Privatization and Corporate Governance: Principles, Evidence, and Future Challenges

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Unless developing countries embrace a corporate governance perspective, privatization is unlikely to provide the benefits of improved performance with accountability. This article introduces the concept of governance chains that can constrain the grabbing hands of public and private actors by providing information and accountability mechanisms to help investors monitor managers. Empirical data on established firms from 49 countries provide estimates of the relative importance and strength of private and formal chains of governance. The framework and empirical benchmarks help explain the outcomes of past privatizations and suggest certain steps that governments can pursue to be sure to get the most out of future privatization activity.

Over the past 15 years, privatization programs have transformed the economic landscape in countries around the globe, transferring close to \$1 trillion in assets from government-controlled enterprises to private hands. Analysts report that this shift provides benefits ranging from increased state revenues to a reduction in government's role as sole provider of certain goods and services, and academic research has documented significant improvements in operating and performance criteria (Galal and others [1994], LaPorta and Lopez-de-Salines [1999], Megginson, Nash, and van Randenborgh [1994]). According to Shleifer (1998), such evidence moved thinking away from a qualified acceptance of privatization toward an enthusiastic endorsement of the process. But more recent studies challenge this view. Such transfers not only have failed to stop the "grabbing hands" of the state, but evidence suggests that they also allowed profits to be diverted to the grabbing hands of insiders in privatized firms. In Chile, for example, the managers of the largest privatized electricity company pocketed more than 850 times the price given to minority shareholders in a takeover bid (Wright 1999). In Russia, following privatization of the oil industry, the controlling shareholder of Yukos Oil "skimmed over 30 cents per dollar of revenue, while stiffing his workers on wages, defaulting on tax payments by claiming that Yukos couldn't afford them, destroying the value

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of minority shares in both Yukos and the production companies that Yukos controlled but only partly owned, and *not* reinvesting in Russia's run-down oil fields, which badly needed new investment" (Black, Kraakman, and Tarassova (1999: 1737). In the Czech Republic, firms were "tunneled out," that is, stripped of their assets and left with debt, disenchanted workers and investors, and little hope of raising capital to fund future investment projects. As one foreign investor warned in a full-page ad in the *New York Times*, "Think twice before you invest in the Czech Republic. Otherwise, you could be left to 'twist in the wind'" (*New York Times*, November 8, 1999).

These revelations present challenges for state-run enterprises that are about to be privatized. Evidently the transfer of title alone does not ensure improved resource allocation. This article argues that policymakers need to consider more than issues of competition and regulation; adopting a corporate governance perspective will lead to more effective privatizations with fewer problems, particularly in the long run. The steps required to encourage the private sector to invest are deceptively simple: find a way to tie the grabbing hands of public and private parties by providing information and accountability to investors. I say "deceptively" because putting such ideas into practice is difficult, given the variety of institutions that affect information and accountability.

To simplify the thinking about privatization and governance, I introduce the concept of governance chains that can constrain grabbing hands and provide benchmarks, based on their use in established firms, that measure the likely effectiveness of different governance chains. I distinguish two types of chains: a private governance chain in which there are few institutions and each provides both information and accountability, and a formal governance chain, in which the specialization of information and accountability increases the length of the chain and the demand for institutional depth.

Sizing Up the Corporate Governance Challenge

In a well-functioning economy, there is specialization in investment and management. Investors provide their resources to managers with strong investment projects and management capability. Suppliers, workers, and financiers are all investors of a sort because they entrust their resources to those in control of an enterprise. As investors in a long-lived collective enterprise, each awaits promised returns to these contributions.

The promise that investors receive in exchange for their resources includes specific terms and broader understandings about how future contingencies will be resolved. Uncertainty accompanies promises. The parties to the promise, as distinct entities with their own goals, know their interests are not perfectly aligned. The promise is certainly incomplete, as it is difficult (if not impossible) to identify in advance all possible changes in circumstances. The greater the elapsed time between the making of the promise and its payoff, the greater the concern that the original terms of the promise will not be fulfilled.

A major obstacle to securing investment is the prospect that those delegated with decision-making power will not use that authority to deliver what was promised but will instead divert the returns for their own benefit. Some diversions, like outright theft, are obvious. Others are less apparent but equally costly from a societal perspective. Managers have myriad ways to reward themselves at the expense of investors, including transferring resources to themselves at below-market prices, using the firm's funds to build personal empires, or simply tolerating management slack.

Where there are no credible ways to stop grabbing hands from diverting resources, suppliers, workers, and financiers will not extend resources to firms. In the long run countries lose two ways. First, valuable investment opportunities are simply lost. Second, there is no competition for the control of resources within firms, leaving those that are poorly managed to underperform and making it more difficult for new firms to raise capital and compete against these inefficient producers in the market.

Grabbing hands can be public or private. Government officials have been known to require payments in exchange for services and business licenses. The acknowledged problems with public grabbing hands provide an important rationale for privatization. Where such perverse incentives are unconstrained, economic activity goes underground and out of the formal economy. Less widely acknowledged are the risks of grabbing hands in the private sector—an occurrence that may surface in privatized firms, allowing insiders to divert resources. For privatization to be effective, the government must be involved in tying both public and private grabbing hands.

It is helpful to distinguish two types of insiders in the private sector. In the first situation, insiders are managers. Viewed from a traditional U.S. perspective, managers often effectively control the firm's resources, although they have small ownership stakes. In the second situation, the controlling shareholders are the insiders. The dominance of controlling shareholders has been illustrated in the continental European countries (Becht and Roell 1999) and in developing countries (La Porta and others 1998).

Benefits of Governance: Improved Information and Accountability

The institutions of corporate governance are those organizations and rules that influence the expected returns to investing and giving authority over one's resources to insiders. Such institutions alter the payoffs to insiders and outsiders, affecting the actions that will be observed, and facilitate or constrain the grabbing hands of public and private actors.

Two factors lower the costs of such delegated decision making. First, effective governance institutions improve information flows and avoid what is often called the "lemons problem." That is, insiders have an incentive to provide information about good investment projects, but they also have an incentive to withhold information when investment projects go bad or when they (insiders) have been diverting promised returns. Investors know that bad information is covered up and act accordingly, raising the returns required or refusing to invest at all. In contrast, where information flows to outsiders are timely, accurate, and credible, diversions are more difficult to hide, and resources are more likely to be matched with promising investment projects and managers.

Second, effective institutions of governance make insiders accountable. To ensure that resources are always being targeted on their most efficient uses, investors need to be able to punish insiders explicitly (by firing them) or implicitly (by withdrawing their investments). Such accountability mechanisms are enhanced when investors have clearly defined powers in advance, the ability to coordinate their actions, and low-cost mechanisms for resolving disputes with insiders.

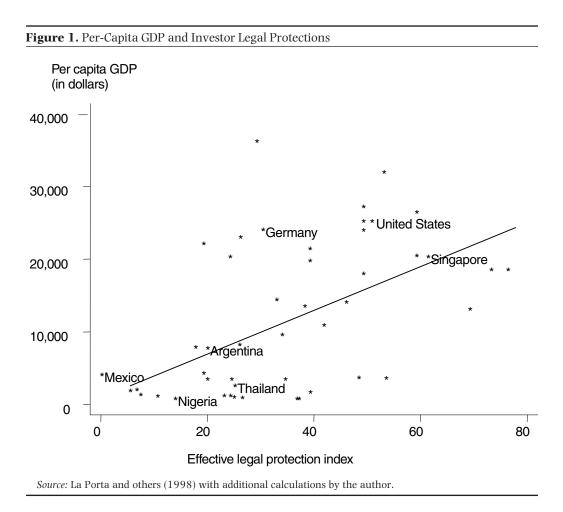
Governance Chains

The least formal governance institutions, which I call private governance chains, have only a few links that monitor and enforce economic activities. The relationship between insiders in the firm and specific external organizations, such as business associations or banks, generates both information and accountability. The strength of these governance chains rests largely on the motivations and ability of insiders in the firm and those in charge of these external organizations.

The most formal solutions contain more links in their governance chains. Separate entities specialize in providing information, others offer accountability, and still others provide a combination of these tasks. The three principal links are institutions that hold political actors accountable; internal institutions, such as boards of directors, that provide both information and accountability; and legal institutions, such as corporate bankruptcy and disclosure laws, which ensure that information and powers of accountability are held not only by the board but also by outside financiers more generally.

Complementing these institutions are additional external organizations. Policy advisers also need to consider financial intermediaries that pool the capital of investors and provide monitoring; information intermediaries, such as auditing firms, credit- and bond-rating agencies, and brokerage firms, that provide independent assessments and ratings; and regulatory organizations that provide incentives for financial and information intermediaries to disseminate socially beneficial information and provide accountability. Private and formal governance chains can be combined, but for my purposes, it is useful to see them as separate entities.

Figure 1 compares private and formal governance chains. The vertical axis shows each country's per-capita gross domestic product (GDP); the horizontal axis provides one measure of the existence of formal governance institutions: an index of the effectiveness of legal protections. To construct the index, I assume that the legal links in formal governance chains would be effective only when arbitrary actions of political actors were constrained and when laws on the books gave powers to financiers. The index is the simple product of, first, a measure of the rule of law provided by commercial risk-rating agencies, and second, a measure of protections for financiers developed by La Porta and others (1998).



Such a simple comparison should not be overinterpreted, but three points are worth noting. First, regardless of the desirability of formal governance chains, most countries do not even have the two links described above. Countries are arrayed predominantly on the left side of the figure. Second, the figure suggests a value to effective formal protections. On average, countries that have a higher index for formal protections have higher per-capita incomes. Third, the figure shows that there are alternative ways to create a well-functioning business environment. The high-income countries exhibit a range of scores indicating the effectiveness of formal institutions. Some countries, like Germany, with only a middling index of effective formal protections, have done very well.

Thinking through the main components of governance chains helps an adviser recommend a given approach. I begin by examining how promises are made credible in settings without an effective state—the situation facing many countries on the left side of figure 1.

Private Governance Chains

Self-enforcement of promises is important in those instances where the state is ineffective and a firm—or a person—is judged by reputation. One way investors can increase the security of their investments is by repeatedly interacting with the same party and allowing "the long shadow of the future" to discipline individuals. Insiders will maintain their promises as long as the losses from breaking up the relationship exceed the short-term gains associated with the breach of promise.

Link One: Linking Insiders to an "Ordering Agent"

One key to the successful use of private governance chains has been the identification of insiders with an "ordering agent" who can coordinate and improve information flows and impose penalties in case of abuse. Reputation is a powerful force, but it has limits when only insiders and investors are involved. Insiders in the firm might violate the interests of one financier and lose the ability to appeal to him or her again for finance, but this threat is weak deterrent if the insiders can turn to other sources for funds. The use of ordering agents to magnify an individual's reputation and support an appeal for investment are found across the developing as well as the industrial world in business associations, business groups, and foreign firms.

Greif (1997) highlights the historical role of business associations as ordering agents who help constrain the state from expropriating private goods. Business associations can also constrain insiders, as revealed in recent evidence from Vietnam and transition economies. Firms that are members of business associations have demonstrated a greater ability to raise formal finance and obtain trade credits, a form of

unsecured lending that is particularly important for smaller firms and those seeking to expand (Johnson, McMillan, and Woodruff 1999).

A related way to link insiders with an ordering agent is to conduct investments through a business group organized around ethnic or family lines. Investors have multiple channels for collecting information and imposing penalties, using social channels to supplement financial ones. Khanna (2000), among others, describes the widespread use of family-centered and ethnic-based business groups in the developing world and demonstrates that performance of group firms relative to nongroup firms can be quite strong.

Both historically and currently, the link between foreign insiders and institutions in their home countries can give those insiders more credibility with investors. Greif (1997) describes the advantages Jewish traders in medieval Mediterranean trade had because of their ethnic ties and the ability of the Jewish community to impose sanctions. Today foreign firms that operate in developing countries are often linked to stock exchanges in their home country, providing a link to a well-functioning institution of organized order. Investors know that information will be made available because the stock exchange requires firms to report consolidated returns using standard accounting practices. The value of this link is suggested by the success domestic firms have had in improving their credibility and ability to raise funds following a crosslisting on a foreign exchange.

Link Two: Adjusting Ownership and Control to Facilitate Private Information Flows and Enforcement

Another key to effective use of private governance chains is to use the ownership and control structures to engage private agents who have a comparative advantage in information collection and in providing accountability. Ownership concentration increases the incentives to monitor insiders and hold them accountable. With sufficiently concentrated provision of finance, one potential set of grabbing hands can even be eliminated, as the dominant provider of finance becomes the manager. International evidence from large firms around the world shows widespread use of this mechanism. When a family controls a firm, it participates in management more than two-thirds of the time.¹

Through ownership structure one can also leverage actors with access to specialized knowledge about the firm and with a comparative advantage in holding managers accountable. Through the early 1990s, many analysts of German and Japanese corporate governance systems suggested that a key to the relatively strong performance of firms in these countries was the ownership and control structure that involved knowledgeable and powerful banks and workers in addition to concentrated owners. Aoki (1984) underscores how labor might be able to police against abuse through its ability to withhold its services. Financial institutions' power to hold insiders accountable derives from their ability to provide long-term finance, from their access to private information about companies, and from their ability to cut off the supply of short-term capital.

A board is accurately characterized as a "relational board" when it includes representatives of suppliers, workers, banks, and major customers. Board members have ties beyond their investment stake that give them preferential access to information and an independent ability to hold insiders to account without having to resort to any legal mechanisms. This type of board is distinguished from the independent board found in more formal approaches to governance and discussed later.

How widespread are private governance chains, as evidenced by the use of ownership concentration and control? Although much academic discussion focuses on dispersed ownership and supporting institutions, recent evidence from academics and World Bank researchers who have measured the size of ownership and voting stakes in large firms shows that internationally such dispersed ownership structures are the exception rather than the norm.

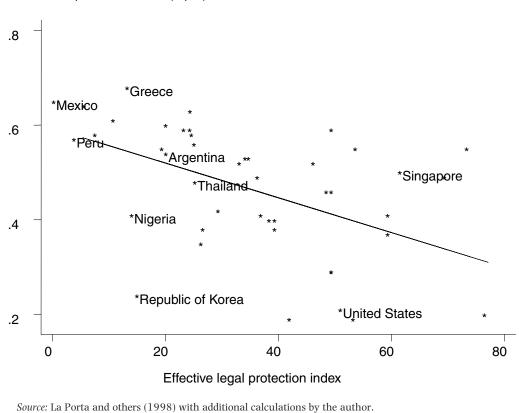
Figure 2 presents evidence from La Porta and others (1998) showing a relationship between ownership structures and legal protections. The measure of ownership concentration is the average shareholding of the three largest shareholders in a sample of the 10 largest domestic publicly listed firms for the same 49 countries as in figure 1. The left side of figure 2 tells an important story: In countries with ineffective legal protections, concentration is the only recorded ownership structure. This evidence is consistent with the argument that dispersed ownership structures are undesirable and unsustainable in countries with weak supporting governance institutions. Furthermore, it is consistent with the argument that ownership concentration is a substitute governance mechanism. This evidence provides an important benchmark for advisers considering privatization because it shows how established firms have responded where two central links in the governance chain are weak.

The Opportunity Cost of Private Governance Chains

Informal, private solutions to the incentive problems addressed by governance measures are widespread and can provide information and accountability. Although such measures should be given serious consideration in a weak institutional environment, private solutions have significant costs relative to formal governance solutions.

The principal advantage of well-functioning formal approaches is their ability to maximize the chances for putting those with resources to invest in touch with those who have good ideas and the ability to implement them. In contrast, potential investment projects that would yield positive returns are likely to go unfunded in an environment characterized by concentrated ownership or one in which insiders must be linked to a private group or business association that can provide order. Formal governance chains also provide equal treatment to those with good investment projects. In

Figure 2. Ownership Concentration and Legal Protections, Worldwide



Ownership concentration (top 3)

an informal setting, those who are not supported by a private governance chain may be unable to find funds for equally good projects.

A second advantage of a well-functioning formal approach is its flexibility. Accountability does not rest with one or two actors but is provided by many parties. If insiders do not fulfill their promises to creditors, bankruptcy laws give financiers control of the company. If firms fail to meet expectations, managers can be replaced by the board, backed by the company's by-laws, by the actions of minority shareholders backed by corporate laws, or by investors enabled to seize control of the firm.

In contrast, given the limited number of actors involved in private governance chains, incentive problems in any one of these actors can produce real and prolonged costs. Banks that have poor incentives will be poor monitors. Recent literature on the Japanese and German banking systems now sees banks' affiliations with borrowing entities as costly and likely to encourage overlending and deferred restructuring (Weinstein and Yafeh 1998). In light of the Asian financial crisis, attention has focused on the widespread practice of control without ownership, which facilitated private grabbing when the economic situation deteriorated. Moreover, private organizations can also coordinate business activities to undermine social welfare by fixing prices or limiting entry to the market.

Recent evidence shows that well-functioning formal governance chains provide many benefits. La Porta and others (2000) report that firms in countries with stronger legal protections are more likely to pay dividends; La Porta and others (1999) and Claessens, Djankov, and Lang (2000) find that legal protections enhance the value of shares. Johnson and others (2000a) show that countries in Asia with stronger formal governance mechanisms suffered smaller declines in share prices and currency values than did countries with weaker protections. La Porta and others (1998) find that the extent of legal protection for financiers is correlated with the depth of equity markets, a predictor of future growth and development.

Formal Governance Chains

Relative to ideal formal governance chains, informal governance chains are weaker. But is this the right comparison? To determine whether formal governance chains can be used we need to understand how they function and find out whether they exist or can be introduced at the time of privatization. This section describes and provides some estimates of each of the six links in formal governance chains.

Link One: Legal Institutions to Constrain the State

Property rights are the first link in the chain of formal governance. The transition economies provide striking evidence of the dangers of an unconstrained state. Johnson, McMillan, and Woodruff (2000), in a study of firms in four transition economies, report that not only do those in control of an enterprise find it nearly impossible to raise external finance in states that do not respect property rights but they are also unwilling even to reinvest earnings. Reinvestment rates are 64 percent higher in firms in countries where property rights are perceived to be stronger than in those where they are perceived to be weak.²

One way to limit the state's involvement is through the use of laws of incorporation. Governments need to create a legal space for private firms to establish themselves. Where firms are not allowed to incorporate at all, or where incorporation requires explicit and discretionary political approval, the state is more likely to interfere. A law of free incorporation signals a greater willingness to cede authority to private actors and markets. But such laws are not enough to tie the hands of the state. A banal but often ignored point is the need for a credible constraint on arbitrary action by political actors who may wish to undermine the rights written into corporate laws. There are many ways to constrain political actors, but underlying them all is a check on executive authority, provided by a separation of powers among executive, legislative, and judicial authorities; by a federal government that oversees regions with independent power; or by other means (Henisz 2000).

To evaluate the desirability of a formal approach, policymakers thus need to test the strength of the constraints on the state, ideally based on an international comparison. One could focus on the structural constraints mentioned above or on the quality of the state's rule of law, the effectiveness of the judiciary, the risk of expropriation, the risk of contract repudiation, or even the extent of corruption or demands for extralegal payments. All such responses are closely correlated. For simplicity in this article, I use the response to the rule-of-law question as the indicator of restraints on the state and the enforcement of laws.

Link Two: Independent Boards to Constrain Insiders

Internal corporate institutions designed to delegate decision making can constrain grabbing hands in the private sector. Here attention has focused on the institution of the board of directors, that body defined in company by-laws and appointed by shareholders to exercise control over insiders. Individuals appointed or elected to a board of directors are charged with the specific task of monitoring management. When boards include members with expertise about the firm and the industry, the board is well positioned to solve problems that arise from management attempts to withhold detrimental information. Effective in providing accountability, boards of directors are also responsible for recruiting executives, setting compensation policy, and handling dismissals.

Boards can help address problems, but they are not enough. To improve information flows and accountability to shareholders, boards need to have the right incentives. All too often boards become instruments of the manager or controlling shareholder rather than watchdogs for outside investors. Making board members independent of top management is desirable wherever independent board members can be found with the ability to monitor management, given the information provided by management. Building on research in developed markets, standard-setting bodies, such as the Organization for Economic Cooperation and Development (OECD), recommend corporate governance guidelines that include more outsiders on boards of directors and in sensitive activities, such as financial reporting, nomination, and remuneration committees. The difficulty of finding board members who are familiar with the firm's circumstances, who are independent of insiders, and who have the incentive to dedicate themselves to their oversight duties leads to the third link in the governance chain legal protections that provide outside investors with information and accountability mechanisms beyond those implied by a board of directors.

Link Three: Legal Institutions to Constrain the Grabbing Hands of Insiders

Important issues arise regarding laws that require firms to disclose financial and ownership information using channels available to all investors. Experience reveals common practices through which insiders have been able to divert large proportions of firm assets to their own uses, suppressing the information that, if disclosed, would help stop such abuses. International standard-setting bodies, by providing a metric, have facilitated measurements of how far actual information disclosure is from standards.

OECD (1999) provides a good illustration of the type of information that should be disclosed to investors to eliminate self-dealing by insiders. That information includes consolidated financial information, which lists all the firms in which the insiders have a controlling interest as well as the transactions between these firms, and "related-party transactions," which require insiders to reveal the terms of any transaction between themselves and the firm. Because such self-dealing transactions are easier to accomplish when there is a clear controlling shareholder, these guidelines also recommend that ownership stakes must be disclosed when they exceed thresholds that could give the shareholder control.

On the accountability side, the laws that are likely to be most effective are those that provide for little interference with management during normal times but allow for significant intervention with low transaction costs when a situation deteriorates. Specifically, these are laws that permit a temporary concentration of control in the hands of shareholders, such as corporate laws requiring shareholder approvals for acquisitions or divestitures, and that provide for the credible possibility that outsiders can replace current controlling shareholders or managers (or both), such as the shift of control to a court-appointed manager in bankruptcy. Such laws lower bargaining costs arising from the presence of many financiers. This approach is associated most closely with the work of La Porta and others (1998), who have produced internationally comparable measures of protections for equity and debt financiers.

Note that the logic behind focusing on such accountability mechanisms produced by the state is the same that drove the discussion of private ordering agents. The state should be viewed as a particularly capable ordering agent because its control over coercive force gives it the ability to enforce its judgments and because in principle it is nondiscriminatory and open to use by all parties in an investment transaction. La Porta and others (1998) first measure legal protections for providers of debt finance. In almost all developing countries, debt finance is central to funding investment projects that exceed internally generated cash flow. Bankruptcy laws specify the criteria for determining when promises have not been kept and outline a procedure for reallocating control over the use and distribution of assets, normally assigning control temporarily to a judge, who often transfers it to a trustee controlled by creditors. Strong bankruptcy laws mean that the costs of invoking these protections are low and that the bargaining process for distributing assets is speedy and predictable.

La Porta and others (1998) then measure protections for minority shareholders under corporate laws, focusing on laws that give these shareholders power regarding changes to the company charter, the process for determining the boards of directors, and management's duty to the board and the board's duty to shareholders. The researchers focus on six rights that indicate who holds the power in firms. Extraordinary actions hinge on protections such as class-action lawsuits and takeovers.

Johnson and others (2000b) note that financiers are protected not only by the substance of the law but also by their ability to seek judicial recourse in case of perceived abuse. For example, the legal concept of a director's "duty of loyalty" to investors is common in most corporate laws. This phrase is thought to have a greater impact in countries with a common law legal tradition, such as the United Kingdom, United States, and Commonwealth countries. Using this weakly defined "duty" as a rationale, outsiders have been able to enlist judges to protect investors from abuse by insiders. In contrast, the same duty of loyalty concept is interpreted narrowly in civil law jurisdictions, with judges unwilling to involve themselves in transactions that might have a plausible business purpose and thus permitting more behavior often labeled as "tunneling."

Link Four: Organizations to Improve Information Flows and Accountability

Many discussions of governance institutions stop here. But that is a mistake. In wellfunctioning governance systems, additional sets of actors emerge or are enlisted to improve information and accountability. Financial organizations that pool capital and invest on behalf of clients are the fourth link in formal governance chains. The size of the investments made by intermediaries gives them the incentive to monitor firms directly or, if necessary, to pay for the information to be collected. Such investors include hedge funds, venture capitalists, and pension and insurance funds. Prominent in established markets, such institutions are increasingly important in developing countries due to cross-border private capital flows as well as to the growth of domestic private pension funds. Financial intermediaries penalize insiders either by exiting the firm and driving down the firm's price or by exercising voice and demanding changes.

Link Five: Firms to Improve the Flow of Information to Outside Investors

Financial intermediaries cannot function effectively without access to information. Such information intermediaries include auditing firms, credit-rating agencies, bondrating firms, and equity analysts affiliated with brokerage houses. These organizations can reduce the lemons problem in information supply by offering an informed judgment about the quality of information released by firms.

The importance of such information intermediaries to investors is revealed in industrial economies. Intertwined with the firms that expanded their scope from regional to national and dramatically increased their size in the 19th century was the development of credit-rating agencies followed by accounting and auditing firms. The capital-demanding railway industry would have found it difficult to expand as it did without the rise of public accounting firms and the emergence of bond-rating companies. Stock markets introduced listing requirements, and brokerage houses and the security analysts they employed provided independent analysis of current and future prospects of firms.

Link Six: Organizations to Provide Incentives to Intermediaries

The sixth link in formal governance chains is provided by private and public regulatory organizations. Financial and information intermediaries are private firms that are naturally more interested in profits than in producing public goods. Financial intermediaries, for example, could benefit from insider trading. Information intermediaries might find it more profitable not to collect information, or they could withhold information if their profits derived more from other business relationships with the firms they monitored.

The potential loss of their customer base is a powerful incentive for these intermediaries to provide quality information. But history suggests that reputation is not enough. Unregulated private entities in the 19th century gave way to regulatory interventions that structured incentives for these intermediaries by setting standards and providing discipline. In this way, regulatory authorities have effectively substituted for boards or corporate laws in promoting socially beneficial information flows.

A key element in structuring intermediaries' incentives is finding the right mix of private and state regulatory solutions. An example of a successful marriage between public and private powers is the formation of the U.S. Securities and Exchange Commission (sEc) in the 1930s. McCraw (1982) recounts how the architects of the sEc decided to focus on the financial and information intermediaries rather than on the firms issuing securities. McCraw also emphasizes that a major factor contributing to increased confidence in the equity markets was the effective use of self-regulation (by delegating power to private regulatory bodies), coupled with the sEc's ultimate responsibility for standard setting and discipline. Importantly, these private regulatory bodies

were not subject to the legal due process required of public institutions attempting to institute the same regulatory rules.

The appropriate mix between state and private regulation cannot be specified in advance, and the mix differs to reflect industry conditions, the incentives of state regulatory actors, the desire for a more flexible system, and the power of reputation penalties. For example, where reputations have less established value (as is the case with new firms in developing economies), more active state involvement might be warranted until private solutions can operate effectively. But all countries need to develop information intermediaries, financial intermediaries, and regulatory organizations to structure incentives. These groups can become major promoters of improvements in other elements of formal governance chains. Where the incentives of these intermediaries are weak, they can become major obstacles to any governance reforms.

Information and accountability can be provided through shorter private governance chains or through longer governance chains where information and accountability are provided by separate entities. Private governance chains are weaker than formal governance chains, but the formal chain may be only as strong as its weakest link, making it impossible to say that one approach is universally preferred.

Governance Approaches and Privatization Outcomes in Transition Countries

To what extent have privatized firms relied on formal governance chains? Have privatization approaches that demand formal governance chains produced strong results in countries that start with weak links? In other words, can the artificial corporate structures created through privatization stimulate the development of governance institutions?

Evidence from transition economies provides a rich data source with countrywide differences and within-country variation on the use of private or formal governance chains. Both sources help refine the understanding of the components of effective governance.

The difference between corporate structures of established firms and those introduced at the time of privatization is that structures devised by political actors for newly privatized firms have not yet been tested. This can be seen by relating an index of concentration to an index of the effectiveness of legal protections. The concentration index is based on whether the European Bank for Reconstruction and Development (EBRD 1999) classified the privatization method as direct asset sales, management and employee buyouts, or voucher privatization. Voucher privatization involves a share issue that results initially in dispersed ownership. Direct asset sales result in more concentrated ownership. Management and employee buyouts are somewhere in between direct sales and voucher privatization at creating concentration at the time of privatization. This is a crude measure, but it captures cross-country differences.

The index of effective legal protections is the product of a national score for formal protections for creditors and equity investors and a measure of the rule of law; both estimates are from Pistor, Raiser, and Gelfer (2000). The legal protections index is based on the year that marked the beginning of the country's privatization program. The rule-of-law index is available for all countries only for 1998. Overall scores for the index are low. To repeat the obvious, the odds were against effective formal protections. The historical legacy of socialism included an atrophying of legal frameworks to support private ownership. Courts were not independent. Legislation was at times slow to develop and in other cases weakly enforced.

The initial approach to ownership at the time of privatization in transition economies did not follow the patterns of established firms around the world. Several transition countries avoided international benchmarks by introducing a privatization approach that demanded formal governance mechanisms without initially having the two principal links in the formal governance chain. For information and accountability, these countries implicitly assumed that the links in the formal governance chain could be introduced quickly, increasing the effective legal protection, or that ownership would be quickly reallocated at a low cost from the public to the private sector, increasing reliance on private governance chains.

There are significant cross-country differences. A number of countries started with private governance chains in focusing on direct sales. These countries followed the patterns of figure 2. In Estonia vouchers were used, but in most instances 60 percent of the firm was sold to a strategic investor (Nellis 1996). German officials rejected demands for a widespread distribution of shares to East Germans, instead selling assets to foreigners and established firms (Dyck 1997).

What does the evidence on the performance of these different approaches show? To a large (and perhaps surprising) degree, the initial approach to privatization correlates well with the country's subsequent growth experience. Those that held to international benchmarks on governance and introduced concentrated ownership structures to counterbalance their weak legal environments have done better than average for their regions, as measured by their per-capita GDP growth rates from 1991 to 1998 (Havrylyshyn and Wolf 1999). Those countries that implicitly relied initially on formal governance chains, such as the Czech Republic, have done worse, sometimes spectacularly so.

More convincing are the results from firm studies. A recent survey of 3,000 enterprises completed by the World Bank and the EBRD (1999) reports that for all indicators of restructuring, reform is much greater in firms with fewer than three shareholders and in foreign firms. The most convincing findings come from quantitative empirical research that employs statistical controls for country factors and the choice of privatization method. Djankov and Murrell (forthcoming) summarize the results from 23 studies, including notable examples such as Frydman and others (1999). Privatized firms that relied on formal approaches to provide governance recorded the weakest returns, whereas those that relied on private solutions based on ownership concentration and links between insiders and private ordering agents have had much stronger returns. Djankov and Murrell (forthcoming) estimate that relative to foreign ownership (the most effective structure), dispersed ownership structures deliver just one-tenth the impact on performance. Outsiders are more effective than insiders in improving performance. Djankov (1999), who studied the former Soviet republics, found that privatization had a positive impact when the ownership stake was greater than 30 percent and the owner was a foreigner.

Interpreting the Relative Weakness of Formal Governance Chains

One problem with the initial use of formal governance chains in cases in which private governance chains could work more effectively has been the costs associated with a rapid increase in ownership concentration and a switch in governance mechanisms. Across the transition countries, there was a dash for control of the privatized entity. The extent of control was sufficient to divert returns, lowering the value of the shares of minority shareholders and making it cheaper for the majority shareholders to buy more shares over time (Claessens and Djankov 1999). In short, governance in firms rested for a long time on the weak links in formal governance chains.

Which links have mattered and should therefore be the focus of reform efforts in subsequent privatizations? Many of the diversionary practices introduced by Eastern European firms have been perfectly legal, a situation that highlights the importance of corporate laws-the third link in formal governance chains. But corporate laws, though important, should not be the sole focus of reform. Pistor, Raiser, and Gelfer (2000) report that the laws on the books to constrain insiders dramatically improved throughout the 1992–98 period. The average level of legal protection for financiers in the La Porta and others (1998) sample of 49 countries was 5.3. In 1992 the transition economies' score of 3.6 put them below this level, but by 1998 their score was 6.4; for the countries that pursued voucher privatization, the score reached 6.9. Pistor, Raiser, and Gelfer (2000) observe that the weak link in the chain was the state's inability to enforce existing laws, an inability that reduced the effectiveness of all reforms. Other researchers have focused on the links of intermediaries and on the regulators that structured their incentives. Compelling evidence is provided by detailed case studies of the Czech Republic and Poland (see Johnson and Shleifer 1999 for a comparison of the Czech Republic and Poland). The two countries had similar levels of legal protection, but Poland's performance was much better. The differences in performance are attributed to correspondingly weaker incentives for intermediaries in the Czech Republic.

The Czech government consciously focused on formal governance chains to constrain insiders. Firms were privatized, with dispersed ownership relying on newly created financial intermediaries to produce information and accountability. The government took no active steps to structure the incentives of these intermediaries through the development of private or public regulatory authorities. Early studies reported that the market was working toward improving governance, but evidence began to show that the laissez-faire approach created ample opportunities for abuse in the supporting organizations. The term "tunneling" was crafted to describe the various mechanisms through which enterprise and fund managers were able to shift investor assets to their own accounts.

A lack of positive incentives for intermediaries and banks facilitated tunneling. The investment privatization funds that were the dominant intermediaries had little incentive to improve their portfolios by undertaking active—and costly—efforts to improve governance, and again, they faced few meaningful regulatory incentives (Coffee 1996). Banks, with large investments in firms through both equity and debt, delayed bankruptcy proceedings and thus failed to provide accountability. Their incentives to act were weakened by the extensive state role in bank ownership and control that created what has been described as a system of "bank socialism."

The absence of government regulations left the financial intermediaries free rein. The securities and exchange commission, which was under the control of the finance ministry and exposed to political pressures, had no real independent authority. Only with the passage of the Securities Commission Act in April 1998 did the Czech National Bank introduce more strict provisioning and loan classification rules to make sure that banks took their lending and monitoring responsibilities more seriously. The timing of this legislation, following the collapse of the government, hints that behind this slow institutional development was a political unwillingness to cede discretionary authority to regulatory agencies.

The contrast with Poland is striking. Poland took a different route by limiting voucher privatizations and focusing first on establishing an institutional structure that regulated financial and information intermediaries and creating incentives to monitor companies' financial returns. The government undertook far more stringent regulation of securities, including controlling financial intermediaries through licensing, demanding that issuers of securities provide complete disclosure, and imposing ex ante restrictions that limited conflicts of interest for intermediaries. There have been far fewer reports of investor dissatisfaction with Polish firms than with Czech firms.

A comparison of trends in market development offers suggestive evidence of the comparative success of Poland's approach to governance. In 1995 market capitalization as a proportion of GDP was 4 percent in Poland and 30 percent in the Czech Republic. Three years later market capitalization had risen to 14 percent of GDP in Poland and had declined to 24 percent in the Czech Republic. The number of issues listed declined from 1,698 to 283 in the Czech Republic and rose from 65 to 218 in Poland (Johnson and Shleifer 1999). Similar results hold across Eastern Europe and

the former Soviet republics, with a particular decline in listed issues in the countries that pursued mass privatization.

The experience of the transition economies reveals the importance of all of the links in formal governance chains. Some links can be transformed through dedicated effort. But what apparently cannot be done is to improve all of the links simultaneously, even as resources are being diverted or left to unproductive uses and promising new investment projects are going unfulfilled. The experience of the transition economies suggest that it takes a long time to develop effective formal governance chains. Private governance chains in the same environment, though they have their flaws, have resulted in better performance.

Governance Approaches and Privatization Outcomes: Global Evidence

Can this lesson from transition economies—that privatization design should be aligned with the strength of existing governance chains—be generalized to other settings? Figure 3, using privatization data from Megginson and others (forthcoming), helps position privatization approaches throughout the world with those in the transition economies and relative to benchmarks suggested by established firms. The downward sloping line in figure 3, following that in figure 2, confirms the relative tendency of governments to use asset sales rather than share issues in privatization programs when formal governance chains are weak. Asset sales are usually associated with the sale of a majority stake to a single investor or to a consortium of investors that have been approved under some prequalification screening process. Share-issue privatizations are more likely to introduce firms without an initial controlling shareholder. Privatized firms around the world stick to established benchmarks to a much greater extent than do transition economies. Among countries with relatively weak formal protections, very few countries use share issues for a large proportion of privatizations.

When a Governance Approach Is Aligned with the Institutional Environment

No comprehensive studies relate a firm's performance to institutional factors and privatization schemes. Notable examples—such as the United Kingdom, which adopted a formal governance chain, and Mexico, which relied on a private governance chain—show that both chains can work very effectively when the institutional environment is supportive.

For a sample of 25 electric and water companies in the United Kingdom, the average ownership stake of the largest shareholder was very low: just 4.6 percent in the year of privatization (Cragg and Dyck 1999a). Despite the threat that this distribution could result in managers controlling the firm, according to evidence provided

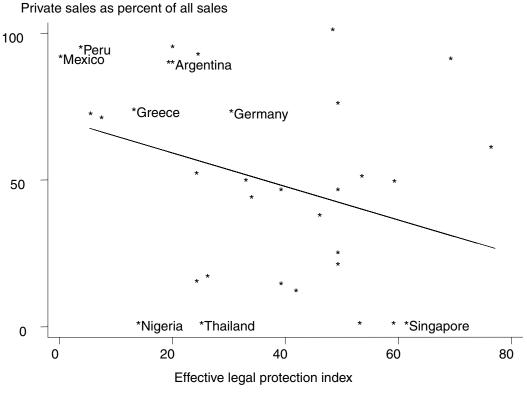


Figure 3. Privatization Approach and Legal Protection, Worldwide

Sources: La Porta and others (2000), Megginson and others (forthcoming), and calculations by the author.

by Cragg and Dyck (1999a, 1999b), managers have been replaced, their replacement and compensation are sensitive to changes in the firm's financial performance, and privatized firms now find it easier to hire top-quality managers. These patterns show that four years after privatization, privatized firms (in terms of incentives) are indistinguishable from established, publicly traded firms, in sharp contrast to their pattern under state ownership, when there was no evidence of dismissal or compensation contingent on a firm's performance.

Qualitative and quantitative evidence introduced in Cragg and Dyck (1999b) reveals the role the six links in the governance chain played in producing these results. The involvement of financial and information intermediaries is particularly important. By the fourth year, the extent of oversight of privatized firms by analysts is indistinguishable from that given to established publicly traded firms, and the quality

of this oversight exceeds that of privatized firms in samples of countries with both high and low levels of shareholder rights.

The Mexican privatization program, another notable success story, used private governance chains. Lopez-de-Salines (1997) finds that controlling stakes were sold to investors in 87 percent of the firms in his privatization sample. When noncontrolling stakes were sold, the shares were bought by the controlling shareholder in 83 percent of the cases. Returns to these privatizations have been tremendous. LaPorta and Lopez-de-Salines (1999) report a 40 percent increase in the ratio of net income to sales three years after privatization, far greater than the 7.5 percent Megginson, Nash, and Van Randenborgh (1994) report in their international sample of share-issue privatizations.

When a Governance Approach Is Not Aligned with the Institutional Environment

What about those privatizations that were not aligned with legal protections? No systematic evidence is available, but some insights are available from Latin America (although caution must be exercised in generalizing from these examples).

Compare the oil company YPF, the largest company in Argentina, and Enersis, the most important electric company in Chile. Effective protection for investors is relatively weak in both countries but particularly so in Argentina. Both economies are dominated by business groups and concentrated ownership structures. In Argentina, for example, 100 percent of established, publicly traded companies without state ownership have an identifiable controlling shareholder (La Porta and others 1999). In 1993 YPF was sold in a privatization that produced no single private shareholder with more than 3 percent of the shares; the state retained a 20 percent direct stake. Enersis was sold to a dispersed group of shareholders, including individuals, employees, and pension funds.

These ownership structures were notable because they were different from the vast majority of other firms in the two countries. In effect, the privatizations relied on formal governance chains to check abuse, whereas the norm was to place more reliance on private governance chains. This approach opened up the possibility of abuse by management or the sort of dash for control and dilution of minority rights as seen in Eastern Europe.

Most analysts give YPF high marks for high levels of disclosure and responsible management, with consistent dividends and healthy equity returns despite a takeover by the Spanish oil company Repsol in 1999. In contrast, although Enersis management is given strong marks for improving efficiency and performance, when Endesa of Spain sought to buy a controlling stake in Enersis in 1997, evidence of widespread diversion of assets emerged. Management successfully demanded a reported price 850 times that available to noncontrolling shareholders (Wright 1999).

Thus it appears that a governance approach that deviates from that suggested by initial levels of legal protection can be successful, but it is vulnerable. In the YPF and

Enersis examples, privatizations that relied on formal governance chains provided a temporary benefit in increased market development and demand for governance institutions, but these governance chains proved unsustainable. Institutional development is not sufficient to maintain these structures.

Strengthening a Given Governance Chain

Governance is not the only factor driving the choice of privatization method. Political factors, including such issues as foreign domination or a concentration of economic power in the hands of already powerful domestic groups, make it difficult to adopt private governance chains.

Strengthening Formal Mechanisms

When firms that are privatized rely on formal governance chains in countries where such institutions are weak, the natural response is to use the tools under control of the policymaker at the time of the privatization to compensate for those links in the chain that are beyond their control. First, to make up for weaknesses in domestic information disclosure laws, firms can tie themselves to foreign institutions through cross-listings on foreign stock exchanges. In addition to increasing liquidity and lowering the cost of access for foreign investors, foreign listing requirements increase the extent of information that must be produced, and the involvement of foreign stock exchanges and foreign regulators increases the credibility of that information. A foreign listing is likely to be particularly useful in providing information and accountability if the company's strategy calls for financing from international markets.

Privatizing firms apparently appreciate the advantages of cross-listings. Of the US\$133 billion that has been raised through American Depository Rights (ADRs) between 1990 and 1999, more than one-third is accounted for by privatized companies (IMF 2000:73). An increasing fraction of equity in the transition economies is also cross-listed on foreign exchanges; both YPF and Enersis were listed on domestic exchanges and on the New York Stock Exchange.

Second, policymakers can compensate for weaknesses in the link of corporate laws by writing investor protections into the company charter. Many privatized companies around the world, for example, include a so-called golden share that requires government approval in the case of a control transfer. In an economy with wellfunctioning governance institutions, this restriction imposes clear costs by limiting value-enhancing takeovers. But in countries with weak formal governance institutions and where transfers of control can also destroy value, such restrictions can protect minorities. In YPF, the company by-laws went further than a golden share and specified that if any entity assembled a 15 percent stake giving it control, it was required to make a public tender offer for all remaining shares at the same price to all shareholders (essentially introducing an equal-opportunity rule). This protected minority investors in case the government ever relinquished control. Enersis, lacking any such legal requirement, turned out to be more susceptible to diversion.

Third, privatization advisers need to find ways to coordinate the resources and powers of investors, securities exchanges, and financial institutions to uphold those legal protections that do exist, both through corporate laws and company by-laws. Enforcing judgments through the judicial system ultimately requires political action. If shares in the company are held by politically powerful interest groups, they can be enlisted and enhance the chances of enforcement.

The case of Enersis demonstrates this dynamic. When informed of management's diversion of returns, a domestic investor contacted other institutional investors and urged them to act to protect their interests. Investors jointly urged the securities regulator to require the Enersis board to review the deal, which in turn resulted in the decision to fire management and impose a \$55 million fine for failure to disclose information regarding the prospective sale. Chile is now working to improve its takeover legislation.

Making the Most of Private-Sector Mechanisms

Simpler informal governance chains also pose dangers. The transition economies suggest that in countries with very weak formal governance mechanisms, the identity of the owners makes a difference. Some owners, because of their comparative advantages in access to information and other sources of power, are more able to hold insiders accountable and are more credible with outside investors. Other owners independently have a reputation to uphold or are linked to an agent who will penalize them if they engage in abusive behavior. Such a chain of logic provides one rationale for the relatively greater performance of foreign firms in transition economies.

The extreme version of the argument that identity matters in countries with weak formal governance chains is that in these settings, auctions selling controlling stakes (but not complete ownership) are problematic. For instance, the owner with the greatest ability and willingness to dilute some assets will pay the most for the firm. This benefit of identity, however, needs to be compared with the equally daunting problem that without price as a metric, corruption is encouraged. A process that sequences prequalification requirements followed by a competitive bid provides a way both to obtain the benefits of identity and to limit the prospect of corruption.

Conclusions

Privatizations have produced significant improvements as well as some disappointments. Advisers that take a governance perspective at the time of privatization will see more effective privatizations, particularly in the long run. At one level, taking a governance perspective is simple—the adviser needs to find a way to protect public and private investors by providing information and accountability. At another level it is difficult, for a variety of institutions can provide such services.

To simplify thinking about privatization and governance, I have introduced the concept of governance chains. I introduce two types of chains: a private governance chain in which there are few institutions and the institutions assume the responsibility of providing information and accountability, and a formal governance chain in which the specialization of information and accountability increases the length of the chain.

Where each of the links is strong, formal governance chains will be more effective, but in most countries many of the links are weak. The key to effective privatization is thus to employ the governance chain that has the greatest probability of success in the first instance and, barring this, to strengthen each link as much as possible. Privatizations that attempt to use formal governance chains without initially developing the links of the governance chain or without making concerted efforts to compensate for existing weaknesses will disappoint.

Notes

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Various measures of legal protection relating to businesses as well as details on ownership concentration and privatization are available in appendix tables on the Web at *http://www.worldbank.org/research/journals/wbromast.htm*.

1. Studies that develop measures of ownership concentration include La Porta and others (1998) for more developed economies and Claessens, Djankov, and Lang (2000) for a more economically diverse group of East Asian countries. La Porta and others report management participation 69 percent of the time in their sample, whereas Claessens, Djankov, and Lang report 67 percent for their sample from East Asia.

2. Results are based on firm-level regression using data from five transition countries, where property rights are measured by an index that combines the incidence of demands for "extralegal payments" for government services, demands for extralegal payments for government licenses, firms paying for protection, and firms reporting that courts cannot be used to enforce contracts.

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