Investor Protection and Corporate Governance*

Rafael La Porta[a], Florencio Lopez-de-Silanes[b], Andrei Shleifer[a,*] and Robert Vishny[c]

[a] Department of Economics, Harvard University, Cambridge, MA 02138

[b] Kennedy School of Government, Harvard University, Cambridge, MA 02138

[c] Graduate School of Business, University of Chicago, Chicago, IL 60637

Abstract.

Recent research has documented large differences among countries in ownership concentration in publicly traded firms, in the breadth and depth of capital markets, in dividend policies, and in the access of firms to external finance. A common element to the explanations of these differences is how well investors, both shareholders and creditors, are protected by law from expropriation by the managers and controlling shareholders of firms. We describe the differences in laws and the effectiveness of their enforcement across countries, discuss the possible origins of these differences, summarize their consequences, and assess potential strategies of corporate governance reform. We argue that the legal approach is a more fruitful way to understand corporate governance and its reform than the conventional distinction between bank-centered and market-centered financial systems.

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[*]Corresponding author. Tel:617 495 5046; fax: 617 496 1708

Email address: ashleifer@harvard.edu

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1. Introduction

Recent research on corporate governance around the world has established a number of empirical regularities. Such diverse elements of countries' financial systems as the breadth and depth of their capital markets, the pace of new security issues, corporate ownership structures, dividend policies, and the efficiency of investment allocation appear to be explained both conceptually and empirically by how well the laws in these countries protect outside investors. According to this research, the protection of shareholders and creditors by the legal system is central to understanding the patterns of corporate finance in different countries.

Investor protection turns out to be crucial because, in many countries, expropriation of minority shareholders and creditors by the controlling shareholders is extensive. When outside investors finance firms, they face a risk, and sometimes near certainty, that the returns on their investments will never materialize because the controlling shareholders or managers expropriate them. (We refer to both managers and controlling shareholders as "the insiders.") Corporate governance is, to a large extent, a set of mechanisms through which outside investors protect themselves against expropriation by the insiders.

Expropriation can take a variety of forms. In some instances, the insiders simply steal the profits. In other instances, the insiders sell the output, the assets, or the additional securities in the firm they control to another firm they own at below market prices. Such transfer pricing, asset stripping, and investor dilution, though often legal, have largely the same effect as theft. In still other instances, expropriation takes the form of diversion of corporate opportunities from the firm, installing possibly unqualified family members in managerial positions, or overpaying executives. In general, expropriation is related to the agency problem described by Jensen and

Meckling (1976), who focus on the consumption of “perquisites” by managers and other types of empire building. It means that the insiders use the profits of the firm to benefit themselves rather than return the money to the outside investors.

If extensive expropriation undermines the functioning of a financial system, how can it be limited? The legal approach to corporate governance holds that the key mechanism is the protection of outside investors—whether shareholders or creditors—through the legal system, meaning both laws and their enforcement. Although reputations and bubbles can help raise funds, variations in law and its enforcement are central to understanding why firms raise more funds in some countries than in others. To a large extent, potential shareholders and creditors finance firms because their rights are protected by the law. These outside investors are more vulnerable to expropriation, and more dependent on the law, than either the employees or the suppliers, who remain continually useful to the firm and are thus at a lesser risk of being mistreated.

The legal approach to corporate governance is a natural continuation of the field as it has developed over the last 40 years. Modigliani and Miller (1958) think of firms as collections of investment projects and the cash flows these projects create, and hence naturally interpret securities such as debt and equity as claims to these cash flows. They do not explain why the managers would return the cash flows to investors. Jensen and Meckling (1976) point out that the return of the cash flows from projects to investors cannot be taken for granted, and that the insiders of firms may use these resources for their own benefit. Jensen and Meckling view financial claims as contracts that give outside investors, such as shareholders and creditors, claims to the cash flows. In their model, the limitation on expropriation is the residual equity ownership by entrepreneurs that enhances their interest in dividends relative to perquisites.

Research by Grossman, Hart, and Moore, summarized in Hart (1995), makes a further key advance by focusing squarely on investor power vis a vis the insiders, and distinguishing between the contractual and residual control rights that investors have. Economists have used this idea to model financial instruments not in terms of their cash flows, but in terms of the rights they allocate to their holders. In this framework, investors get cash only because they have power. This can be the power to change directors, to force dividend payments, to stop a project or a scheme that benefits the insiders at the expense of outside investors, to sue directors and get compensation, or to liquidate the firm and receive the proceeds. Unlike in the Modigliani-Miller world, changing the capital structure of the firm changes the allocation of power between the insiders and the outside investors, and thus almost surely changes the firm's investment policy.

In both the contractual framework of Jensen and Meckling and the residual control rights framework of Grossman, Hart, and Moore, the rights of the investors are protected and sometimes even specified by the legal system. For example, contract law deals with privately negotiated arrangements, whereas company, bankruptcy, and securities laws specifically describe some of the rights of corporate insiders and outside investors. These laws, and the quality of their enforcement by the regulators and courts, are essential elements of corporate governance and finance (La Porta, Lopez-de-Silanes, Shleifer and Vishny 1997, 1998). When investor rights such as the voting rights of the shareholders and the reorganization and liquidation rights of the creditors are extensive and well enforced by regulators or courts, investors are willing to finance firms. In contrast, when the legal system does not protect outside investors, corporate governance and external finance do not work well.

Jensen and Meckling (1976) recognize the role of the legal system when they write:

This view of the firm points up the important role which the legal system and the law play in social organizations, especially, the organization of economic activity. Statutory law sets bounds on the kinds of contracts into which individuals and organizations may enter without risking criminal prosecution. The police powers of the state are available and used to enforce performance of contracts or to enforce the collection of damages for non-performance. The courts adjudicate contracts between contracting parties and establish precedents which form the body of common law. All of these government activities affect both the kinds of contracts executed and the extent to which contracting is relied upon (p. 311).

One way to think about legal protection of outside investors is that it makes the expropriation technology less efficient. At the extreme of no investor protection, the insiders can steal a firm's profits perfectly efficiently. Without a strong reputation, no rational outsider would finance such a firm. As investor protection improves, the insiders must engage in more distorted and wasteful diversion practices such as setting up intermediary companies into which they channel profits. Yet these mechanisms are still efficient enough for the insiders to choose to divert extensively. When investor protection is very good, the most the insiders can do is overpay themselves, put relatives in management, and undertake some wasteful projects. After a point, it may be better just to pay dividends. As the diversion technology becomes less efficient, the insiders expropriate less, and their private benefits of control diminish. Firms then obtain outside finance on better terms. By shaping the expropriation technology, the law also shapes the opportunities for external finance.

The legal approach to corporate governance has emerged as a fruitful way to think about a number of questions in finance. In Section 2, we discuss the differences in legal investor protection among countries and the possible judicial, political, and historical origins of these differences. In Section 3, we summarize the research on the economic consequences of investor protection. In Section 4, we compare the legal approach to corporate governance to the more standard focus on the relative importance of banks and stock markets as ways to explain country differences. In Section 5, we discuss both the difficulties and the opportunities for corporate governance reform. Section 6 concludes.

2. Investor protection

When investors finance firms, they typically obtain certain rights or powers that are generally protected through the enforcement of regulations and laws. Some of these rights include disclosure and accounting rules, which provide investors with the information they need to exercise other rights. Protected shareholder rights include those to receive dividends on pro-rata terms, to vote for directors, to participate in shareholders' meetings, to subscribe to new issues of securities on the same terms as the insiders, to sue directors or the majority for suspected expropriation, to call extraordinary shareholders' meetings, etc. Laws protecting creditors largely deal with bankruptcy and reorganization procedures, and include measures that enable creditors to repossess collateral, to protect their seniority, and to make it harder for firms to seek court protection in reorganization.

In different jurisdictions, rules protecting investors come from different sources, including company, security, bankruptcy, takeover, and competition laws, but also from stock exchange regulations and accounting standards. Enforcement of laws is as crucial as their contents. In most countries, laws and regulations are enforced in part by market regulators, in part by courts, and in part by market participants themselves. All outside investors, be they large or small, shareholders or creditors, need to have their rights protected. Absent effectively enforced rights, the insiders would not have much of a reason to repay the creditors or to distribute profits to shareholders, and external financing mechanisms would tend to break down.

The emphasis on legal rules and regulations protecting outside investors stands in sharp contrast to the traditional "law and economics" perspective on financial contracting. According to that perspective, most regulations of financial markets are unnecessary because financial contracts take place between sophisticated issuers and sophisticated investors. On average, investors recognize a risk of expropriation, penalizing firms that fail to contractually disclose information about themselves and to contractually bind themselves to treat investors well. Because entrepreneurs bear these costs when they issue securities, they have an incentive to bind themselves through contracts with investors to limit expropriation (Jensen and Meckling 1976). As long as these contracts are enforced, financial markets do not require regulation (Stigler 1964, Easterbrook and Fischel 1991).

This point of view, originating in the Coase (1961) theorem, crucially relies on courts enforcing elaborate contracts. In many countries, such enforcement cannot be taken for granted. Indeed, courts are often unable or unwilling to invest the resources necessary to ascertain the facts pertaining to complicated contracts. They are also slow, subject to political pressures, and at times corrupt. When the enforcement of private contracts through the court system is costly enough, other forms of protecting property rights, such as judicially-enforced laws or even government-enforced regulations, may be more efficient. It may be better to have contracts restricted by laws and regulations that are enforced than unrestricted contracts that are not. Whether contracts, court-enforced legal rules, or government-enforced regulations are the most efficient form of protecting financial arrangements is largely an empirical question. As the next section shows, the evidence rejects the hypothesis that private contracting is sufficient. Even among countries with well functioning judiciaries, those with laws and regulations more protective of investors have better developed capital markets.

La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) discuss a set of key legal rules protecting shareholders and creditors and document the prevalence of these rules in 49 countries around the world. They also aggregate these rules into shareholder (antidirector) and creditor rights indices for each country, and consider several measures of enforcement quality, such as the efficiency of the judicial system and a measure of the quality of accounting standards. La Porta, Lopez-de-Silanes, Shleifer, and Vishny use these variables as proxies for the stance of the law toward investor protection to examine the variation of legal rules and enforcement quality across countries and across legal families.

Legal scholars such as David and Brierley (1985) show that commercial legal systems of most countries derive from relatively few legal "families," including the English (common law), the French, and the German, the latter two derived from the Roman Law. In the 19th century, these systems spread throughout the world through conquest, colonization, and voluntary adoption. England and its former colonies, including the U.S., Canada, Australia, New Zealand, and many countries in Africa and South East Asia, have ended up with the common law system. France and many countries Napoleon conquered are part of the French civil law tradition. This legal family also extends to the former French, Dutch, Belgian, and Spanish colonies, including Latin America. Germany, Germanic countries in Europe, and a number of countries in East Asia are part of the German civil law tradition. The Scandinavian countries form their own tradition.[1]

Table 1 presents the percentage of countries in each legal family that give investors the

[1]Socialist countries had a legal tradition based on Soviet law, but because the laws of these countries are changing rapidly during the transition out of socialism, La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) do not consider them.

rights proposed by La Porta, Lopez-de-Silanes, Shleifer, and Vishny, as well as the mean for that family antidirector and creditor rights scores. How well legal rules protect outside investors varies systematically across legal origins. Common law countries have the strongest protection of outside investors —both shareholders and creditors—whereas French civil law countries have the weakest protection. German civil law and Scandinavian countries fall in between, although comparatively speaking they have stronger protection of creditors, especially secured creditors. In general, differences among legal origins are best described by the proposition that some countries protect all outside investors better than others, and not by the proposition that some countries protect shareholders while other countries protect creditors.

Table 1 also points to significant differences among countries in the quality of law enforcement as measured by the efficiency of the judiciary, (lack of) corruption, and the quality of accounting standards. Unlike legal rules, which do not appear to depend on the level of economic development, the quality of enforcement is higher in richer countries. In particular, the generally richer Scandinavian and German legal origin countries receive the best scores on the efficiency of the judicial system. The French legal origin countries have the worst quality of law enforcement of the four legal traditions, even controlling for per capita income.

Because legal origins are highly correlated with the content of the law, and because legal families originated before financial markets had developed, it is unlikely that laws were written primarily in response to market pressures. Rather, the legal families appear to shape the legal rules, which in turn influence financial markets. But what is special about legal families? Why, in particular, is common law more protective of investors than civil law? These questions do not have accepted answers. However, it may be useful here to distinguish between two broad kinds of answers: the “judicial” explanations that account for the differences in the legal philosophies using the organization of the legal system, and the “political” explanations that account for these differences using political history.

The “judicial” explanation of why common law protects investors better than civil law has been most recently articulated by Coffee (2000) and Johnson, La Porta, Lopez-de-Silanes, and Shleifer (2000). Legal rules in the common law system are usually made by judges, based on precedents and inspired by general principles such as fiduciary duty or fairness. Judges are expected to rule on new situations by applying these general principles even when specific conduct has not yet been described or prohibited in the statutes. In the area of investor expropriation, also known as self-dealing, the judges apply what Coffee calls a “smell test,” and try to sniff out whether even unprecedented conduct by the insiders is unfair to outside investors. The expansion of legal precedents to additional violations of fiduciary duty, and the fear of such expansion, limit the expropriation by the insiders in common law countries. In contrast, laws in civil law systems are made by legislatures, and judges are not supposed to go beyond the statutes and apply “smell tests” or fairness opinions. As a consequence, a corporate insider who finds a way not explicitly forbidden by the statutes to expropriate outside investors can proceed without fear of an adverse judicial ruling. Moreover, in civil law countries, courts do not intervene is self-dealing transactions as long as these have a plausible business purpose. The vague fiduciary duty principles of the common law are more protective of investors than the bright line rules of the civil law, which can often be circumvented by sufficiently imaginative insiders.

The judicial perspective on the differences is fascinating and possibly correct, but it is incomplete. It requires a further assumption that the judges have an inclination to protect the outside investors rather than the insiders. In principle, it is easy to imagine that the judges would use their discretion in common law countries to narrow the interpretation of fiduciary duty and to sanction expropriation rather than prohibit it. Common law judges could also in principle use their discretion to serve political interests, especially when the outside investors obstruct the government's goals. To explain investor protection, it is not enough to focus on judicial power; a political and historical analysis of judicial objectives is required. From this perspective, important political and historical differences between mother countries shape their laws. This is not to say that laws never change (in Section 5 we focus specifically on legal reform) but rather to suggest that history has persistent effects.

La Porta, Lopez-de-Silanes, Shleifer and Vishny (1999a) argue that an important historical factor shaping laws is that the state has a relatively greater role in regulating business in civil law countries than in common law ones. One element of this view, suggested by Finer (1997) and other historians, points to the differences in the relative power of the king and the property owners across European states. In England from the seventeenth century on, the crown partially lost control of the courts, which came under the influence of the parliament and the property owners who dominated it. As a consequence, common law evolved to protect private property against the crown. Over time, courts extended this protection of property owners to investors. In France and Germany, by contrast, parliamentary power was weaker. Commercial Codes were adopted only in the nineteenth century by the two great state builders, Napoleon and Bismarck, to enable the state to better regulate economic activity. Over time, the state maintained political control over firms and resisted the surrender of that power to financiers.[2] Perhaps as importantly, the state in civil law countries did not surrender its power over economic decisions to courts, and hence maintained the statutory approach to commercial laws. As we noted above, however, fairness assessments of self-dealing transactions, for which judicial power and discretion are essential, may be central to limiting expropriation.

Recent research supports the proposition that civil law is associated with greater government intervention in economic activity and weaker protection of private property than common law. La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1999a) examine the determinants of government performance in a large number of countries. To measure government interventionism, they consider proxies for the amount and quality of regulation, the prevalence of corruption and of red tape, and bureaucratic delays. As a general rule, they find that civil law countries, particularly French civil law countries, are more interventionist than common law countries. The inferior protection of the rights of outside investors in civil law countries may be one manifestation of this general phenomenon. This evidence provides some support for interpreting the differences in legal families based on political history.[3]

3. Consequences of investor protection

Three broad areas in which investor protection has been shown to matter are the

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[2]According to Cameron (1961), France had a lively stock market in the nineteenth century. Nearly all firms listed on it, however, benefitted from government concessions, investment, ownership, subsidies, protection, and often outright guarantees to investors.

[3]Berglof and von Thadden (1999) and Rajan and Zingales (1999) argue that political factors affect corporate governance through channels other than the law itself. This may be true, but the law remains a crucial channel through which politics affects corporate governance.

ownership of firms, the development of financial markets, and the allocation of real resources.

3.1. Patterns of ownership and control

The focus on expropriation of investors and its prevention has a number of implications for the ownership structures of firms. Consider first the concentration of control rights in firms (as opposed to the dividend or cash flow rights). At the most basic level, when investor rights are poorly protected and expropriation is feasible on a substantial scale, control acquires enormous value because it gives the insiders the opportunity to expropriate efficiently. When the insiders actually do expropriate, the so called private benefits of control become a substantial share of the firm's value. This observation raises a question: will control in such an environment be concentrated in the hands of an entrepreneur or dispersed among many investors?

The research in this area originates in the work of Grossman and Hart (1988) and Harris and Raviv (1988), who examine the optimal allocation of voting and cash flow rights in a firm. The specific question of how control is likely to be allocated has not received a clear answer. For several reasons, entrepreneurs may wish to keep control of their firms when investor protection is poor. La Porta, Lopez-de-Silanes, and Shleifer (1999) note that if expropriation of investors requires secrecy, sharing control may restrain the entrepreneur beyond his wishes. Zingales (1995), La Porta, Lopez-de-Silanes, and Shleifer (1999), and Bebchuk (1999) argue that if entrepreneurs disperse control between many investors, they give up the "private benefits" premium in a takeover. In Bebchuk's (1999) model, diffuse control structures are unstable when investors can concentrate control without fully paying for it. Finally, an entrepreneur or his family may need to retain control of the firm because the family's reputation is needed to raise external funds when the legal protection of outside investors is poor. For all these reasons, firms in countries with poor investor protection may need concentrated control.

Bennedsen and Wolfenzon (2000) make a countervailing argument. When investor protection is poor, dissipating control among several large investors—none of whom can control the decisions of the firm without agreeing with the others—may serve as a commitment to limit expropriation. When there is no single controlling shareholder, and the agreement of several large investors (the board) is needed for major corporate actions, these investors might together hold enough cash flow rights to choose to limit expropriation of the remaining shareholders and pay the profits out as efficient dividends. When the dissipation of control reduces inefficient expropriation, it may emerge as an optimal policy for a wealth-maximizing entrepreneur.

An entrepreneur has a number of ways to retain control of a firm. He can sell shares with limited voting rights to the outsiders and still retain control by holding on to the shares with superior voting rights. He can also use a pyramidal structure, in which a holding company he controls sells shares in a subsidiary that it itself controls. Wolfenzon (1999) shows that an entrepreneur can then control the subsidiary without owning a substantial fraction of its cash flow rights, and that such schemes are more attractive when the protection of outside investors is weaker. An entrepreneur can also keep control through cross-shareholdings among firms, which make it harder for outsiders to gain control of one group firm without buying all of them.

What about the distribution of cash flow rights between investors as opposed to control? If an entrepreneur retains control of a firm, how can he raise any external funds from outside investors—for financing or for diversification—who expect to be expropriated? Jensen and Meckling (1976) would suggest that cash flow ownership by an entrepreneur reduces incentives for expropriation and raises incentives to pay out dividends. La Porta, Lopez-de-Silanes, Shleifer and Vishny (1999b) show that this need for higher cash flow ownership as a commitment to limit expropriation is higher in countries with inferior shareholder protection.

The available evidence on corporate ownership patterns around the world supports the importance of investor protection. This evidence was obtained for a number of individual countries, including Germany (Edwards and Fischer 1994, Gorton and Schmid 2000), Italy (Barca 1995), and seven Organization for Economic Cooperation and Development countries (European Corporate Governance Network 1997). La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) describe ownership concentration in their sample of 49 countries, while La Porta, Lopez-de-Silanes, and Shleifer (1999) examine patterns of control in the largest firms from each of 27 wealthy economies. The data show that countries with poor investor protection typically exhibit more concentrated control of firms than do countries with good investor protection. In the former, even the largest firms are usually controlled either by the state or by the families that founded or acquired these firms. In the latter countries, the Berle and Means corporation—with dispersed shareholders and professional managers in control—is more common.[4]

Claessens, Djankov and Lang (2000) examine a sample of nearly 3,000 firms from 9 East Asian economies. Except in Japan, which has fairly good shareholder protection, they find a predominance of family control and family management of the corporations in their sample, with some state control as well. They also present remarkable evidence of "crony capitalism" in Asia: outside Japan, the top 10 families in each of the remaining 8 countries studied control between 18

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[4]The evidence also reveals that control is valued, and specifically that voting premiums increase as shareholder protection deteriorates (see, for example, Modigliani and Perotti, 1998; Nenova, 1999; and Zingales, 1994).

and 58 percent of the aggregate value of listed equities.

In sum, the evidence has proved to be broadly consistent with the proposition that the legal environment shapes the value of the private benefits of control and thereby determines the equilibrium ownership structures. Perhaps the main implications of this evidence for the study of corporate governance are the relative irrelevance of the Berle and Means corporation in most countries in the world and the centrality of family control. Indeed, La Porta, Lopez-de-Silanes, and Shleifer (1999) and Claessens, Djankov and Lang (2000) find that family-controlled firms are typically managed by family members so that the managers appear to be kept on a tighter leash than what Berle and Means describe. As Shleifer and Vishny (1997) have argued, in large corporations of most countries, the fundamental agency problem is not the Berle and Means conflict between outside investors and managers, but rather that between outside investors and controlling shareholders who have nearly full control over the managers.

3.2. Financial markets

The most basic prediction of the legal approach is that investor protection encourages the development of financial markets. When investors are protected from expropriation, they pay more for securities, making it more attractive for entrepreneurs to issue these securities. This applies to both creditors and shareholders. Creditor rights encourage the development of lending, and the exact structure of these rights may alternatively favor bank lending or market lending. Shareholder rights encourage the development of equity markets, as measured by the valuation of firms, the number of listed firms (market breadth), and the rate at which firms go public. For both shareholders and creditors, protection includes not only the rights written into the laws and regulations but also the effectiveness of their enforcement. Consistent with these predictions, La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997) show that countries that protect shareholders have more valuable stock markets, larger numbers of listed securities per capita, and a higher rate of IPO (initial public offering) activity than do the unprotective countries. Countries that protect creditors better have larger credit markets.

Several recent studies have also established a link between investor protection, insider ownership of cash flows, and corporate valuation.[5] Gorton and Schmid (2000) show that higher ownership by the large shareholders is associated with higher valuation of corporate assets in Germany. Claessens, Djankov, Fan, and Lang (1999) use a sample of East Asian firms to show that greater insider cash flow ownership is associated with higher valuation of corporate assets, whereas greater insider control of voting rights is associated with lower valuation of corporate assets. Using a sample of firms from 27 wealthy economies, La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1999b) find that firms in countries with better shareholder protection have higher Tobin's Q than do firms in countries with inferior protection. They also find that higher insider cash flow ownership is (weakly) associated with higher corporate valuation, and that this effect is greater in countries with inferior shareholder protection. These results support the roles of investor protection and cash flow ownership by the insiders in limiting expropriation.

Johnson, Boone, Breach, and Friedman (2000) draw an ingenious connection between investor protection and financial crises. In countries with poor protection, the insiders might treat outside investors well as long as future prospects are bright and they are interested in continued

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[5]In addition, La Porta, Lopez-de-Silanes, Shleifer, and Vishny (2000) show that better minority shareholder protection is associated with higher dividend pay-outs in a cross-section of firms from around the world.

external financing. When future prospects deteriorate, however, the insiders step up expropriation, and the outside investors, whether shareholders or creditors, are unable to do anything about it. This escalation of expropriation renders security price declines especially deep in countries with poor investor protection. To test this hypothesis, Johnson, Boone, Breach, and Friedman (2000) examine the depreciation of currencies and the decline of the stock markets in 25 countries during the Asian crisis of 1997-1998. They find that governance variables, such as investor protection indices and the quality of law enforcement, are powerful predictors of the extent of market declines during the crisis. These variables explain the cross-section of declines better than do the macroeconomic variables that have been the focus of the initial policy debate.

3.3. Real consequences

Through its effect on financial markets, investor protection influences the real economy. According to Beck, Levine, and Loayza (2000), financial development can accelerate economic growth in three ways. First, it can enhance savings. Second, it can channel these savings into real investment and thereby foster capital accumulation. Third, to the extent that the financiers exercise some control over the investment decisions of the entrepreneurs, financial development allows capital to flow toward the more productive uses, and thus improves the efficiency of resource allocation. All three channels can in principle have large effects on economic growth.

A large body of research links financial development to economic growth. King and Levine (1993) initiate the modern incarnation of this literature by showing that countries with larger initial capital markets grow faster in the future. Demirguc-Kunt and Maksimovic (1998), Levine and Zervos (1998), Rajan and Zingales (1998), and Carlin and Mayer (1999) extend these findings. Several of these papers show that an exogenous component of financial market development, obtained by using legal origin as an instrument, predicts economic growth.

More recent research distinguishes the three channels through which finance can contribute to growth: saving, factor accumulation, and efficiency improvements. Beck, Levine, and Loayza (2000) find that banking sector development exerts a large impact on total factor productivity growth and a less obvious impact on private savings and capital accumulation. Moreover, this influence continues to hold when an exogenous component of banking sector development, obtained by using legal origin as an instrument, is taken as a predictor. Wurgler (2000) finds that financially developed countries allocate investment across industries more in line with the variation in growth opportunities than do financially underdeveloped countries. Morck, Yeung, and Yu (2000) find that stock markets in more developed countries incorporate firm-specific information better, helping to allocate investment more effectively. This research suggests that financial development improves resource allocation. Through this channel, investor protection may benefit the growth of productivity and output.

4. Bank and market centered governance

Traditional comparisons of corporate governance systems focus on the institutions financing firms rather than on the legal protection of investors. Bank-centered corporate governance systems, such as those of Germany and Japan, are compared to market-centered systems, such as those of the United States and the United Kingdom (see, e.g., Allen and Gale 2000). Relatedly, relationship-based corporate governance, in which a main bank provides a significant share of finance and governance to each firm, is contrasted with market-based governance, in which finance is provided by large numbers of investors and in which takeovers play a key governance role.

These institutional distinctions have been central to the evaluation of alternative corporate governance regimes and to policy proposals for improvement. In the 1980s, when the Japanese economy could do no wrong, bank-centered governance was widely regarded as superior because, as Aoki and Patrick (1993) and Porter (1992) argue, far-sighted banks enable firms to focus on long term investment decisions. According to Hoshi, Kashyap and Scharfstein (1991), banks also deliver capital to firms facing liquidity shortfalls, thereby avoiding costly financial distress. Finally, banks replace the expensive and disruptive takeovers with more surgical bank intervention when the management of the borrowing firm underperformed.

In the 1990s, as the Japanese economy collapsed, the pendulum swung the other way.[6] Kang and Stulz (1998) show that, far from being the promoters of rational investment, Japanese banks perpetrate soft budget constraints, over-lending to declining firms that require radical reorganization. And according to Weinstein and Yafeh (1998) and Morck and Nakamura (1999), Japanese banks, instead of facilitating governance, collude with enterprise managers to deter external threats to their control and to collect rents on bank loans. In the recent assessments by Edwards and Fischer (1994) and Hellwig (1999), German banks are likewise downgraded to ineffective providers of governance. Market-based systems, in contrast, rode the American stock market bubble of the 1990s into the stratosphere of wide support and adulation.

Unfortunately, the classification of financial systems into bank and market centered is neither straightforward nor particularly fruitful. One way to do this is by looking at the actual

[6]Jensen (1989) expresses some early skepticism about the Japanese financial system.

outcomes. It is easy to classify Germany as bank-centered because its banks influence firms through both debt and equity holdings and its stock market is underdeveloped.[7] But what about Japan, which boasts both powerful banks with influence over firms and a highly developed and widely-held equity market (second or third in the world by size) with thousands of listed securities? Or what about the French civil law based financial systems, in which neither credit markets nor stock markets are especially well developed? Sapienza (1999), for example, finds that in Italy the stock market is extremely underdeveloped, but so is the banking system, with a typical firm raising a small amount of money from each of a dozen banks. More generally, La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997) show that, on average, countries with bigger stock markets also have higher ratios of private debt to gross domestic product (GDP), contrary to the view that debt and equity finance are substitutes for each other. The prevalent financing modes generally do not help with the classification.

Another way to classify financial systems is based on the existence of Glass-Steagall regulations restricting bank ownership of corporate equity. This approach is again useful for distinguishing the United States from Germany, which does not have such regulations. On the other hand, most countries in the world do not have these regulations. Some of them, like the United Kingdom, have a highly developed stock market and few equity holdings by banks, even though banks are not prevented by law from holding equity. Other countries have neither a developed banking system nor a developed stock market. Glass-Steagall regulations in themselves do not assure a development of a market system by interfering with corporate governance by banks. Consistent with our skepticism about the usefulness of such regulations for classifying

[7]Hellwig (1999) doubts that banks are so powerful, even in the case of Germany.

financial systems, La Porta, Lopez-de-Silanes, and Shleifer (1999) show that Glass-Steagall regulations have no predictive power for ownership concentration across countries.

Perhaps most important, the reliance on either the outcomes or the Glass-Steagall regulations to classify corporate governance regimes misses the crucial importance of investor rights. All financiers depend on legal protection to function. A method of financing develops when it is protected by the law that gives financiers the power to get their money back. Germany and some other German civil law countries have developed banking systems because they have strong legal protection of creditors, particularly of secured creditors. Without such rights German banks would have much less power. The United Kingdom also has a large banking and public debt sector, again because creditors have extensive rights, as well as a large equity market. Italy and Belgium, by contrast, have developed neither debt nor equity markets because no outside investors are protected there.[8] The point here is simple: all outside investors, be they large or small, creditors or shareholders, need rights to get their money back. Investor rights are a more primitive determinant of financial development than is the size of particular institutions.

Despite the difficulty of classifying financial systems into bank- and market centered, economists at least since Gerschenkron (1962) have engaged in a lively debate as to which one is superior, focusing on the hypothesis that bank-centered systems are particularly suitable for developing economies. This is not a place to review this debate. Rather, our concern is that the interest in monopoly bank lending distracts attention from the important role that stock markets

[8]Levine, Loayza, and Beck (1999) find that the La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) measure of creditor rights is correlated with measures of financial intermediaries development across countries, while their measure of shareholder rights is correlated with stock market development.

play in external finance. Equity financing is essential for the expansion of new firms whose main asset are the growth opportunities. In principle, firms could utilize private equity financing, but it has many of the same problems of excessive investor power suppressing entrepreneurial initiative as does monopoly banking (see, e.g., Myers,1977, Burkart, Gromb, and Panunzi, 1997). Public equity financing, for which a developed stock market is needed, has other advantages over private equity financing. It allows the buyers of equity to diversify. It offers the initial equity holders, such as venture capitalists, an attractive exit option through the public equity markets. Last but not least, it allows firms to time their equity issues to take advantage of favorable investor sentiment toward their industry, or toward the market as a whole. Such sentiment may play a beneficial role when shareholders are skeptical about the likelihood of getting back a return on their money. Indeed, Keynes (1931) and others have argued that bubbles play an important and positive role in stimulating investment.

To summarize, bank- versus market centeredness is not an especially useful way to distinguish financial systems. Investor rights work better to explain differences among countries, and in fact are often necessary for financial intermediaries to develop. Moreover, even if some countries go through monopoly banking in their development process, this stage has little to recommend it other than as a stepping stone toward more developed markets. And to get to more developed markets, it is essential to improve the rights of outside investors.

5. Possibilities for reform

In the last decade, the reform of corporate governance has attracted interest in Western and Eastern Europe, Latin America, and Asia. The discussions have intensified since the Asian financial crisis, and took on the flavor of reforming “the global financial architecture.” To discuss any reform, it is important to start with its goals. Our analysis suggests that the objective of corporate governance reform is to protect the rights of outside investors, including both shareholders and creditors. As the evidence described in Section 3 shows, the benefits of such reform would be to expand financial markets, to facilitate external financing of new firms, to move away from concentrated ownership, to improve the efficiency of investment allocation, and to facilitate private restructuring of financial claims in a crisis.

So what, if anything, can be done to achieve these goals, and what are the obstacles? To organize this discussion, we follow Coffee (1999) in drawing a distinction between legal and functional convergence. Legal convergence refers to the changes in rules and enforcement mechanisms toward some successful standard. To converge to effective investor protection in this way, most countries require extensive legal, regulatory, and judicial reform. Alternatively, functional convergence refers to more decentralized, market-based changes, which do not require legal reform per se, but still bring more firms and assets under the umbrella of effective legal protection of investors. We discuss these paths of reform in turn.

For most countries, the improvement of investor protection requires radical changes in the legal system. Securities, company, and bankruptcy laws generally need to be amended. The particular list of legal protections of investors studied by La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) is neither necessary nor sufficient for such reforms. There may be significant complementarities between various laws in protecting minority shareholders: securities laws, for example, can mandate disclosure of material information while company laws enable minority shareholders to act on it. Moreover, the regulatory and judicial mechanisms of enforcing shareholders and creditor rights would need to be radically improved. In fact, the evidence on the importance of the historically determined legal origin in shaping investor rights—which could be thought of as a proxy for the law's general stance toward outside investors—suggests at least tentatively that many rules need to be changed simultaneously to bring a country with poor investor protection up to best practice.

The political opposition to such change has proved intense. Governments are often reluctant to introduce laws that surrender to the financiers the regulatory control they currently have over large corporations. Important objections to reform also come from the families that control large corporations. From the point of view of these families, an improvement in the rights of outside investors is first and foremost a reduction in the value of control due to the deterioration of expropriation opportunities. The total value of these firms may increase as a result of legal reform, as expropriation declines and investors finance new projects on more attractive terms; still, the first order effect is a tax on the insiders for the benefit of minority shareholders and creditors. What the reformers see as protection of investors, the founding families call "expropriation of entrepreneurs." No wonder, then, that in all countries—from Latin America to Asia to Europe—the families have opposed legal reform.

There is a further reason why the insiders in major firms oppose corporate governance reform and the expansion of capital markets. As Mayer (1988) shows, existing large firms typically finance their own investment projects internally or through captive or closely connected banks. In fact, La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997) show that the lion's share of credit in countries with poor creditor protection goes to the few largest firms. These firms obtain the finance they need, the political influence that comes with the access to such finance, and the protection from competition that would come if smaller firms could also raise external capital. When new entrepreneurs have good projects, they often have to come to the existing firms for capital. Poor corporate governance delivers the insiders secure finance, secure politics and secure markets. They have an interest in keeping the system as is.

Consistent with the dominance of interest group politics, successful reforms have occurred only when the special interests could be destroyed or appeased. In this respect, corporate governance reform is no different from most other reforms in developing or industrialized countries (see, e.g., Hirschman 1963, Shleifer and Treisman 2000). But examples of significant legal reform of corporate governance do exist. Ramseyer and Nakazato (1999) describe legal reform in Japan after World War II, when General McArthur, assisted by attorneys from Chicago and an occupying army, introduced an Illinois-based company law. Another example is securities markets regulation in the United States in 1933-1934, introduced in the middle of the Great Depression, which substantially increased corporate disclosure. A third example is some streamlining of bankruptcy procedures in East Asia following the crisis of 1997.

Although such opportunities for corporate governance reform do arise, they often have been wasted, in part because of a lack of appreciation of the need to protect investors. Recent research points to some crucial principles of investor protection that reforms need to focus on.

The first such principle is that legal rules do matter. It is not just the stance of the law or the political sentiment of the day that shapes financial markets. One illustration of this principle, described by Johnson (1999), is the Neuer Markt in Germany, a segment of the Frankfurt Stock Exchange created especially for listing new firms. Because the Neuer Markt operates in Germany, the corporate law, the securities law, and other basic laws and regulations that are applied to the companies listing there are the general German rules. The politics are German as well. As part of a private contract with firms wishing to list on the Neuer Markt, the Deutsche Bourse -- which operates the Frankfurt Stock Exchange -- has mandated that these firms must comply with international accounting standards and agree to greater disclosure than that required of already listed firms. The new listing venue, with its greater restrictions on the entrepreneurs, has sharply accelerated the pace of initial public offerings in Germany. At the same time, the captains of German industry have accepted it because their firms were not directly affected. This points to one possible strategy of overcoming political opposition to reform.

A second principle is that good legal rules are the ones that a country can enforce. The strategy for reform is not to create an ideal set of rules and then see how well they can be enforced, but rather to enact the rules that can be enforced within the existing structure. One example of the success of such a policy is the U.S. securities legislation of 1933-1934, described by Landis (1938) and McCraw (1984). This legislation placed much of the responsibility for accurate corporate accounting and disclosure on intermediaries, and focused the regulatory oversight by the Securities and Exchange Commission (SEC) on these relatively few intermediaries. The SEC also emphasized self-regulation by the intermediaries. Thus the accounting profession, once it recognized the increased demand for its services, became an independent private force in assuring the compliance with disclosure regulations. As a consequence, a small Commission was able to regulate a huge market with relatively few resources. The principle of recruiting private intermediaries into the enforcement of securities regulations has since been followed by a number of countries, including Germany and Poland.

A third and related principle of successful reform, stressed by Glaeser, Johnson, and

Shleifer (2000), is that government regulation of financial markets may be useful when court enforcement of private contracts or laws cannot be relied upon. An example of how regulation can work when judicial enforcement is limited comes from the securities law reform in Poland and the Czech Republic, two transition economies whose judiciaries in the early 1990s were generally viewed as ineffective. At that time the Polish government introduced a tough securities law focused on shareholder protection. Like the U.S. securities law, the Polish regulations focused on significant disclosure by new issuers and already listed firms, as well as on licensing and close administrative oversight of intermediaries. The law also provided for a creation of a powerful SEC with significant enforcement powers that did not require reliance on courts. This reform was followed by a remarkable development of the Polish stock market, with both new and already listed companies raising equity in the market.

By contrast, the Czech government chose neither to introduce tough securities laws nor to create a powerful market regulator at the time of privatization. Perhaps as a consequence, the Czech markets have been plagued by massive expropriation of minority shareholders—the so-called "tunneling" of assets from both firms and mutual funds. In contrast to the Polish market, the Czech market stagnated, with hundreds of companies getting delisted and virtually no public equity financing by firms (see Coffee, 1999; Pistor, 1999; Glaeser, Johnson and Shleifer, 2000). The comparison of Poland to the Czech Republic is especially instructive because the two countries share roughly similar incomes, economic policies, and quality of judiciaries. Under these circumstances, regulation of the stock market and listed firms in Poland, with its focus on investor protection, appeared to play a beneficial role.

The successful regulations of the U.S. securities markets, the Polish financial markets, and the Neuer Markt in Germany share a common element: the extensive and mandatory disclosure of financial information by the issuers, the accuracy of which is enforced by tightly regulated financial intermediaries. Although such disclosure is not sufficient by itself without the right of the shareholders to act on it, it does appear to be a key element of shareholder protection.

With the legal reform slow and halting in most countries, "functional convergence" may play a role in improving investor protection. The liberalization of capital markets in many countries has increased not only the flow of foreign investment into them, as Henry (2000) and Stulz (1999) document, but also the economic and political pressure to create financial instruments acceptable to foreign investors. These pressures give rise to several forms of functional convergence. When contracts are enforced well, companies in unprotective legal regimes can offer their investors customized contracts such as corporate charters with greater rights than the law generally provides. This strategy relies on perhaps a greater enforcement capacity of courts than is warranted, and also ignores the public good benefit of standard rules. A more promising approach is for companies to opt into the more investor friendly legal regimes. One way of doing this is to list a company's securities on an exchange that protects minority shareholders through disclosure or other means. In fact, this is done by many companies that list their shares as American Depositary Receipts (ADRs) in the U.S. But such listing imposes only limited constraints on the insiders: although it improves disclosure, it typically does not give minority shareholders many effective rights.

A related and increasingly important mechanism of opting into a more protective legal regime is being acquired by a firm already operating in such a regime. When a British firm fully acquires a Swedish firm, the possibilities for legal expropriation of investors diminish. Because the controlling shareholders of the Swedish company are compensated in such a friendly deal for the lost private benefits of control, they are more likely to go along. By replacing the wasteful expropriation with publicly shared profits and dividends, such acquisitions enhance efficiency.

It is important to recognize the limitations of functional convergence, particularly in the area of creditor rights. Assets located in particular countries generally remain under the jurisdiction of these countries' laws. Without bankruptcy reform, opt-in mechanisms are unlikely to address the legal problems faced by creditors. Thus, despite the benefits of opting into the more protective legal regime for external finance, this mechanism is unlikely to fully replace bona fide legal reform.

6. Conclusion

This paper describes the legal protection of investors as a potentially useful way of thinking about corporate governance. Strong investor protection may be a particularly important manifestation of the greater security of property rights against political interference in some countries. Empirically, strong investor protection is associated with effective corporate governance, as reflected in valuable and broad financial markets, dispersed ownership of shares, and efficient allocation of capital across firms. Using investor protection as the starting point appears to be a more fruitful way to describe differences in corporate governance regimes across countries than some of the more customary classifications such as bank- or market-centeredness.

An important implication of this approach is that leaving financial markets alone is not a good way to encourage them. Financial markets need some protection of outside investors, whether by courts, government agencies, or market participants themselves. Improving such protection is a difficult task. In part, the nature of investor protection, and more generally of regulation of financial markets, is deeply rooted in the legal structure of each country and in the origin of its laws. Marginal reform may not successfully achieve the reformer's goals. In part, the existing corporate governance arrangements benefit both the politicians and the entrenched economic interests, including the families that manage the largest firms in most countries in the world. Corporate governance reform must circumvent the opposition by these interests. Despite these difficulties, reform of investor protection is politically feasible in some circumstances, and can bring significant benefits. It can take the form of opting into more protective legal regimes or introducing more radical changes in the legal structure. The integration of world capital markets makes such reforms more likely today than they have been in decades.

References

Allen, F., Gale, D., 2000. Comparing Financial Systems. MIT Press: Cambridge, MA.

Aoki, M., Patrick, H., 1993. The Japanese Main Bank System: Its Relevance for Developing and Transforming Economies. Oxford University Press: New York.

Barca, F., 1995. On corporate governance in Italy: issues, facts, and agency. Unpublished working paper. Bank of Italy: Rome.

Bebchuk, L., 1999. The rent protection theory of corporate ownership and control. Unpublished working paper. Harvard Law School: Cambridge, MA.

Beck, T., Levine, R., Loayza., N., 2000. Finance and the sources of growth. Journal of Financial Economics 58, this issue.

Bennedsen, M., Wolfenzon, D., 2000. The balance of power in closely held corporations. Journal of Financial Economics 58, this issue.

Berglof, E., von Thadden, L., 1999. The changing corporate governance paradigm: implications for transition and developing countries. Unpublished working paper. Stockholm Institute of Transition Economics: Stockholm, Sweden.

Burkart, M., Gromb, D., Panunzi, F., 1997. Large Shareholders, monitoring, and fiduciary duty. Quarterly Journal of Economics 112, 693-728.

Cameron, R., 1961. France and the Economic Development of Europe. Princeton University Press: Princeton, NJ.

Carlin, W., Mayer, C., 1999. Finance, investment and growth. Unpublished working paper. University College: London.

Claessens, S., Djankov, S., Lang, L., 1999. The separation of ownership and control in East Asian corporations. Journal of Financial Economics 58, this issue.

Claessens, S., Djankov, S., Fan, J., Lang, L., 1999. Expropriation of minority shareholders in East Asia. Unpublished working paper. The World Bank: Washington, DC.

Coase, R., 1961. The problem of social cost. Journal of Law and Economics 3, 1-44.

Coffee, J., 1999. The future as history: the prospects for global convergence in corporate governance and its implications. Northwestern Law Review 93, 631-707.

Coffee, J., 2000. Privatization and corporate governance: the lessons from securities market failure. Working paper no. 158. Columbia Law School: New York.

David, R., Brierley, J., 1985. Major Legal Systems in the World Today. Stevens and Sons: London.

Demirguc-Kunt, A., Maksimovic, V., 1998. Law, finance, and firm growth. Journal of Finance 53, 2107-2139.

Easterbrook, F., Fischel, D., 1991. The Economic Structure of Corporate Law. Harvard University Press: Cambridge, MA.

Edwards, J., Fischer, K., 1994. Banks, Finance and Investment in West Germany Since 1970. Cambridge University Press: Cambridge, U.K.

European Corporate Governance Network (ECGN). 1997. The Separation of Ownership and Control: A Survey of 7 European Countries Preliminary Report to the European Commission. Volumes 1-4. Brussels: European Corporate Governance Network.

Finer, S., 1997. The History of Government, Vol. III.. Cambridge University Press: Cambridge, U.K.

Gerschenkron, A., 1962. Economic Backwardness in Historical Perspective. Belknap Press of

Harvard University Press: Cambridge, MA.

Glaeser, E., Johnson, S., Shleifer, A., 2000. Coase v. the Coasians. Unpublished working paper. Harvard University: Cambridge, MA.

Gorton, G., Schmid, F., 2000. Universal banking and the performance of German firms. Journal of Financial Economics 58, this issue.

Grossman, S., Hart, O., 1988. One-share-one-vote and the market for corporate control. Journal of Financial Economics 20, 175-202.

Harris, M., Raviv, A., 1988. Corporate governance: voting rights and majority rules. Journal of Financial Economics 20, 203-236.

Hart, O., 1995. Firms, Contracts, and Financial Structure. Oxford University Press: London.

Hellwig, M., 1999. On the economics and politics of corporate finance and corporate control. Unpublished working paper. University of Mannheim: Mannheim.

Henry, P., 2000. Do stock market liberalizations cause investment booms? Journal of Financial Economics 58, this issue.

Hirschman, A., 1963. Journeys Toward Progress. The Twentieth Century Fund: New York.

Hoshi, T., Kashyap, A., Scharfstein, D., 1991. Corporate structure, liquidity, and investment: evidence from Japanese industrial groups. Quarterly Journal of Economics 106, 33-60.

Jensen, M., 1989. Eclipse of the modern corporation. Harvard Business Review 67, 61-74.

Jensen, M., Meckling, W., 1976. Theory of the firm: managerial behavior, agency costs, and ownership structure. Journal of Financial Economics 3, 305-360.

Johnson, S., 1999. Does investor protection matter? Evidence from Germany’s Neuer Markt. Unpublished working paper. MIT: Cambridge, MA.

Johnson, S., Boone, P., Breach, A., Friedman, E., 2000. Corporate governance in the Asian financial crisis, Journal of Financial Economics 58, this issue.

Johnson, S., La Porta, R., Lopez-de-Silanes, F., Shleifer, A., 2000. Tunneling. American Economic Review Papers and Proceedings 90, 22-27.

Kang, J., Stulz, R., 1998. Do banking shocks affect borrowing firm performance? An analysis of the Japanese experience. Unpublished working paper. Ohio State University: Columbus, OH.

Keynes, J. 1931. An economic analysis of unemployment. In Collected Writings, Vol. XII. Macmillan: London.

King, R., Levine, R., 1993. Finance and growth: Schumpeter might be right. Quarterly Journal of Economics 108, 717-738.

Landis, J., 1938. The Administrative Process. Yale University Press: New Haven, CT.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., 1999. Corporate ownership around the world. Journal of Finance 54, 471-517.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., 1997. Legal determinants of external finance. Journal of Finance 52, 1131-1150.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R.,1998. Law and finance. Journal of Political Economy 106, 1113-1155.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., 1999a. The quality of government. Journal of Law, Economics and Organization 15, 222-279.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., 1999b. Investor protection and corporate valuation. NBER Working Paper 7403. National Bureau of Economic Research: Cambridge, MA.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., 2000. Agency problems and dividend policies around the world. Journal of Finance 55, 1-33.

Levine, R., Zervos, S., 1998. Stock markets, banks and economic growth. American Economic Review 88, 537-558.

Levine, R., Loayza, N., Beck, T., 1999. Financial intermediary development and economic growth: causality and causes. Journal of Monetary Economics, forthcoming.

Mayer, C., 1988. New issues in corporate finance. European Economic Review 32, 1167-1188.

McCraw, Thomas K. 1984. Prophets of Regulation. The Belknap Press of Harvard University Press: Cambridge, MA.

Modigliani, F., Miller. M., 1958. The cost of capital, corporation finance, and the theory of investment. American Economic Review 48, 261-297.

Modigliani, F., Perotti, E., 1998. Security versus bank finance: the importance of a proper enforcement of legal rules. Unpublished working paper. MIT: Cambridge, MA.

Morck, R., Nakamura, M., 1999. Banks and corporate control in Japan. Journal of Finance 54, 319-340.

Morck, R., Yeung, B., Yu, W., 2000. The information content of stock markets: why do emerging markets have synchronous price movements? Journal of Financial Economics 58, this issue.

Myers, S., 1977. Determinants of corporate borrowing. Journal of Financial Economics 5, 147-175.

Nenova, T., 1999. The value of a corporate vote and private benefits: a cross-country analysis. Unpublished working paper. Harvard University: Cambridge, MA.

Pistor, K., 1999. Law as a determinant of equity market development. Unpublished working paper. Harvard University: Cambridge, MA.

Porter, M., 1992. Capital disadvantage: America's falling capital investment system. Harvard Business Review 46, 65-72.

Rajan, R., Zingales, L., 1998. Financial dependence and growth. American Economic Review 88, 559-586.

Rajan, R., Zingales, L., 1999. The politics of financial development. Unpublished working paper. University of Chicago: Chicago, IL.

Ramseyer, M., Nakazato, M., 1999. Japanese Law: an Economic Approach. University of Chicago Press: Chicago, IL.

Sapienza, Paola. 1999. The effects of bank mergers on loan contracts. Unpublished working paper. Northwestern University: Chicago, IL.

Shleifer, A., Treisman, D., 2000. Without a Map: Political Tactics and Economic Reform in Russia. MIT Press: Cambridge, MA.

Shleifer, A., Vishny, R., 1997. A survey of corporate governance. Journal of Finance 52, 737-783.

Stigler, G., 1964. Public regulation of the securities market. Journal of Business 37,117-142.

Stulz, R., 1999. International Portfolio Flows and Securities Markets. Working Paper 99-3, Fisher College of Business. The Ohio State University: Columbus, OH.

Weinstein, D., Yafeh, Y., 1998. On the costs of a bank-centered financial system: evidence from the main bank relations in Japan. Journal of Finance 53, 635-672.

Wolfenzon, D., 1999. A theory of pyramidal structures. Unpublished working paper. Harvard

University: Cambridge, MA.

Wurgler, J., 2000. Financial markets and the allocation of capital. Journal of Financial Economics 58, this issue.

Zingales, L., 1994. The value of the voting right: a study of the Milan stock exchange. The Review of Financial Studies 7, 125-148.

Zingales, L., 1995. Inside ownership and the decision to go public. Review of Economic Studies 62, 425-448.

Table 1
Legal origin and investors rights

This table presents data on measures of investor protection for 49 countries classified by their legal origin. The source of the data is La Porta et al. (1998). Panel A shows the measures of shareholder protection across legal origins. The “antidirector rights index” is a summary measure of shareholder protection. This index ranges from zero to six and is formed by adding one when: the country allows shareholders to mail their proxy vote to the firm; shareholders are not required to deposit their shares prior to the General Shareholders’ Meeting; cumulative voting or proportional representation of minorities in the board of directors is allowed; an oppressed minorities mechanism is in place; the minimum percentage of share capital that entitles a shareholder to call for an Extraordinary Shareholders’ Meeting is less than or equal to 10 percent (the sample median); shareholders have preemptive rights that can only be waved by a shareholders’ vote. The rest of the rows in Panel A show the percentage of countries within each legal origin for which each component of the “antidirector rights index” is provided by the law. Panel B shows the measures of creditor protection across legal origins. The “creditor rights index” is a summary measure of creditor protection. This index ranges from zero to four and is formed by adding one when: the country imposes restrictions, such as creditors’ consent or minimum dividends to file for reorganization; secured creditors are able to gain possession of their security once the reorganization petition has been approved (no automatic stay); secured creditors are ranked first in the distribution of the proceeds that result from the disposition of the assets of a bankrupt firm; the debtor does not retain the administration of its property pending the resolution of the reorganization. The rest of the rows in Panel B show the percentage of countries within each legal origin for which each component of the “creditor rights index” is provided by the law. Panel C shows measures of legal enforcement. “Efficiency of the judicial system” is an index ranging from zero to ten representing the average of investors’ assessments of conditions of the judicial system in each country between 1980-1983 (lower scores represent lower efficiency levels). “Corruption” is an index ranging from zero to ten representing the average of investor’s assessments of corruption in government in each country between 1982-1995 (lower scores represent higher corruption). “Accounting standards” is an index created by examining and rating companies’ 1990 annual reports on their inclusion or omission of 90 items falling in the categories of general information, income statements, balance sheets, funds flow statement, accounting standards, stock data, and special items.

	Legal Origin				
Variables	Common law (18 countries)	French civil law (21 countries)	German civil law (6 countries)	Scandinavian civil law (4 countries)	World average (49 countries)
		Panel A: Measures of shareholder protection			
Antidirector rights index	4.00	2.33	2.33	3.00	3.00
Proxy by mail	39 %	5 %	0 %	25 %	18 %
Shares not blocked before meeting	100 %	57 %	17 %	100 %	71 %
Cumulative voting / proportional represent’n	28 %	29 %	33 %	0 %	27 %
Oppressed minority	94 %	29 %	50 %	0 %	53 %
Preemptive right to new issues	44 %	62 %	33 %	75 %	53 %
% Share of capital to call and ESM ≤ 10 %	94 %	52 %	0 %	0 %	78 %

Variables	Legal Origin Common law (18 countries)	French civil law (21 countries)	German civil law (6 countries)	Scandinavian civil law (4 countries)	World average (49 countries)
			Panel B: Measures of creditor protection		
Creditor rights index	3.11	1.58	2.33	2.00	2.30
No automatic stay on secured assets	72 %	26 %	67 %	25 %	49 %
Secured creditors first paid	89 %	65 %	100 %	100 %	81 %
Restrictions for going into reorganization	72 %	42 %	33 %	75 %	55 %
Management does not stay in reorganization	78 %	26 %	33 %	0 %	45 %
			Panel C: Measures of enforcement		
Efficiency of the judicial system	8.15	6.56	8.54	10.00	7.67
Corruption	7.06	5.84	8.03	10.00	6.90
Accounting standards	69.92	51.17	62.67	74.00	60.93