. The belief that firms should maximize shareholder value is a corollary of the simplistic competitive equilibrium model underpinning their analysis. The logic is plain: in the simple neoclassical paradigm, workers and the suppliers of other factors have a horizontal supply curve at the competitive market price, so that the actions of the firm have no effect on them. The actions of the firm only affect the residual returns. Thus, the controller of residual rights, in exercising those rights, only affects his own well-being; and that is why allowing him to do so naturally results in economic efficiency. Even within these narrow confines, the result that shareholder capitalism leads to economic efficiency is not in general true. It requires that there be a full set of risk markets (Arrow-Debreu securities) extending for all dates into the future (Grossman and Stiglitz 1977). Indeed, in general, different shareholders will not even agree on what the firm should do to maximize their own interests (Grossman and Stiglitz 1980).

Indeed, the simple principle that firms should maximize shareholder value (a seeming assignment of property rights to the firm’s shareholders) doesn’t fully answer relevant legal questions: Whose *judgment* and in what time horizon? Should management be allowed to decide what is in the long-run interests of shareholders? Should the firm be put up for auction continuously, allowing whoever bids the most to be the “owner”? What restrictions should be placed on management, whose actions might adversely affect what bidders might be willing to pay? Or should deference be given to management and its judgment of what is in the long-term interests of shareholders? Economic theory again provides some (limited) guidance: only under very restrictive conditions will (unrestricted) takeover mechanisms be effective in ensuring efficiency, or even stock market value maximization (Stiglitz 1972; Grossman and Hart 1980, 1981).

We have a whole set of laws affecting the behavior of management within corporations. With imperfect information, restrictions on conflicts of interest may lead to increased efficiency. To be sure, in some of these cases, contract terms

(with penalties for breach) might do as well, but there are savings in transactions costs<sup>23</sup> in having standard contracts.<sup>24</sup> Such laws would seem to benefit shareholders and bondholders, at the expense of managers. More generally, different rules for corporate governance can have markedly different effects on different stakeholders. Germany's model of stakeholder capitalism is, in many ways, as effective America's "shareholder capitalism," but workers seem better protected. There is less divisiveness.

We have argued that one cannot defend the "shareholder capitalism" model of corporate governance on the basis of economic theory. But those who argue for shareholder capitalism, as if it is the only natural form of capitalism, make another mistake. They forget that the limited liability corporation (like intellectual property, or property rights more generally) is a social construction with no inherent rights. Governments, in creating these "artifices," can impose any set of constraints they wish. They can, for instance, impose constraints on the governance structure of the corporations. Society grants limited liability, which means that, necessarily, incentives are distorted (the corporations do not bear the full downside consequences of their actions).

Especially in large corporations, control rights are ambiguous, but even if they were well defined, "assigned" to shareholders, there is a problem: If shareholders are dispersed, then the fact that good management of the company is a public good (i.e., all shareholders benefit) means that each shareholder will underinvest in monitoring. Effective control will reside elsewhere, in management and in banks, whose interests may differ markedly from those of the shareholders and workers. It is inevitable that governments will want to ensure that the decisions taken by the firm advance the interests of stakeholders (and society more broadly), and not just those who control the assets.<sup>25</sup> This means that government will want to impose constraints on corporations, on how they make decisions, including how control of the assets is changed. That is why the issues discussed later in this volume on corporate rights are so important.

We emphasized at the beginning of our discussion of property rights that actions taken by any individual affect others. Corporations are large collectivities of individuals, and not surprisingly, managerial decisions affect not just shareholders, but a host of other "stakeholders"—bondholders, workers, suppliers, customers, those in the communities in which it operates. That this is so can be said to reflect a "market failure," but it is worthwhile to ask more specifically why this is the case. Part of the reason is that there is incomplete contracting and incomplete insurance. A worker who goes to work for a firm does not know fully the jobs that will be assigned to him, how difficult or unpleasant the tasks, the hours that he might have to work. The firm might not know either (i.e., there may or may not be asymmetries of information). There are contingencies that cannot be perfectly anticipated. But different actions by the firm can affect the likelihood of more or less pleasant contingencies occurring—and therefore affecting the well-being of the worker. For example, the firm's actions may increase the likelihood that he will be redundant or the worker may have invested in (firm-specific) human capital. But there is no insurance against the destruction of the capital's value should he be fired. Laws protecting worker rights often recognize the importance of asymmetries in bargaining power that disadvantage workers. A society in which firms are able, without restraint, to take advantage of that

asymmetry may not only be inequitable, it may be less efficient. Bondholders are aware that the firm may take actions that adversely affect their claims on the firm, and that is why there are typically bond covenants. But it is well recognized that these covenants only constrain a fraction of the possible actions that the firm might undertake to adversely affect the value of bonds.

Actions of firms—including subsequent contracts with third parties—affect the well-being of those who have previously signed (implicit or explicit) contracts. Different governments take different positions on how these externalities might best be dealt with, e.g., through a voice on the boards of directors, restrictions on the kinds of contractual arrangements that can be undertaken, etc., with different distributive consequences.

As an example, some governments require collective action clauses in bonds, which allow a qualified majority (say 85 percent of bondholders) to restructure. It is recognized that there may be circumstances in which renegotiation (a new bond) is desirable, but that in such circumstances, a small minority can hold up what might otherwise be a Pareto-superior renegotiation, demanding a ransom. On the other hand, the ability of a (qualified) majority to restructure the debt contract means that they can, in principle, redesign the contract in ways that work markedly to the disadvantage of the minority, which may not be simply holding up the majority, but may have legitimate differences in interests and perspectives. Regrettably, it is difficult to write a simple legal framework that protects against one abuse without opening up the window to another.

There is another set of “externalities” that may arise, which relate to signaling. Bankruptcy provisions may be used to signal one’s likelihood of going bankrupt. Firms that have a low probability of going bankrupt may signal that that is the case by imposing heavy penalties on themselves should they go bankrupt. The resulting signaling equilibrium is not Pareto-efficient. Signals are costly, and in general, signaling equilibria are inefficient. Governments may enforce a better equilibrium by eliminating the scope for signaling, e.g., by imposing a standardized bankruptcy regime.<sup>26</sup>

Finally, it is impossible (and even if technically possible, prohibitively costly) for contracts to anticipate every contingency. All contracts are incomplete, and there is an important role for government to specify what happens in unanticipated contingencies—a set of “defaults” that greatly simplify the writing of contracts.<sup>27</sup>

In addition to these externalities, there are a host of more widely discussed macroeconomic externalities, where decisions by firms have social costs that they do not appropriately take into account (just as firms do not appropriately take into account environmental externalities). For instance, even without unemployment insurance benefits, firms’ decisions concerning layoffs do not, in fact, lead to Pareto efficiency.<sup>28</sup> In unemployment systems that are not experience-rated, it is obvious that when a firm lays off an individual, it imposes a social cost on others; but the result holds even when unemployment insurance premiums are based on experience. When a plant closes, workers lose not only their jobs, but, if the firm is a large local employer, property values decrease. In making the decision to close the plant, these externalities are seldom taken into account—and would be disregarded by a profit-maximizing firm.<sup>29</sup>

Not only is it the case that managers in modern corporations often have effective control, they have the incentives and ability to take actions that enhance

their well-being at the expense of shareholders and the rest of society. (This is sometimes called the *agency* problem, and can be viewed in part as an externality—their actions have effects on other stakeholders, which they may not fully take into account.)<sup>30</sup> What has emerged in the United States is more akin to managerial capitalism than “shareholder capitalism,” with wide latitude given to management, which has resisted even shareholders having a say in pay. Courts have given management wide deference in interpreting what is in the interests of shareholders. It is clear that American-style managerial capitalism often does not serve shareholders and bondholders well, let alone others in society. Rules and regulations limit shareholders’ latitude in a variety of ways, e.g., voting, say in pay, poison pills, golden parachutes, behavior of management, the extent of their control, and their ability to exercise that control to advance their interests over those of shareholders or other stakeholders. Such rules and regulations have both efficiency and distributive consequences.

Different countries have chosen markedly different systems of corporate governance. In thinking about what system is right going forward, China should be aware of the range of alternatives. Though the US system is often described as if it were “shareholder” capitalism, it is in fact a system of managerial capitalism. While the theoretical underpinnings for shareholder capitalism are weak, those for managerial capitalism are even weaker. The system of corporate governance that has evolved in the United States leaves much to be desired.

### Security of property rights

We have emphasized that the very nature of what is meant by property—rights, obligations, privileges, and constraints—is defined by the government. And just as there cannot be fully specified contracts (defining what each party will do in every contingency), property (with its rights, obligations, and constraints) cannot be fully specified. New contingencies, not fully anticipated, will arise, and decisions will have to be made about whether the rights, obligations, and constraints need to be altered in response. It would be inefficient to bind totally the hand of government, to say that it cannot change the rules of the game, the regulations that affect what individuals can do. (Such a stance would also imply that governments could not change taxes, since that affects the “rights” of what individuals can extract for themselves from their assets.)

The world (and our knowledge of the world) changes. This will necessitate changes in the rules and regulations that govern how resources can be used.<sup>31</sup> It would be wrong to freeze the rights and responsibilities at any moment of time. “Excesses” of property rights (i.e. making it inordinately difficult to change the rights, obligations, constraints, taxes, etc.) can adversely affect efficiency. Assigning land rights to the commune in a way that could not be reversed would have impaired the reforms that set off China’s march to a market economy. We want to be able to impose new restrictions when circumstances or knowledge change.

On the other hand, if rights and responsibilities are always changing, then there will be unnecessarily high levels of uncertainty about the value of any asset. Investments will be impaired and people couldn’t reliably contract. It would also be inefficient *not* to bind the hand of government to some extent. The

question is where to draw the line—getting the balance right.<sup>32</sup> There might be several places to draw the line that might yield efficiency, but with different winners and losers. Hence the extent to which the hand of government should be bound is a question of policy.

Two examples illustrate. Before society was aware of the dangers of ground water pollution, there was no need to impose restraints on the use of land as a toxic waste dump. Once the danger becomes clear, it is imperative that constraints be imposed.

Earlier, we referred to the takings movement that has demanded that government compensate property owners for changes in regulations. Adopting such an approach would be a change in the property rights regime, for the owner of a polluting factory would know that the cost of individuals suing him are such that he could pollute with impunity. It would, in effect, be a transfer of wealth to the owner from the rest of society. So too, the rules governing class action suits could make it either easier (less expensive) or more difficult to sue. Thus, *any* change in the legal framework has effects on the value of property rights. Government needs to be aware of these effects, and it should be cautious in making such changes. But when there are large enough changes in the world or in our knowledge of the world, it would be wrong not to change.

Any government action or change in government action can affect property values and rights, with complex distributive changes. We have noted that governments have a variety of ways (short of outright expropriation) of imposing restrictions and taxes that, in a sense, deprive the “owner” of his property rights. They decrease the (expected present discounted) value of the asset (to the owner). There are always, of course, questions about the extent to which they are likely to do so. If the increase in a tax or a new regulation was anticipated, then there will be no change in market value; and indeed, failure to enact the tax or regulation as anticipated would lead to an increase in market value. We have argued that no government will (or should) fully circumscribe its ability to adopt legislation that will allow it to respond to new information and changing circumstances. If a firm has been polluting groundwater, poisoning others, in a way that was unnoticed (and perhaps even not known), once it becomes known, it should be stopped—and it is not obvious that it should be compensated for *not* poisoning others. The building of a subway increases some property values and decreases others. We typically neither compensate the losers nor appropriate but a fraction of the gains of the winners. The passage of the Endangered Species Act (which restricts the use of land when it adversely affects an endangered species) may have reduced the value of some property. It may have increased the value of some neighboring properties. But the next set of owners who buy the land knowing that the legislation had been passed and assuming (along with the market) that it would stay in place, would be affected in the opposite way if it were to be repealed. The new owner would get a windfall gain, his neighbor (enjoying the preservation of the land next door), a windfall loss.

Insecurity of property rights also arises from private actions. The value of a house may be dependent on the view of the ocean or the peacefulness of the neighborhood, but someone else can build and obstruct the view, or someone with noisy children may move next door. In short, there is as much private interference with property as there is public—all the other people’s rights and privileges that may, or may not, be exercised.

Property rights legislation must balance out the costs and benefits of any changes (including the costs of *not* changing) and of the rules that govern how the changes are made. In the United States, recent trends have emphasized paying more attention to the costs (and possible resulting inequities) of changing regulations—though we suspect that this is motivated little by an analysis of the economic costs; legislation forcing those proposing new regulations to quantify the costs and benefits is intended to make the process of adopting new regulations more difficult, reducing the scope especially for environmental and safety regulations.

### **Legitimacy of property and security of property rights**

There are many countries where questions have been raised about the legitimacy of existing ownership claims. Some have advocated that such issues be put aside; it is more important to have secure property rights. Hoff and Stiglitz (2004a, 2004b, 2007) have argued, however, that it is not possible for any society to provide such security. So long as there is a widespread view in society that such rights were obtained illegitimately, there will always be political pressures for property rights reform. And no government can fully bind successors (though they can make it more difficult or most costly for successor governments). One reason for having “good” property rights laws (widely accepted as “legitimate,” and not the result of special interests) accompanied by good judicial procedures (see below) is that it enhances the chances that ownership claims will be viewed as legitimate and that property rights will be viewed as more secure. The issue has played out in many transition economies, which have faced difficulties in the initial (re)assignment of property rights. Should they restore property as of 1944, 1945, or 1946? Often, there were series of land redistributions; in each, land changed hands. The date selected for restitution could have large effects on the well-being of particular individuals. Russia is facing another problem: many of the assets held by oligarchs were obtained via methods that were questionable at best. Should one ignore how the property was acquired? In most societies, a person who buys stolen property may still be forced to return it to the original owner. There is a responsibility imposed on the buyer to ensure that the property rights of the seller are “legitimate.” Much of the property of oligarchs can be viewed as stolen from the state. But throughout the world, privatizations were often conducted with a certain degree of “illegitimacy,” e.g., involving some degree of corruption.

This raises another difficult issue: if we trace property throughout history, there usually comes a point at which questions can be raised about legitimacy. Most of the land in the US was taken from Native American tribes using a variety of dubious methods. Advocates of “strong” property rights rarely reflect on the legitimacy of their own claims.

China faces a similar problem; questions can be raised about the origins of the wealth of many individuals. If their property rights are not secure, then they will have an incentive to take their wealth out of the country as fast as possible (a problem evident in Russia). If they are given full security, it would in effect be sanctioning socially destructive behavior. China must resolve these issues as it defines its property rights regime.

### Enhancing the security of property rights

Some “law and development” scholars have given primacy to assigning clear property rights. Failure to develop is ascribed to a lack of property rights. Putting aside the grandiosity of the claim—some countries have grown rapidly even with seemingly imprecisely defined property rights—a formalization of rights, as part of the process of providing more secure property rights, is an example of a change to a legal system that can have profound distributive consequences. In the status quo (*before* “precisely” defining property rights), there are certain outcomes to economic interactions. They may not be perfectly predictable to every potential participant in the market, but there are still patterns that can be ascertained. There is, in effect, an existing set of “property rights,” which may not be easily understood by everyone, but are understood by some. While there may be some ambiguity about such property rights before they have been “assigned,” it is likely that some ambiguity (as we have emphasized throughout this chapter) will remain *after*. Indeed, formal rights are not clear to everyone either—they are clearer to some market actors than to others; the clarity to foreigners may differ from that to those for whom kinship and informal arrangements are well understood. It might accordingly be better to say that formalizing rights reallocates transaction costs (and, as always, such reallocations have distributive consequences).

*Assigning* property rights typically (or, I should say, inevitably) means a *reassignment*. And this is also (especially) true in circumstances where property rights are ill defined, so that it is hard to determine the effective recipient of the returns to the assets or who has effective residual control. In other words, the “clear” assignment of property rights is almost never just a conversion of *de facto* rights into *de jure* rights. And a conversion from *de facto* to *de jure* is itself a reassignment, in that there is a change in terms of how rights are known, remedies for violation, modes of enforcement—the relationship of the “owner” to many people has changed, and indeed, that is precisely the point of doing it. That is why property rights legislation is often so contentious. If it were just a matter of clarifying existing rights, it would presumably be a Pareto improvement, simply because it would lower transactions costs. De Soto (2000) presumes that it is easy to figure out whom to title from customary patterns. If it were so easy, then almost by definition, the property rights question with which he is concerned would not have arisen.

### Legal transplants

The property rights movement is an example of an attempt to transplant a legal system that may work well in one context to another. “Legal transplanting”—taking the legal frameworks developed for one country to another—often encounters problems. Another reason (besides those implicit in the previous paragraph) is that there are typically a host of implied rules and understandings that govern the interpretation of language and practice. Even if the formal language is transplanted, the accompanying interpretations are not. What would the parties to the contract reasonably have understood by the words of the contract? What is meant by “due care”?

FROM COASE TO DE SOTO AND BEYOND

The above analysis implies that the slogan that there *should* be well-defined property rights is empty. It is impossible to have perfectly defined property rights; there may be large costs associated with further refinements (removing further ambiguities); it does not specify how rights (and obligations) might change as circumstances and knowledge change; and saying that there should be well-defined property does not say how questions about the relative strength of various rights, duties, and privileges should be answered, e.g., when various rights come into conflict. And how one answers these questions makes a difference.

Those like de Soto (see, e.g., de Soto 2000), who seem to suggest that the most important problem facing developing countries is the assignment of well-defined property rights, fail to compare their reassignment to the preexisting, often informal, social and institutional arrangements, and to assess the distributive consequences of the change. Moreover, they offer little guidance as to how the various choices comprising a property regime ought to be made—how strong or weak to make the various rights, duties, and privileges. Nor do they tend to recognize the importance in mature property regimes of *general standards*, such as “reasonable” or “fair use,” which often are understood by reference to the informal arrangements and expectations of economic actors themselves.

It is, accordingly, just wrong to think that simply assigning property rights will solve complex social problems. The devil is in the details—*how* are they to be assigned and enforced, *which* rights and obligations are to be included, *what* excuses and limitations are to be recognized? How to redefine property rights when circumstances (knowledge) change, as they inevitably do?

**Property rights and credit markets**

The one inefficiency that assigning land property rights is often said to solve is credit market imperfections. Using land as collateral facilitates the development of credit markets, and thus improves overall economic efficiency. But giving title to land will not necessarily give rise to a land market, especially one of a thickness that can support its use as collateral. Moreover, local courts may be loath to turn over land to creditors in the event of a default. And there are other ways of improving credit markets, e.g., through the revolving credit schemes used by Grameen Bank and other microcredit institutions, as Chapter 4 points out—schemes that, at least in some circumstances have performed far better than the “property rights” approach. In addition, one can collateralize the *produce* of the land, even if one can’t collateralize land itself. It may well be that preexisting social arrangements offer alternative methods for collateralizing informally recognized entitlements that are more effective than the formal system is likely to be. Moreover, formal titling may well effect a redistribution of land, often within the family (from wives to husbands)—in ways which may or may not enhance efficiency.

### **Imperfect property rights may suffice**

Changing the relationship between farmers and their land played an important role in China's success. Moving to the household responsibility system did not give farmers land "ownership."<sup>33</sup> More accurately, we should say that it gave them some rights (that they did not have before), but it did not give them other rights (e.g., the right to sell the land to others). It did give them the fruits of their labor, and this had an enormous consequence for productivity. It achieved much of what could have been achieved by full land titling. Individuals could not borrow, using their land as collateral, to buy seeds and fertilizer. But this lacuna was at least partially filled in by government and other arrangements, which ensured the availability of high-quality seeds and some access to credit. Over the longer run, full land titling might have resulted in many farmers borrowing beyond their ability to repay, losing their land, creating a new class of landless workers—with obvious implications for inequality, but also for efficiency (with an increase in agency costs resulting from landlessness).<sup>34</sup> In the medium term, there were some efficiency issues: lack of security in land ownership may lead to underinvestment in caring for the land. Inability to transfer land may mean that land is not deployed in the best way. But as China's development has progressed, one more issue has arisen: who should reap the benefits of industrialization, with the associated large increases in the value of land near cities? If it is given to the farmer farming that land, it is simply a windfall capital gain, unrelated to his own efforts. He benefits at the expense of others whose land was not so well situated. At the same time, if his land is taken away without adequate compensation, that too seems unfair. But then, what is adequate compensation? Enough to buy a similar plot, of equal quality, elsewhere? But the farmer has ties to his community, and there are high social costs of removing him. There are no easy answers to these essentially distributive questions, though gradually societal consensus may emerge. If the choice is between giving money to the poor farmer or to a corrupt politician or a rich land developer, the farmer's claims seem more justified. Today, land titling is seen not just as a means of assuring efficient land usage, but also as a form of protection for poor farmers, ensuring that they get a larger fraction of the benefits that emerge from growth and urbanization.

### **Distributive consequences of property rights assignments and alternative approaches**

By the same token, assigning property rights to the lords in the seventeenth-century enclosure movements may have been one way of avoiding the tragedy of the commons, the problem of overgrazing. But most communities have found more equitable ways of overcoming the tragedy of commons, e.g., by restricting the usage of the commons, for instance by regulation. There were large distributive consequences of the enclosure. It is a political and ethical judgment whether these large distributive changes (typically adverse, from the perspective of equality) were justified by the efficiency gains. (Economists may have simply played into the hands of the powerful, giving them an excuse, a justification, for their land grab.)

Many contend that something analogous is going on today, the enclosure of common knowledge, its privatization through unbalanced intellectual property regimes.<sup>35</sup>

### **Why less restrained property rights may lead to lower efficiency**

The fallacious nature of the simplistic property rights school is deeper, because it may not even result in enhanced efficiency.<sup>36</sup> Consider the consequences of allowing individuals to sell (without restriction) their land and to borrow against the land. To answer this question, one can construct a dynamic model of land ownership, which takes into account the various conditions under which individuals sell (or buy) land, e.g., illnesses of parents for which there is a medicine that is available, but for which the public sector will not pay. There are large societal costs of inequalities in land ownership—the agency costs associated with a disparity between labor and land ownership. (There are other costs as well—the landless face a much higher degree of insecurity.) Such a dynamic model could describe the incidence of landlessness, the consequences of which in turn may depend on the pace of job creation in the urban sector, and the levels of education in the rural sector.

One could contrast the outcomes of this system of unrestricted property rights with a system in which individuals are allowed to mortgage (a fraction) of this year's output, but not the land. There would be a short-run static inefficiency, arising from capital market imperfections (the extent of which might depend on other attributes of the capital market), but this inefficiency might be much less than the long-run inefficiency associated with the greater agency costs arising from more extensive landlessness that would emerge in a system with unfettered rights to sell. Long-run output in the system of unrestricted property rights might be markedly lower than in the alternative system. While unfettered rights to sell might lead to enhanced efficiency in a world without agency costs, it may lead to reduced efficiency in a world with agency costs<sup>37</sup> (Braverman-Stiglitz 1989).

### **PROPERTY RIGHTS MORE BROADLY DEFINED**

The role of legal frameworks in shaping rights and responsibilities—and behavior—should now be clear. The discussion so far has focused on property rights, broadly defined to include intellectual property rights and the “rights” and obligations of other social constructs such as corporations. These broadly defined property rights extend to contracts (what are enforceable contracts, the rules for interpreting disputes when they arise, penalties that can be imposed when contracts are abrogated) and bankruptcy laws (what happens when individuals or firms cannot meet the obligations that they have undertaken in a credit contract).

### Labor rights

Modern economics emphasizes that the most important asset in modern societies is not financial or physical capital, but human capital. Society puts all kinds of restrictions on the use of human capital—e.g., on the set of admissible labor contracts and how they can be enforced. Workers must receive a minimum wage and they cannot sell themselves into bondage. Governments also enforce minimal working conditions. In China, there is another important set of restrictions on the mobility of labor, called the Hukou System, which is discussed in Chapter 15. Individual decisions about where to live affect others, and so it is natural that society might try to regulate those decisions.<sup>38</sup> Moving into a crowded city with well-paid jobs and public amenities benefits the individual, but may have adverse effects on both the community from which he comes and the community to which he goes. It may lead to excess population and fiscal burdens (to provide adequate education, health, and transportation) in the latter and insufficient population (to maintain essential services and the tax base to support them) in the former. At the same time, restrictions on labor mobility may create economic inefficiencies *narrowly defined*, i.e., labor may not be used in a way that contributes optimally to economic output, with labor productivity in a city being much higher than in the rural area from which the migrant comes. Moreover, the system contributes to inequality, with migrants who are essential for the country's growth being treated as second-class citizens, with their children not entitled to public education and other public services,<sup>39</sup> and with a risk of social problems arising out of the peculiar structure to family life that often results when the family stays behind, and the wage earners migrate temporarily. Reforming this system remains a priority in China's next stage of transition to a market economy.

By the same token, many laws and regulations arise to protect individuals (especially as workers and consumers) against the abuse of market power or, more generally, to enhance the efficiency of the market, when there is some other form of market failure.

### Social rights

The Universal Declaration of Human Rights brought to the fore the importance of another set of *economic* rights, affecting access to certain goods, that follow simply from the fact that an individual is a member of a particular community (a citizen of a particular nation state). The constitutions and legal frameworks in different countries have elaborated, extended, and helped to define the scope of these rights. They include rights pertaining to education, health, and minimum living standards for both workers and retirees. As in other areas that have been discussed, the flip side of a set of rights is a set of responsibilities. Resources do not come freely. A set of rights to access certain goods is inextricably accompanied by obligations on others to pay for those goods and perhaps by the recipients to fulfill certain conditions. The link between these rights and conventional "property rights" is highlighted by discussions about the provision of these goods as being part of a "social contract." Some of the key institutional aspects of these sets of rights are taken up in Chapters 13 and 14.

We have emphasized that any assignment of rights has both efficiency and distribution consequences. Neither can be ignored; neither has primacy over the other. One key aspect of social rights is that such rights have important impacts on different generations: guaranteeing higher incomes for the elderly imposes obligations on those working, and may reduce resources available for the young. (See in particular Chapter 13.) These issues become particularly important when age structures change—as they are in China. The one-child policy combined with advances in health extending longevity is quickly leading to an aging population. China is the one country that appears to be growing old before it grows rich. Environmental/natural resource regulation, while it affects the quality of life in China today, also has important implications for intergenerational equity and efficiency which we were unfortunately not able to pursue in this volume.

#### HAYEK AND THE “SECOND GENERATION” CHICAGO SCHOOL

The neoliberal law and economics (Chicago) School focused on the design of institutions to ensure economic efficiency. Nonmarket institutions were explained in part as helping to ensure efficiency.<sup>40</sup> There is another “conservative” tradition, derived not so much from neoclassical economics, which focuses on equilibrium models with antecedents in classical physics, as from Hayek, with antecedents in evolutionary biology. The design of an economic system should facilitate growth and change. It too focuses on “efficiency,” but often economic objectives are seen as secondary to a broader objective of individual fulfillment, and this necessitates individuals having “freedom” to pursue their own desires and ambitions.

In many ways, this approach is consistent with some of the perspectives in this book. We have emphasized how institutional arrangements affect not just what happens today but how society will evolve. We have argued that one needs to go beyond a narrow emphasis on economic efficiency toward broader conceptions of the nature of society and people and how individuals are shaped by social (institutional) arrangements.

There are several problems, however, with the Hayekian perspective. Focusing on the narrower economic conception, there is, in fact, no theory that unfettered markets will facilitate “efficient” evolution, whatever that might mean. While evolutionary models have not been the object of the careful kind of scrutiny to which the equilibrium models discussed in previous sections have been subjected, it is already clear that many “market failures” are as relevant to evolutionary behavior as they are to equilibrium behavior. A firm that has, for instance, high long-run growth potential may be wiped out by a macroeconomic downturn; it cannot borrow against its long-run profit potential to tide it over its current difficulties. Firms that are weeded out in crises may be just as efficient as those that survive; the main difference may be their choice of financial structures (debt-equity ratios), which may have little to do with their real dynamic potential.<sup>41</sup>

There are at least two problems with the broader Hayekian perspective. First, one individual’s freedom may impinge on the rights of others. One individual’s

right to smoke may take away another individual's right to not die from second-hand pollution. Externalities constitute one of the main reasons for collective action. A broad affirmation of "freedom" is far too vague to resolve questions about whose ox must be gored as choices are made about the trade-offs inherent in any legal regime.

There is another reason for collective action: through collective action, in many cases, in principle, all individuals *can* be made better off, and in practice, most might be made better off, e.g., through collective expenditures on public goods. To be sure, forcing individuals to pay taxes may impinge on their "freedom," but (if they were being completely honest) they would agree that the benefits they receive more than compensate.

There is a final problem, then, with the Hayekian perspective, perhaps the most important. One individual's "fulfillment" may come only at the expense of constraints imposed on others, not just because of externalities, but because the realization of an individual's potential requires expenditures (on education, food, health care) that the individual may not be able to afford himself. To finance these, taxes must be imposed on others.

### Political economy

The focus on *change* is picked up in another strand of (what I loosely call) the Chicago School. Political decisions are viewed as endogenous. Decisions today (about institutions, or about the distribution of income, or about policies) affect decisions in the future. A decision today about the voting rule (whether a majority is required, or a supermajority for making a particular decision) affects the decisions that will be made in the future. Each decision has to be evaluated for its future consequences, and the most important decisions are those that affect decision-making processes.

Recent discussions of transition from communism to the market have argued that the assignment of control (property) rights, even before there is a clear rule of law that specifies how those rights might be used or abused, will lead to the adoption of a rule of law, with (more) clearly specified property rights. Hoff and Stiglitz (2004a, 2004b, 2007) have argued, to the contrary, that the way control rights were assigned (under shock therapy, rapid privatization) as well as specific policies that were adopted (high interest rates, capital market liberalization) undermined the demand for the rule of law and help explain why, in so many of the former Soviet countries, a rule of law has not emerged.

### Adaptive frameworks

The evolutionary approach rightly stresses change. Just as no contract can fully anticipate every contingency that the parties to the contract may face, no law can fully anticipate all the disputes that might arise. (If the law could anticipate all of these contingencies, so presumably could the parties.<sup>42</sup>) These concerns are especially important for China, which has an economy with distinctive characteristics that is changing rapidly. It can learn from the problems facing other economies, but inevitably some of the issues are *sui generis*.

Problems arise when society and the economy change in ways that make the legal (and other aspects of the institutional) infrastructure inappropriate and unable to deal effectively with new situations. That is why one of the most important features of a good legal framework is adaptability and flexibility, as we noted earlier. At the same time, there is a cost: excessively frequent changes give rise to legal uncertainty. And the frameworks that allow for flexibility often have their own problems. Ordinary legislation requires broad consensus (in the US, for instance, a minority can often effectively veto major pieces of legislation.) Powers are delegated to regulatory bodies to enact regulations that respond to the changing situations. But the regulatory bodies are often captured by special interests, in particular those they are supposed to be regulating.

Some advocate self-regulation as a more flexible alternative. But it is hard for an industry group to reflect adequately the interests of its customers or other parties that might be injured by its actions.<sup>43</sup> (The problems were brought to the fore by the difficulties at the New York Stock Exchange and the attempts at bank self-regulation, embodied in Basle II, which clearly failed so badly.)

There should be flexibility in the degree of flexibility and adaptability, accompanied by regular review processes that highlight problems in the institutional/legal infrastructure, that allow some changes to the regulatory framework under the aegis of a regulatory agency, but which submit more fundamental changes to political processes.<sup>44</sup>

China, in its development strategy, based on the principle of “crossing the river by feeling the stones,” has been sensitive to the necessity of this kind of pragmatism. But as China moves to the next stage of its transition, more formal institutional arrangements will have to be adopted to regulate its growing, and growingly complex, economy. Such arrangements will inevitably circumscribe some of the flexibility that might be achieved by more ad hoc approaches. The institutional designers will, however, have to pay careful attention to preserving adequate flexibility to the rapid changes going on, both inside China and in the world around it.

## DISTRIBUTIVE CONCERNS

The Chicago/neoliberal School emphasized the role of property rights and other institutions in promoting efficiency. But institutions (and especially those relating to legal structures) have often served another function: they have overtly distributive consequences.

There has long been an overtone of “social justice” by those outside of the Chicago School, emphasizing the importance of the rule of law, which historically circumscribed the ability of the King to act capriciously against the nobles. But institutions and “the rule of law” have also been used to maintain existing inequalities. We have already discussed how the seventeenth-century enclosure movement was more about redistribution of wealth than an increase in efficiency: there were alternative ways in which the tragedy of the commons could have been avoided without the distributional consequences of the enclosure movement. The current movement for the privatization of knowledge may have its roots more in

a movement to increase incomes of certain corporations that are dependent on intellectual property than in enhancing innovation. Privatizing knowledge may actually retard innovation. (And if it were primarily concerned with incentives, it would have provided more incentives for the preservation of biodiversity and greater protection of traditional knowledge.) The rule of law was used to maintain segregation and economic suppression in the American South. The rule of law enabled banks to engage in predatory lending, and then to foreclose upon their properties.

Whatever rules are adopted will have distributive consequences. If redistribution were costless, this itself might not be of that much concern: the consequences could always be undone by lump sum redistributions. But, as we have seen, efficiency and equity concerns cannot be easily separated.<sup>45</sup>

Matters are worse: often the reason particular rules and regulations and institutions persist is that they have distributive effects that could not be achieved (or achieved easily) in other ways. (This is related to the earlier point: there is always an implicit set of property rights, including entitlements, and a change in the legal framework accordingly inevitably has distributive consequences. One of the problems with formalizing property rights that exist is that by making such rights more transparent, they may make them political unacceptable.<sup>46</sup> Alternatively, by formalizing them, they make rights that should be unacceptable seem legitimate and therefore protect and preserve them. In either case, formalization itself has consequences.)

While property rights (and institutions, rules, and regulations more broadly) may be used to protect existing inequalities, they can also be used to advance social justice. One might argue that it might be more efficient to do this through lump sum transfers, but such transfers are not feasible, and especially in developing countries, there is a high opportunity cost to the funds. Social legislation may be a more effective way of targeting. For instance, affirmative action programs circumscribe what businesses can do; they may, as a result, be viewed as redistributing wealth from businesses (and, since some of these costs are passed on to consumers, from society more broadly) to the disadvantaged group. But the benefits that they bring may be far greater than the value of the profits lost by firms or the slight increase in prices consumers might have to pay.<sup>47, 48</sup>

Much social and economic legislation (restrictions on businesses employment practices or anticompetitive practices) arises out of a belief that the unfettered market may be, in some sense, “unfair.” Much of this is based on the premise that the economy is not really fully competitive; there are many “bargaining” problems, and in the bargains, the poor and the less educated do poorly. There are rents to be divided, and they get a disproportionately small share of these rents. Rules and regulations can change the outcome, and while there may be some efficiency costs, the redistributive benefits outweigh these efficiency costs.<sup>49</sup>

Similarly, if individuals are imperfectly informed, exploitive firms can engage in predatory behavior (as America’s banks have done). Theorems about the efficiency of competitive markets do not apply in such situations. Arguments that not allowing firms to engage in such predations will interfere with the dynamism and efficiency of the market economy are simply wrong. To the contrary, imposing such restrictions might lead them to devote their create energy in ways that enhance productivity or engage in other activities that might enhance societal well-being.

In this view, then, how property rights are designed and assigned can make a great deal of difference, and not just for the efficiency of the economy. Land reform, redistributing land from large landlords to peasants, can increase economic efficiency by reducing agency costs. Making it more difficult for government to use its right of eminent domain to take land away from poor peasants, to be used for development projects which may be of more benefit to others, will ensure that they get a larger share of the rents associated with the redeployment of land.

### CONCLUDING COMMENTS

In recent decades, there has been important scholarly progress on the relationship among law, economics, and development. Coase played an important role in helping us think about the consequences of alternative assignments of property rights. Unfortunately, the neoliberal legal tradition, especially simplifications that have gained currency in some traditions within economics, neither reflects an understanding of the limitations of markets, the importance of equity, and the constraints and costs of redistributions, nor the conceptual complexities associated with property and property rights.

In the beginning of China's move to a market economy, there was a discussion of the central ingredients required to make a market economy work. Obviously, many ingredients contribute to success. At a conference in Wingspread, Wisconsin, with a delegation from China's Academy of Social Sciences, there was extensive discussion of the relative role of property rights and competition. Ken Arrow and I urged that the focus be on competition.<sup>50</sup> Russia and many other Eastern European countries chose to emphasize property rights, with little attention to broader legal structures, including corporate governance; some Western advisers supported this strategy, arguing that good legal structures would follow naturally. They didn't, and inappropriately designed property rights provided flawed incentives, leading to asset stripping, impeding development. The contrasting performance of China and Russia is, in large measure, a result of these fundamental choices made early on in the process of transition (see Stiglitz 2000b, 2001b; Hoff and Stiglitz 2004b).

While this chapter—and much of this part of the book, focuses on property rights, it is important to keep this issue in perspective. This chapter has emphasized that not only did the neoliberal law and development literature overly simplify what was entailed when they instructed countries to provide and enforce clear property rights, but they almost surely overemphasized their importance and underemphasized other institutional reforms necessary to create a successful economy.

This chapter echoes several themes that are raised throughout the book. There is no single "best" legal system; law is not just about enhancing efficiency, it is also about promoting other societal values such as social justice; different legal systems, like different assignments of property rights, have different distributive consequences, and reflect the norms of society. But they also affect how society evolves. Changes in the legal system, even attempts to formalize property rights,

have distributive consequences. Countries have choices—there is not a single Pareto-dominant approach—and those choices do make a difference, both today and in the future.

These are important lessons for China to take on board as it develops the legal frameworks “with Chinese characteristics” that will enable it to continue its transition to a market economy with Chinese characteristics.

## NOTES

1. I am indebted to David Kennedy for his insightful comments on law and economics, and to Mo Ji for her insights on the application of these ideas to China. Earlier versions of this chapter were presented to various meetings of the IPD China Task Force, with the financial support of the Brooks World Poverty Center and Columbia’s Committee for Global Thought. I am indebted to the participants in those task forces for helpful comments.
2. As we noted in the introductory chapter, we use the term “neoliberal” orthodoxy and the “Chicago School” interchangeably, as a simplification to describe a complex set of ideas within which there are many variants. We should emphasize that there are many economists and legal scholars at Chicago who do not subscribe to what has come to be called the Chicago School. While the distinctions among the adherents of neoliberal doctrines are important, in practice, the distinctions are typically glided over. In its heyday, these ideas were extraordinarily influential in shaping development policy, especially the set of policies that were pushed by the World Bank and the IMF in the ’80s and early ’90s (Stiglitz 2002a). Interestingly, John Williamson, who best articulated the resulting “Washington Consensus” was himself skeptical of unfettered markets, in particular of unbridled short-term capital flows. See Williamson (1990, 2008), Serra and Stiglitz (2008), and Stiglitz (2008a).
3. A result that was “conjectured” by Adam Smith, in his famous “invisible hand theorem,” that the pursuit of self-interest led, as if by an invisible hand, to the efficiency of the market (Smith 1776). Smith himself was more aware of the limitations of this conjecture than his latter-day followers (see, e.g., Rothschild 2001; Kennedy 2009; Phillipson 2010). It was to take 175 years before Arrow and Debreu (1954) and Debreu (1959) ascertained the limited conditions under which Smith’s conjecture was correct. The conditions in which markets did not lead to efficient outcomes were referred to as “market failures” (Atkinson and Stiglitz 1980).
4. Moreover, in the presence of wealth effects, there are real consequences of these distributional differences: the equilibrium that emerges may be markedly different under alternative assignments of property rights. Still, different assignments can generate efficient outcomes. Coase himself was not so naïve as to think that transaction costs could be ignored, recognizing that they are ubiquitous. Law and economics scholars have been obsessed with transaction costs, from the first interpretations of Coase by Calabresi through to today’s leading figures; see Calabresi and Melamen (1972). For a brief summary and bibliography of the American law and economics literature, see Kennedy and Fisher (2006: 403–13).
5. One of the reasons that little attention was paid to distribution was that it was typically assumed in simplistic Chicago-style models that redistributions were costless. Hence, all that was required was to ensure efficiency. But redistributions are often very costly, and indeed, often don’t occur. The rules of the game thus determine the well-being of

different members of society. See Coase (1960), Stiglitz (1994), and the references cited there.

6. The US Supreme Court decision (*Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 1993) limiting the scope of claims on anticompetitive predatory behavior is illustrative of the influence of the Chicago School in this area.
7. Sometimes advocates of the Chicago School economics argue (simply as a matter of assertion) that these imperfections and their consequences are *quantitatively* insignificant. One of the main results of the modern theory of the economics of information is to show, however, that even a little bit of information imperfection can have a very large effect and change the qualitative properties of the economy. See Stiglitz (2002b). Chicago School economists also often argue that even if markets “fail,” governments often fail too. But such failures are not inevitable—in all the most successful economies government played an important role—and the objective of this chapter (and other chapters in this book) is to enhance understanding of what kinds of government interventions and actions are most likely to work.
8. Some go so far as to point out the inefficiencies that result from restricting bonded labor, with an overtone that perhaps even these restrictions should be eliminated.
9. In Chicago School economics, the owner of IPR could act as a perfectly discriminating monopolist, and there would be no inefficiency. But an individual would not have the information required to act as a perfectly discriminating monopolist, and the resulting distortions can be considerable (see, e.g., Stiglitz 1977 for the inefficiencies arising from monopolies with imperfect information, and Stiglitz 2006 and Henry and Stiglitz 2010, as well as the chapters below, for a discussion of the distortions arising from the IPR system).
10. As we noted earlier, if farmers tend their own land, there is no problem of incentivizing them; but if farmers have no land, then common forms of tenancy lead to large inefficiencies. Sharecropping—in which farmers give the landlord 50 percent (or more) of their produce, attenuates incentives. One of the implications of the Greenwald-Stiglitz (1986) analysis is that market equilibrium in such situations is almost never Pareto-efficient.
11. In the standard sense of Paretian efficiency.
12. Partially because governments do not have the information required to engage in lump sum redistributions (see Stiglitz 1994).
13. There is a further problem of attribution, which has become particularly relevant in the debate over global warming: should the producer or the consumer of the good be charged for the cost of the greenhouse gases emitted? In perfectly competitive markets, it would make no difference. But markets are typically not perfectly competitive, so how such questions are answered has real consequences; see Stiglitz (forthcoming).
14. All property rights are, we have argued, social constructions; the definitions of rights, obligations, and constraints associated with real property have evolved over centuries and therefore are more likely to be taken for granted.
15. We elaborate on these points at greater length in the discussion below on “control.”
16. The logic is that since only a fraction of those who commit the wrong are caught and convicted, optimal deterrence requires that the penalty when they are caught be a multiple of the costs imposed in that particular instance; see Becker (1968). There is good reason for using private enforcement: political influence may impede public enforcement. Such concerns were particularly important in the context of antitrust laws, where large monopolies had the resources to try to induce government not to take actions against them.

17. This discussion also helps explain why, ordinarily, there should be no compensation for regulatory takings. If the regulation is directed at limiting a negative externality, the effect on the value of the property will be limited, so long as the individual had previously faced liability for these negative externalities.
18. If it is assumed that the government can't assess the risks and costs of injury-inducing consequences of certain individual behavior, or at least assess it better than private participants, then making them pay the costs of the injury ex post will more likely lead to "correct" decisions, than would be the case if the government imposed a tax.
19. They would have to anticipate every conceivable situation that might arise. It is obvious that this is impossible—how could one have written a contract contingent on an explosion at a neighboring nuclear power plant, before the concept of nuclear energy had even been conceived? There are always ambiguities in language. Even when contracts are tightly written, there are questions about whether a particular circumstance falls within the ambit of a particular provision. Background law specifies what happens when a contingency not explicitly written into the contract occurs.
20. There has been extensive discussion in the US of the consequences of the separation of ownership and control in corporations (Berle and Means 1932). In that context, control is exercised by management (not by shareholders)—even though *formally* management is not the owner. Though in principle, shareholders have the "right" to choose a new management, there are significant impediments to their doing so. See, e.g. Stiglitz (1982b, 1985a). See the discussion in the next section.
21. Though some rights may be contingent on ownership, i.e., when the "owner" sells, other rights terminate.
22. A US law that ensures that the owner of property (such as a forest) does nothing that adversely affects an endangered species.
23. Not only savings in writing contracts, but in interpreting them. Again, standard contractual forms could arise naturally. But difficulties arise with interpreting the (inevitably) incomplete contracts.
24. Additional problems may arise from signaling inefficiencies.
25. There is a large literature on how corporations can try to align the interests of managers with shareholders, e.g., with stock options. But there is overwhelming evidence that these attempts have failed, and that indeed, stock options have provided incentives for managers to distort the information that they provide to the market and have encouraged excessive risk-taking and short-sighted behavior, with consequences that are adverse to the interests of shareholders, bondholders, and other stakeholders. For a discussion of such behavior in the context of the most recent crises and financial scandals in the US, see Stiglitz (2003, 2010). The problems are inherent, arise out of the inevitable information asymmetries and the public-good problem of "good management"; the separation of ownership and *de facto* control has long been a source of concern about economists and lawyers, but this concern has often been given short shrift in the Chicago view (see Stiglitz 1985a; Berle and Means 1932).
26. In technical terms, this is referred to as imposing a pooling equilibrium. A competitive market equilibrium cannot be characterized by pooling (one of the central results of Rothschild-Stiglitz 1976). The inefficiencies in contractual equilibria are, however, not limited to problems of signaling. In moral hazard models, contracts by one party affect reservation levels and behavior within other contracts. See, e.g., Rey and Stiglitz (1993) and Arnott and Stiglitz (1985).
27. Asymmetric information can also explain why the economy may get stuck at an inefficient contractual equilibrium. See Stiglitz (1992a).

28. This is seen most obviously in efficiency wage models, where wages affect productivity either because of effects on incentives, selection, morale, or labor turnover. For instance, in the Shapiro-Stiglitz “shirking” model, firms must pay a high enough wage to induce individuals not to shirk. The requisite wage depends on the unemployment rate and the length of time that individuals remain in the unemployment pool. Firms that have a policy of letting go of labor more easily lead to higher labor turnover, and, at any unemployment rate, a shorter duration in the unemployment pool. This means that the equilibrium wage and unemployment rate will be higher. More generally, it is optimal to throw “sand in the wheels”: some friction, e.g., associated with mandatory severance pay. See Shapiro and Stiglitz (1984); Arnott and Stiglitz (1985); Rey and Stiglitz (1993); Stiglitz, (1974a, 1982a, 1992b).
29. In the absence of insider trading rules, it might even profit from the foreknowledge of the plant closing. This is another example of how the legal framework helps shape incentives and behavior.
30. There is a huge literature on agency issues, which can be viewed as the central issue in incentives. See, e.g., Stiglitz (1974b) or Ross (1973).
31. Fifty years ago, we did not know of the risks of global warming or of the dangers of certain toxic wastes.
32. The choice is parallel to that which we discuss at greater length below concerning broader rules of the game. Good systems need clear rules. But when the world changes, the rules have to change. Putting too many of the rules in a hard-to-change constitution leads to societal rigidities, impeding adaptability to changing circumstances—something Europe is learning at great cost.
33. The word “ownership” is in quotes to remind the reader that property rights always are a bundle of rights and responsibilities, and that such bundles can take a variety of forms.
34. See Braverman and Stiglitz (1989).
35. Boyle (2003).
36. As Chapter 8 points out, “strengthened” intellectual property rights introduce static inefficiencies, and if the system of IPR is not well designed, may not lead to offsetting dynamic benefits.
37. More generally, an implication of the Greenwald–Stiglitz (1986) theorem is that privately profitable contracts may not be socially efficient. The set of contractual arrangements that evolved in the US involving first and second mortgages, “serviced” by service providers without due attention to conflicts of interest and the potential need for renegotiation has resulted in large inefficiencies, including large transactions costs.
38. Note that the United States does similar things with different mechanisms—a combination of zoning (of “nonresidential” land, of minimum acreage for housing or single-unit housing, which affects housing costs), vagrancy laws, location and arrangement of transport networks, etc., affects where individuals live. So too do patterns of expenditures on local publicly provided goods, such as education. Still, there is a difference between these indirect control mechanisms and more direct control mechanisms, though the direct control mechanisms work mostly indirectly, through the rights of access to local public services.
39. Such discrimination of immigrants is common; what is perhaps unusual about China is that these are domestic migrant workers, rather than foreign.
40. They were mainly based on assertions, not deep economic analysis. Indeed, nonmarket institutions that might arise in response to a market failure (e.g., imperfect insurance arising out of imperfect information) may actually decrease efficiency—making everyone in society worse off; see Arnott and Stiglitz 1991). For more general discussion of these issues and references, see Stiglitz (2000a, 2001a).

41. Indeed, the evidence in the case of the Korean crisis of 1997–8 is consistent with this perspective. For broader discussions of the inefficiency of evolutionary processes, see Stiglitz (1975, 1994).
42. The issue is more complex than this sentence suggests. It is not just a matter of anticipating different contingencies. There are large transaction costs associated with resolving what should be done in each contingency. It makes little sense to bargain about what to do in contingencies that are unlikely to occur. Moreover, between now and the time that the particular contingency could occur, other information/events may occur that may alter the set of efficient actions in that contingency, or affect the bargaining position. If each individual believes that the intervening events will redound to their favor, it may be easier to reach compromise by postponing the specification of the action to be taken in that contingency. Legal frameworks may specify the permissible degree of ambiguity for the contract to be valid. And again, the legal framework can have distributive, as well as efficiency, consequences. One party may take advantage of another knowing that *ex post*, the other party will be in a weaker bargaining position, and that the individual does not know that now.
43. Equally, since corporations are represented by their management, it is hard for self-regulation to protect an industry against actions by management that might be adverse to the interests of shareholders and bondholders—which was evident in the 2008 crisis in the US.
44. To put it in another way: we can think of two stages in the analysis, a specification of how the consequences of risk are borne among the parties and a specification of how the allocation of the consequences is borne can be changed. There are distributional consequences to each specification. The latter inevitably entails not just private parties, but public actors.
45. Moreover, inequities of wealth created by an unbalanced legal system can be self-perpetuating: wealth influences political processes to ensure that redistributions do not occur and to push for legal reforms that perpetuate and enhance inequities.
46. This also helps explain why it is often difficult to make seeming Pareto improvements, e.g., converting distortionary agriculture subsidies into a lump sum annual equivalent. Because governments cannot make binding commitments, farmers would not believe that those payments would continue, once their magnitudes become clear—it would almost surely be unacceptable for a rich corporation to receive millions for doing nothing, though it is acceptable for the same corporation to receive similar amounts for producing corn. But there is in fact a double commitment problem: even if the farmers were to agree to take a lump sum payment up front in return for the elimination of their subsidies, it may be difficult to enforce. After they receive the up-front payment, they may once again lobby for subsidies.
47. To return to the “transactions cost” perspective, the costs associated with achieving these distributive outcomes from this implicit legal assignment of rights may be markedly lower than achieving similar outcomes in other ways.
48. There are even some instances in which such legislation can move an economy from one equilibrium to a Pareto-superior equilibrium. There can exist multiple equilibria, some entailing discrimination, others without discrimination.
49. This is especially the case since the original equilibrium was not itself efficient, because of market failures (e.g., the presence of imperfections of competition).
50. My paper (1980) is available in Chinese as part of *Selected Works on Economics by Joseph E. Stiglitz*.

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