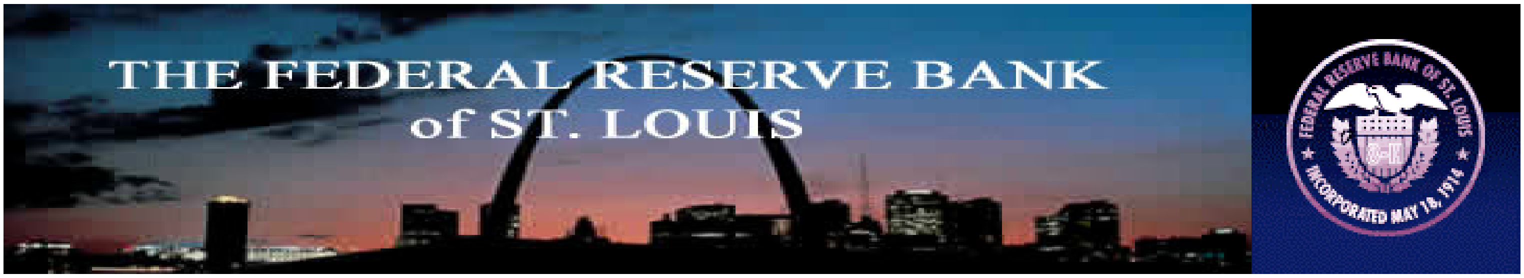

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Corporate Governance And Corporate Performance

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CORPORATE GOVERNANCE AND CORPORATE PERFORMANCE

ABSTRACT

National corporate-governance traditions are distinctive, deeply rooted, and difficult to change. Recent research points to a country's legal traditions and its stage of economic development as important determinants of corporate-governance institutions. Common-law countries tend to provide more explicit investor protections than civil-law countries. Richer countries tend to enforce corporate law more strictly. Broader and deeper financial markets emerge in the presence of strong investor protections, fostering more outside financing and better corporate financial performance. Corporate-governance systems also influence resident firms' capital structures and ownership structures. A broader perspective on corporate performance suggests that no country's system of corporate governance is without shortcomings, however.

CORPORATE GOVERNANCE AND CORPORATE PERFORMANCE

Corporate-governance mechanisms assure investors in corporations that they will receive adequate returns on their investments (Shleifer and Vishny, 1997). If these mechanisms did not exist or did not function properly, outside investors would not lend to firms or buy their equity securities. Businesses would be forced to rely entirely on their own internally generated cash flows and accumulated financial resources to finance ongoing operations as well as profitable investment opportunities. Overall economic performance likely would suffer because many good business opportunities would be missed and temporary financial problems at individual firms would spread quickly to other firms, employees, and consumers.

This paper investigates the links between distinctive national systems of corporate governance and the performance of firms and economies that employ them. We first review the recently released *OECD Principles of Corporate Governance,* an initiative designed to increase awareness of governance issues and to disseminate information on best practices. Then we describe the world's predominant corporate-governance traditions and discuss the historical and legal roots of these traditions. We then trace the effects of different corporate-governance traditions on the development of financial systems broadly defined, including such things as the amount of external financing that firms typically do and in what form they obtain funds from investors (e.g., debt or equity, bank debt or bond-market debt). Finally, we provide evidence on the effectiveness of each of the major systems of corporate governance in producing favorable economic outcomes both at the firm level and for national economies as a whole. We also consider reasons why traditional profit- or economic growth-based indicators of performance may be inadequate for analyzing the complexities surrounding a country's corporate-governance environment.

To preview our conclusions briefly, we find that corporate-governance traditions are distinctive, deeply rooted, and difficult to change. Some sets of corporate-governance institutions appear to encourage or support broad financial-system development more than others, which in turn may have consequences for the types of firms that can access public capital markets. Financial-system development may also have implications for long-term economic growth, although this link remains controversial. At the same time, corporate-governance systems in some countries may excel in respects other than fostering capital markets, such as providing long-term financial stability and opportunities for intertemporal risk-sharing. In sum, there appears to be no "perfect" system, so we view continued diversity among corporate-governance systems as unsurprising. Nevertheless, there is limited evidence of convergence among corporate-governance systems around the world.

THE CAMPAIGN FOR BETTER CORPORATE-GOVERNANCE PRACTICES

We begin with a case study that documents persistent cross-country differences in the profitability of large internationally active commercial banks. This simple example is designed to motivate our search for the causes of underlying differences in corporate-governance environments around the world. Then we discuss a newly released set of corporate-governance principles. The Organization for Economic Cooperation and Development (OECD), a grouping of 29 industrialized and newly industrializing countries, recently published a set of corporate-governance standards and guidelines covering five major areas: (1) the rights of shareholders, (2) the equitable treatment of shareholders, (3) the role of stakeholders in corporate governance, (4) disclosure and transparency, and (5) the responsibilities of the board (OECD, 1999a). The OECD document highlights the increased profile that governance issues have attained around the world. In part, the renewed focus on governance can be traced to the immediate challenges facing policymakers and business leaders in emerging markets and transition economies. It is also the case, however, that the globalization of financial markets more generally has brought into sharp relief the sometimes significant differences that exist among advanced market economies with respect to shareholder rights, creditor rights, and the legal enforcement environment.

Why Corporate-Governance Practices Matter: The Case of Bank Profitability

Comprehensive cross-country and cross-industry comparisons of corporate performance are extremely difficult to carry out and to interpret. We focus instead on the core profitability of one part of a single sector, namely, large internationally active commercial banks. Although regulatory regimes and local competitive conditions differ across countries, our narrow focus on an internationally comparable performance ratio—pre-tax return on assets, or ROA—allows us to explore the hypothesis that persistent cross-country differences might be attributable to differences in the incentives and controls facing managers. Given that investors in all countries prefer the highest return possible, persistently inefficient use of corporate assets is an indication that the prevailing corporate-governance system has not aligned the interests of managers and owners adequately.

TABLE 1 HERE

Table 1 provides snapshots of the core profitability of large internationally active commercial banks from 12 countries for two three-year periods. The first row of panel A shows the average pre-tax return on assets of the largest banks in each group of countries sampled over 1986-88, while the second row gives the individual country detail (the reason for grouping countries in this way will become evident below.) Pre-tax ROAs vary a lot across countries, particularly in view of the tiny margins facing large banks. Panel B of Table 1 provides the same information viewed exactly ten years later. Panel C shows the averages over the two three-year periods taken together.

The most striking pattern in the table is that pre-tax ROAs in the first column (including the United States, the United Kingdom, and Canada) tend to be higher than those in other columns. It is less obvious what differences, if any, exist between the countries or country groups in columns two, three, and four. Likewise, it is difficult to make any general statement about the relative profitability of large banks in the U.S., the U.K., and Canada. The questions we confront immediately are therefore: What's different about the English-speaking countries vis-à-vis the other countries? and What is similar among the English-speaking countries? We would also like to learn if there are differences between the remaining countries, given that they constitute a diverse group themselves.

Before investigating these questions, we introduce the core standards and guidelines recommended recently by the OECD to promote harmonization in and improvement of corporate-governance systems around the world.

TABLE 2 HERE

The OECD Principles of Corporate Governance

The OECD's recommended principles of corporate governance are listed in Table 2 along with a brief commentary highlighting what we think are some of their most noteworthy elements. Five areas of concern are covered: (1) the rights of shareholders, (2) the equitable treatment of shareholders, (3) the role of stakeholders in corporate governance, (4) disclosure and transparency, and (5) the responsibilities of the board.

The major thrusts of the OECD principles are for better disclosure of important information to shareholders and vigorous protection of shareholder interests, especially those who hold a minority interest or are located abroad. The report stops short of advocating far-reaching reforms of existing systems of corporate governance or legal systems even though it recognizes significant shortcomings in some countries. These shortcomings are arguably entrenched in the governance environment in some countries, however, so it is not clear how effective a set of voluntary guidelines such as these might be. Examples of serious impediments to greater compliance with the OECD guidelines include deviations from one share-one vote corporate charters and a board that is effectively dominated by the firm's managers or a minority shareholder.

The OECD principles represent a compromise in a number of dimensions. There is a clear advocacy of greater shareholder rights, but the stakeholder view of corporate governance is also acknowledged (if not endorsed). Yet, is not conflict inevitable between these two perspectives in practice? How is a country or an individual firm to sort out the competing priorities of shareholder- and stakeholder-based systems of governance?[1] The OECD document suggests that shareholders may benefit in the long run from a concern with stakeholder interests, but this provides little guidance in the short term in the real world of corporate decisionmaking.

In another instance of ambiguity, minority and foreign shareholders are held up for special mention as deserving better treatment than they sometimes receive. However, the OECD calls merely for disclosing, rather than eliminating, the corporate-governance practices that put these shareholders at a disadvantage. These practices include unequally weighted voting classes and other capital structures (e.g., pyramids composed of multiple holding companies each with a controlling interest but less than full ownership in the company at the level below it) that give certain shareholders control rights that are disproportionate to their share of contributed capital. Foreign and minority shareholders have little reason to expect that the mere publication of the *OECD Principles of Corporate Governance* will greatly enhance their property rights. Fundamental reforms must be enacted in individual countries in the face of what is likely to be strong resistance by parties well-served by the current system.

Finally, creditors are obliquely mentioned in the principles in the context of non-shareholder stakeholders in the firm, but no specific recommendations are made to enhance creditor rights in countries where these are neglected (we provide evidence of this below). We will give special emphasis below to the importance of creditor rights in an overall framework of adequate corporate-governance practices and institutions. It is to the fundamentals that underlie the visible framework of corporate governance that we now turn.

LEGAL TRADITIONS AND THE RULE OF LAW

Despite their universal importance and a considerable international exchange of ideas and institutions, corporate-governance systems differ, even among advanced market economies. Perhaps the most important cause of international diversity among corporate-governance systems is the existence of several distinctive legal traditions across countries (La Porta, Lopez-de-Silanes, Shleifer, and Vishny, 1998, henceforth LLSV 1998). These traditions shape the specific rights and protections investors enjoy in their interactions with firms. In addition, the extent to which contracts are legally enforced—what we will call the rule of law—also influences how effective corporate governance is in a particular country.

This section describes the major legal traditions in existence today and sketches their impact on creditor and shareholder rights. We also discuss cross-country measures of the enforcement of the rule of law as it applies to investors. We summarize the adequacy of creditor rights, shareholder rights, and the enforcement climate in each of the major country groupings proposed by LLSV (1998) to come up with an overall ranking of the corporate-governance environments in which firms operate around the world. Finally, following LLSV (1998), La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997a, henceforth LLSV 1997a), La Porta, Lopez-de-Silanes, and Shleifer (1999, henceforth LLS 1999), Shleifer and Vishny (1997), and Levine (1998, 1999), we argue that the legal and political environments are critical influences on the nature of corporate governance and thereby on corporate performance in every country.

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[1] For example, Gorton and Schmid (1999) find that worker codetermination in German firms—the statutory right of employees to sit on corporate supervisory boards—exerts a negative impact on shareholder value.

Legal Traditions

What are the key features of a legal tradition that define and differentiate it from other traditions? LLSV (1998) cite comparative legal scholars who have identified six criteria:

> Among the criteria often used for this purpose are the following: (1) historical background and development of the legal system, (2) theories and hierarchies of sources of law, (3) the working methodology of jurists within the legal systems, (4) the characteristics of legal concepts employed by the system, (5) the legal institutions of the system, and (6) the divisions of law employed within a system (Glendon, Gordon, and Osakwe, 1994, pp. 4-5).

Following this approach, legal scholars have concluded that the two most important broad legal traditions are civil law and common law. Other traditions exist that have the character of rule-based systems of law—such as Jewish law, Canon law, Hindu law, and Muslim law—but LLSV (1998) argue that religious and other quasi-legal traditions are not relevant for a cross-country study of investor protection and corporate governance.[2]

The common-law tradition is found in the United States, Canada, the United Kingdom, other English-speaking countries, and countries whose modern development was heavily influenced by the English-speaking world. The civil-law tradition (or "Romano-Germanic" tradition) is found in Continental Europe and other countries that were heavily influenced by Continental Europeans. LLSV (1998) further subdivide the civil-law tradition into three main branches: (2a) the Scandinavian civil-law tradition, (2b) the German civil-law tradition, and (2c) the French civil-law tradition.

TABLE 3 HERE

[2] Interestingly, La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997b) suggest in a different paper that religious traditions may be important, after all. They find a strong positive link between "trust" by individuals of other people and organizations in society and measures of government efficiency, participation in civic organizations, social efficiency, and the size of business firms. They argue that trust, in turn, is lower in countries where the dominant religion is "hierarchical," including the Roman Catholic, Eastern Orthodox, and Muslim religions. Thus, differing religious traditions may be important in any search for ultimate determinants of social systems and behaviors.

Table 3 displays the LLSV (1998) classification scheme for the legal systems of 49 countries. Countries from all continents are included in the sample although great swathes of Asia, Africa, and eastern Europe are absent. Data limitations prevented LLSV from including the more than 100 other countries that are in databases such as the Penn World Table, Mark 5 (Summers and Heston, 1991). Fortunately, the LLSV (1998) sample includes countries representing all the major legal familes. The sample countries also produce the vast majority of world economic output. China and Russia are the two largest and perhaps most important countries missing from the sample.

The four legal families are indicated along the horizontal dimension of the table and a rough proxy for each country's stage of economic development is used to allocate countries vertically. The two largest legal groupings are those with corporate-governance traditions originating in England and France. The common-law grouping includes all the English-speaking members of the OECD as well as former British colonies and protectorates plus Thailand. The countries with French legal traditions include several long-standing European OECD members, recent members Mexico and Turkey, plus former French, Spanish, and Portuguese colonies in South America, Asia, and the Middle East. The Scandinavian and German legal traditions were not spread as widely around the world due to the relatively small colonial empires these countries amassed. It is interesting to note that China, Russia, and most of eastern Europe are developing legal and financial systems most heavily influenced by the German legal tradition.

Table 3 allows a first crude attempt to identify patterns among corporate-governance systems. First notice that the OECD and G-7 countries are fairly evenly spread across three of the four legal traditions identified by LLSV (1998). Thus, there is no monopoly by a single legal tradition among rich countries today. The distribution of countries not in the OECD (mostly former colonies of European powers) is less uniform but is not dominated by any single legal tradition, either. In sum, it is not obvious how legal origins and broad economic performance are related. We must examine each of these traditions more closely and ascertain what corporate-governance practices and financial-system features are associated with them before we can draw any conclusions about whether and how corporate governance and corporate performance are related.

The Common-Law Tradition. The English common-law legal tradition is characterized by judges trying to resolve particular cases. That is, precedents from judicial decisions, rather than contributions of legal scholars, shape common law. While most of the common-law countries share a common historical root in the English system and continue to apply a similar procedural approach to the evolution of their respective bodies of law, subsequent independent development means that the various national systems resemble each other less closely as time goes on. Nevertheless, comparative legal scholars generally agree that members of the common-law tradition share more critical features with each other than with members of other legal families (LLSV, 1998).

The Civil-Law Tradition. The civil, or "Romano-Germanic," legal tradition originates in Roman law and thus is much older than the common-law tradition. Civil law uses statutes and comprehensive codes as the primary means of organizing its legal principles. It relies on legal scholars to interpret the code and draft new interpretations and rules rather than building on judicial precedents alone (LLSV, 1998). Having developed to some extent independently over many centuries, countries within the broad civil-law tradition in some cases have diverged from each other more than have countries within the common-law family. Therefore, LLSV (1998) argue that the tripartite scheme of subdividing civil-law countries mentioned above is appropriate.

The Scandinavian family of legal traditions has its roots in Roman law but in modern times (since the 18^{th} century) the civil codes have not been used (LLSV, 1998). In this respect, Scandinavian law has converged some way toward common law. Nevertheless, the origins of the Scandinavian legal system are in the civil-law tradition and quantitative measures of its protection of investors are most similar to those of the German tradition.[3]

The German Commercial Code was written in 1897. It influenced the legal development of Austria, Switzerland, Japan, Greece, and Italy, although LLSV (1998) assign the latter two countries to the French group because they give priority to the origin of a country's legal tradition. Legal developments in South Korea and Taiwan were heavily influenced by Japan and China, respectively, both of which in turn borrowed from the German legal system. Other countries that show strong influence from the German legal tradition include the former Czechoslovakia, Hungary, and the former Yugoslavia, although none of these countries are included in the LLSV sample due to their underdeveloped private sectors.

The French Commercial Code was written under Napoleon in 1807 and was spread initially in the wake of his conquests. Later, French colonizers imposed French legal systems that still survive in the Near East, Africa, southeast Asia, Oceania, and the French Caribbean islands. The Spanish and Portuguese empires in Latin America predated Napoleon, but their disintegration paved the way for the introduction of modern French legal systems (LLSV, 1998).

Creditor Rights and Shareholder Rights

Legal traditions matter for corporate governance and corporate performance because they are systematically related to patterns in the types of legal rights and protections provided to investors. These rights and protections, in turn, affect the types of financing available to firms and may encourage the participation of some groups of investors more than others (such as banks, non-financial corporations, or individuals). It is to these specific rights and protections—and their distribution across countries—that we now turn.

[3] LLSV (1998, Tables 2 and 4) compute indexes of shareholder rights and creditor rights for each country in their sample. Tests of differences of means for various aspects of investor protections between the four legal

Creditor rights. LLSV (1998) point out that creditor rights are actually more complex than shareholder rights in at least two respects. First, there are typically multiple classes of creditors of large firms, including secured and unsecured lenders, as well as senior and junior positions within a security class. Disagreements among creditors can literally tear apart a firm as secured and senior creditors pursue their collateral while unsecured and junior creditors are much more likely to wish the firm to continue as a going concern. Related to this conflict is the second aspect of the complexity pointed out by LLSV (1998). In case of financial distress, creditors must somehow choose between two quite distinct—and risky—strategies. They can liquidate the firm, perhaps locking in losses that are especially large for junior creditors. Alternatively, they can attempt to reorganize and resuscitate the firm, albeit risking total loss in the future. Reorganization may be very difficult and contentious, especially if incumbent management retains control rights while the reorganization proceeds. In contrast, shareholders almost always prefer to continue operating the firm because their upside potential is unlimited while their downside losses are bounded by virtue of limited liability.

To simplify the analysis of creditor rights, LLSV (1998) adopt the perspective of a senior secured lender. They use four binary variables to proxy for creditor rights, including the following (assigning a value of one if the answer is "yes" and zero if "no"):[4]

- Is there an automatic stay on assets?
- Are secured creditors paid first?
- Are there restrictions for going into reorganization?
- Is management prevented from retaining operating control during reorganization?

LLSV (1998) sum these four binary indicators to form a broad index of creditor rights. They also check for the existence of a "remedial" mechanism that may compensate to some extent for weak protection of creditors:

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traditions indicate that the Scandinavian and German legal traditions are the most similar among all pairs.

[4] See Table 1 of LLSV (1998) for a complete description of the underlying data series.

- Is a legal reserve required, expressed as some percentage of capital?

A legal reserve requirement protects unsecured creditors, in particular, who might otherwise receive nothing in a liquidation.

Creditor rights vary considerably across countries. France is a prime example of a country with very little legal protection of creditors, scoring zero on the LLSV broad index of creditor rights. Perhaps unsurprisingly, French law imposes a legal reserve requirement (of 10 percent of capital) as partial redress of the poor protection of creditors' rights otherwise. At the other extreme, several countries, including the United Kingdom, obtain a perfect score on the broad index of creditor rights. There is no legal reserve requirement in the U.K., presumably because creditors are well protected in any case.

TABLE 4 HERE

The first row of Table 4 provides a crude summary ranking of the four country groups according to their legal protection of creditor rights. The average score of the English-origin group on creditor rights dominates those of each of the other three groups in head-to-head comparisons (see LLSV, 1998, Table 4, Panel B, for an explanation of the head-to-head comparisons). The German-origin group on average offers stronger protections to creditors than either the Scandinavian or French groups, so we assign two stars to the German group. The Scandinavian group may be slightly more protective of creditor rights than the French group, but this is not entirely clear so we conservatively assign one star to each of these groups. Following LLSV (1998), our conclusion is that common-law countries provide the best legal protection of creditor rights. It remains to be seen how well shareholders are legally protected in each country group and, even more importantly, how consistently contracts and investor rights are actually upheld. Without a climate in which the rule of law prevails, investor rights are meaningless.

Shareholder rights. Company laws in force in a country largely determine the nature of shareholders' voting rights, the ultimate source of value in corporate equity shares (Hart, 1995). LLSV (1998) identify six different types of shareholder rights that may or may not be present in any country. In addition, they create indexes for three other measures of shareholder rights that affect dividend payouts and the conduct of annual meetings. If present, each of the following six shareholder rights provides an important investor guarantee:[5]

- One share-one vote;
- Proxy voting by mail;
- Shares are not blocked before a general meeting;
- Cumulative voting or proportional representation (to allow minority interests to gain representation on the board);
- An oppressed minority mechanism (allowing either judicial redress or a mandatory buyout of shareholders who are opposed to fundamental changes in company bylaws, such as voting rules);
- Pre-emptive rights to purchase new equity issues.

Each of these variables is coded zero if the right does not exist or one if it does exist for each country in the sample.

In addition to these binary indicators, LLSV (1998) construct three other measures of shareholder rights:

- Percentage of share capital needed to call an extraordinary shareholder meeting, where a lower number signifies better shareholder rights;
- An index running from zero to six of "antidirector rights," consisting of the sum of scores on all of the previous indicators except one share-one vote, and where a value of one is

[5] See Table 1 of LLSV (1998) for a complete description of the underlying data series.

assigned when any percentage of share capital less than 10 percent is needed to call an extraordinary shareholder meeting;

- The percentage of net income that by law must be paid out as a dividend, if any.

As in the case of creditor rights, these indicators of shareholder rights reveal a vast diversity among countries. Among the rich countries, for example, Belgium (part of the French-origin group) scores zero on every single indicator where this is possible except for the relatively high (and unfavorable to minority shareholders) 20 percent of shares needed to call an extraordinary shareholders meeting. At the other extreme, Canada (assigned to the English-origin group by virtue of Ontario's dominant role in the financial system) achieves a perfect score on six of eight measures of shareholder rights and a near-perfect score on the ninth (only 5 percent of shares needed to call an extraordinary shareholders meeting).

The second row of Table 4 provides a summary ranking of the four country groups according to their legal protection of shareholder rights. The average scores of the English-origin group again dominate those of each of the other three groups in head-to-head comparisons (see LLSV, 1998, Table 2, Panel B); hence, we assign the English-origin group of countries three stars. Despite the example of Belgium noted above, the French-origin group on average offers stronger protections to shareholders than either the Scandinavian or German groups, so we assign two stars to the French group. The Scandinavian group appears in head-to-head comparisons to be somewhat more protective of shareholder rights than the German group, so we assign one star to the former and none to the latter.

Thus, the common-law countries appear to provide the strongest legal protection of both creditor and shareholder rights. If these were the only relevant dimensions of corporate governance, we could stop at this point and recommend that all countries not in the English-origin group of countries should simply copy one of its representatives. LLSV (1998) argue that this would be a mistake, however. Effective corporate governance requires not just a strong legal framework of investor protections, but also a strong culture of rule of law. It is to this vital consideration that we now turn.

The Rule of Law

Legal rights of shareholders and creditors to receive certain cash flows and to participate in various corporate decision-making activities are necessary but not sufficient conditions for effective corporate governance. A climate of respect for the rule of law is also needed. Conversely, the greatest respect for and enforcement of the law are of no use to investors if they have few or inadequate legal rights to enforce. Thus, a core set of shareholder and creditor rights and an established tradition of legal enforcement of these rights appear to be complementary features of an effective system of corporate governance.

LLSV (1998) identify five "enforcement" variables that may proxy for the intangible degree of the rule of law in a country. In addition, they examine the quality of accounting standards in each country. The enforcement variables they investigate are the following:[6]

- The efficiency of the judicial system, as ranked by Business International Corp.;
- An assessment of the law and order tradition, provided by International Country Risk, a credit-rating agency;
- An index of government corruption, also from International Country Risk;
- The risk of expropriation, also from International Country Risk;
- The risk of repudiation of a contract by the government, also from International Country Risk.

Each of these ratings is rescaled to lie between one and ten. The authors also generated ratings of accounting standards in each country by checking for the inclusion of 90 items in the 1990 annual reports of at least three companies in each country.

In contrast to the previously discussed cases of shareholder and creditor rights, the rule of law appears to be consistently strong among the rich countries and somewhat weaker among poorer countries. As LLSV (1998) note, rule-of-law indicators may be strongly correlated with per-capita GDP for more fundamental reasons than differing legal origins. The rule of law may be both a cause and an effect of a well-functioning economy and society. Nevertheless, there are significant differences between groups of countries sorted according to their respective legal origins.

The third row of Table 4 provides a summary ranking of the four country groups according to their observance of the rule of law. The average scores of the Scandinavian-origin group are highest on these criteria, but it must be kept in mind that there are no poor countries in this group. The German-origin group on average obtains higher scores on the rule of law than either the English or French groups, but this also may be related to the relative scarcity of low-income countries in the German group. Meanwhile, the English-origin countries score higher than the French-origin countries with respect to law and order, and this result does not appear to be distorted by the mix of different income levels among countries.

Legal Traditions and the Rule of Law as Corporate-Governance Indicators

What can we conclude about the importance of legal traditions and the rule of law in evaluating corporate governance in major countries around the world? The pioneering work of LLSV (1998) documents a link between a country's legal tradition and its relative ranking in terms of providing rights to shareholders and creditors and in fostering the rule of law (with the caveat that the latter also is related strongly to the country's level of economic development). Table 4 provides our interpretation of LLSV's (1998) results in summary fashion. We find that, on average according to a simple measure that assigns equal importance to creditor rights, shareholder rights, and the rule of law, countries in the common-law tradition appear to provide a better corporate-governance environment than countries that

[6] See Table 1 of LLSV (1998) for a complete description of the underlying data series.

have civil-law traditions. Differences among the civil-law country groups do not appear as significant, particularly given the large number of low- and middle-income countries in the French-origin group that may depress this group's scores for reasons unrelated to corporate governance *per se*.

The connections identified by LLSV (1998) between legal traditions and corporate-governance indicators fall short of a full explanation of corporate governance and its ramifications, however. We need to understand how the corporate-governance environment discussed above translates into specific modes of financing and ownership. Furthermore, we must seek to establish a link between these objective measures of financial structure of firms and measures of ultimate performance, such as profitability or growth. Consequently, the next section explores the evidence regarding possible links between a country's corporate-governance environment and the financial structure of its firms. In particular, we focus on the typical capital structures employed by firms and on the structure of corporate ownership.

CAPITAL STRUCTURE AND CORPORATE OWNERSHIP

For present purposes, differences in legal traditions and the rule of law are important only if they actually matter for corporate governance. More specifically, differences in corporate-governance institutions are of interest only if they translate into differences in objective measures of firm behavior. In this section, we focus on the impact of the previously discussed corporate-governance environment on the sources of external finance used by firms in different countries and on the patterns of corporate ownership.

The Corporate-Governance Environment and Firms' Capital Structures

We first examine two aspects of the financing of large firms across countries: (1) their typical capital structure, that is, broad patterns on the liability side of firms' balance sheets, and (2) the relative importance of external financing, that is, funds provided by parties who are not firm insiders.

Capital structure. We provide two views of capital structure that correspond to a "macro" view and a "micro" view of firms' balance sheets. The advantages of the macro view from national statistics are that we capture all firms in the economy and we can observe a large number of countries. The advantage of the micro view from firms' financial statements is that it provides a more detailed look at balance-sheet items for a few important countries.

TABLE 5 HERE

Table 5 provides the macro view of capital structures in a large sample of countries. Panel A of Table 5, drawn from LLSV (1997a), shows the ratio of the debt of all firms to GDP in 1994 averaged over all countries within each of the four legal traditions discussed above. The numerator of this ratio is the sum of bank debt of the private sector and outstanding non-financial sector bonds. There is essentially no difference between the common-law countries and the civil-law countries on this dimension, a surprising finding given the much stronger protection of creditors in the English-origin countries (recall the second row of Table 4). Individual country detail (in the second row of panel A) reveals that high-income countries tend to have larger debt-to-GDP ratios than low-income countries sharing the same legal tradition, a point to which we will return later. Another explanation for why common-law countries do not have much larger debt-to-GDP ratios than civil-law countries is that other sources of financing may be available more readily—for example, equity.

Panel B of Table 5 breaks down the debt owed by the business sector into bank debt and bond-market debt for each of the G-7 countries (Rajan and Zingales, 1995). Although these data are from the mid 1980s and bond markets have grown in virtually all major economies in the meantime, it is unlikely that the relative importance of bank debt has changed very much. Simply put, firms in the United States and Canada issue significant amounts of bonds but nowhere else in the G-7 countries is this true. The fact that British firms turn to banks for the vast majority of their debt financing indicates that legal traditions are *not* primarily responsible for the unimportance of corporate bond markets around the world.

Panel C of Table 5 shows the relative importance of equity markets around the world. The figures shown are estimates made by LLSV (1997a) of the ratio of the market value of outside equity—defined as the total market value of equity of the top ten firms in each country less the amount controlled by the three largest shareholders in each—to GDP. In contrast to the measures of debt shown in panels A and B, the relative importance of equity markets is indeed strongly related to legal traditions. Common-law countries have nearly twice the market capitalization of civil-law countries except in the German-origin group, where the inclusion of East Asia is pivotal. The surprisingly high score of the German-origin group (46% of GDP) is due to Japan, South Korea, and Taiwan, whose average equity-to-GDP ratio of 66 percent is more than double the three European members' average of 27 percent.

The overall picture we obtain from Table 5 is that common-law countries have much larger markets for outside equity and, in some countries, also for corporate bonds. Most external financing done by firms in civil-law countries is in the form of bank loans, although banks are quite important in common-law countries, too.

Financing by corporate insiders and outsiders. The results in Table 5 provided some indication of the unimportance of public equity and bond markets for most firms in civil-law countries. The unavoidable implication of having "underdeveloped" equity and bond markets is that most firms in most countries are dependent on three sources of insider or near-insider financing:

- Owner-contributed funds;

- Retained earnings;
- Bank debt.

Narrow capital markets in turn mean that fewer new firms are likely to emerge; existing firms may be smaller or more financially fragile than would otherwise be the case; internal financing is likely to be predominant and closely linked to the business cycle; inefficient forms of retained earnings may emerge; banks may obtain unwelcome power over firms; and owners may remain relatively undiversified. We discuss the first five of these issues briefly here before turning to the structure of corporate ownership in the next subsection.

TABLE 6 HERE

Table 6 presents indicators of how narrow capital markets may constrain the financial behavior of firms. Panel A contains two indicators of the ease with which firms may obtain external equity financing. The number of initial public offerings indicates the flow of new firms coming to the equity market, while the number of domestic listed firms gives some idea of how broad the equity market has become. This reflects both the inflow of new firms as well as the outflow of existing firms that can no longer operate profitably. These two measures are very similar in pointing to a clear distinction between the common-law and civil-law countries with respect to effective access to public equity markets, although Scandinavian-origin countries resemble the common-law countries in this respect.

Panel B of Table 6 provides details on the mix of internal and external financing by non-financial firms in the G-7 countries. Firms in the civil-law countries generally must rely more on internal sources of funds than their common-law counterparts, as indicated by slightly higher percentages of total financing due to cash flows from operations in some cases.

Two special cases should be noted. The United States presents an exception to our generalization during the period Rajan and Zingales (1995) studied because a sizable portion of cash flows at U.S. firms were dedicated to repurchasing their own equity (the same phenomenon has occurred in the 1990s). The consequence is that, rather than constituting a source of funds, net equity financing was a use of funds. In fact, reliance on external debt by U.S. firms was not out of line with their English-origin counterparts relative to overall cash flows, while the contribution of equity financing was equivalent to nearly negative 8 percent of total financing in the U.S. versus positive 12-14 percent for the U.K. and Canada (Rajan and Zingales, 1995, Table 4). This results in a relatively high reported percentage of total financing by U.S. firms from internal cash flows. Subtracting 20 percentage points from the U.S. figure—8 percentage points of negative equity financing plus the "normal" English-origin rate of net equity financing of 12 percentage points—gives a figure of 57 percent, perfectly consistent with the numbers shown for Canada and the United Kingdom.

The second special case is Japan, which experienced an asset-price bubble during the late 1980s. All kinds of financing were considered cheap by firms during this period so they may have borrowed more and issued more equity than is "normal." Hence, because of the market boom, Japan's figure of 44 percent may be abnormally low and should not be used as *prima facie* evidence of low reliance on internal sources of funds by firms in civil-law countries in general.

Firms in Germany, France, and Italy, meanwhile, obtained approximately 10 percentage points less of their total financing from external sources than did firms in the U.K. and Canada. This constitutes more evidence that relatively narrow capital markets in the civil-law countries may have constrained firms' financial behavior.

The second row of panel B shows the percentage of total assets financed by untaxed reserves or "other" liabilities, which together may represent relatively inefficient sources of financing in the sense that they are not priced by the market and are likely to be inflexible. A massive 30.4 percent of German firms' assets are financed by these special categories; the lion's share of these liabilities are pension reserves (Rajan and Zingales, 1995). In contrast to the common-law country "prudent-man" rules dictating minimum off-balance sheet funding requirements for employee pension liabilities, German firms are allowed to fund their future pension obligations—as well as financing their current operations—with on-balance sheet reserves.

The last consequence of narrow capital markets we discuss in this section is the power banks may obtain over borrowing firms by virtue of their dominant role in external financing. Table 5 showed that firms in civil-law countries rely to a great extent on banks for external finance. It is commonly asserted that banks in these countries wield a great deal of influence through a myriad of financial activities that are grounded in a lending relationship (Rajan, 1992; Emmons and Schmid, 1998). It is possible that the relatively large amount of internal financing done by firms in civil-law countries reflects their attempts to minimize their dependence on banks.

We have shown in this section that the amount of debt financing by firms is similar among all high-income countries. A well-developed rule of law that may be a feature of high-income countries probably contributes to this widely shared feature of corporate capital structure. This regularity obscures differences in details, however. First, a few English-speaking countries have flourishing bond markets, providing an alternative to banks for debt financing. The strong protections of creditors' interests found in the common-law countries may be an important factor contributing to the vitality of public debt markets. The continuing dependence of British firms on banks points out the fact that creditor protections are necessary but not sufficient for bond markets to develop, however. If creditor protections are in fact important, however, then future bond-market development may be more likely in German-origin countries than in other countries with civil-law traditions.

Second, many of the common-law countries have large equity markets in which outside investors hold substantial stakes in firms. These countries provide greater opportunities for firms to obtain outside equity and stock-market listings and greater opportunities for investors to share economy-wide risks. With the exception of the East Asian countries, few civil-law countries have large and liquid equity markets. Shareholder rights appear to be stronger in French-origin countries than in the other civil-law countries, so equity markets may develop faster in the former group.

Third, civil-law countries finance a substantially larger part of their total operating requirements with internal cash flows. This could be due to weaker investor protections and the consequent underdevelopment of external capital markets relative to common-law countries. It could also reflect firms' attempts to minimize the extent to which they rely on banks in order to maintain their own bargaining power.

Together, these pieces of evidence on firms' capital structures suggest that bank domination of external financing in civil-law countries may reduce firms' flexibility in some respects. This aspect of relatively underdeveloped capital markets must be kept in mind when evaluating some of the potential benefits of bank-centered financial systems. It may also be related to the existence of insider-oriented governance structures and relatively concentrated equity ownership structures in many civil-law countries, as the next subsection discusses.

The Corporate-Governance Environment and Ownership Structure

The number and nature of investors in a corporation and the relative sizes of their stakes are important features of the ownership structure of corporations. We now turn to evidence on differences across countries and legal traditions in terms of: (1) the locus of effective control by shareholders, (2) concentration of equity ownership, and (3) the identity of controlling shareholders.

TABLE 7 HERE

Control of large public firms. A common assumption among economists and management scholars is that large firms are widely held, i.e., the shares are dispersed among many investors, each with an insignificant fraction of the total and no way of exerting control over the management. This has lead to large theoretical and empirical literatures dealing with managerial agency problems and the inefficiencies these create.

Panel A of Table 7 shows that dispersed ownership is a good approximation of reality in only some countries. Using a definition of effective control of 20 percent ownership or more by a single entity at the end of 1995, LLS (1999) found that only 36 percent of a sample of large firms drawn from 27 countries had no effective owner, i.e., were widely held. If a cutoff level of stakes amounting to 10 percent or more is applied, only 24 percent of firms in the sample were widely held. Large firms in the United States, the United Kingdom, and Japan are almost all widely held, but other high-income countries are just about as likely to be controlled by one shareholder as to be without a dominant owner. Widely held firms are virtually unknown in some middle-income countries such as Mexico and Argentina, while in 17 of the 27 sample countries, a majority of large firms were controlled by a single owner (LLS, 1999, Table 2). Thus, we have some evidence that ownership is concentrated in many large firms, especially outside the English-speaking world. This feature of equity ownership structure may be a response to the lack of investor protections in many civil-law countries noted above (LLSV, 1998).

Concentration of ownership. We can also examine the ownership concentration of a small number of large owners to seek more evidence on concentrated ownership. After all, effective control could be exerted by a small group of shareholders rather than by a single owner. Panel B of Table 7 provides evidence of a high degree of concentration of ownership among the three largest shareholders in large firms in many countries (LLSV, 1998, Table 7). Consistent with the results shown in panel A of Table 7, the least-concentrated ownership structures appear to be those in the English-speaking world and Japan.

Within the English-origin group of countries, there is a very strong negative correlation between an individual country's per-capita income level and the degree to which ownership is concentrated in its large firms. That is, richer countries have more widely held firms. A similar, but weaker, pattern appears among the French-origin countries. Thus, if concentrated ownership is a response to weak investor protections, then our earlier conclusion that common-law countries have stronger investor protections than civil-law countries is consistent with the ownership patterns we observe among the rich countries. A second, income-related, effect appears to be operating, as well. Within any country group, richer countries have more widely held firms than other countries (see panel A of Table 7). This may reflect our conclusion that the rule of law, an important complement of explicit legal investor protections, is stronger in richer countries of all legal traditions.

Identity of owners. Given a high degree of concentrated equity ownership in many countries, we can ask who these owners are. Panels C and D of Table 7 provide details on the types of major shareholders observed in large firms in several countries at the end of 1995. The fraction of large firms controlled by a family, the State, or a widely held nonfinancial firm is typically around one half or more in all but the high-income English-speaking countries and Japan (panel C). For example, one of the 10 largest nonfinancial firms in Germany was controlled by a family and three others were controlled by the State (in one of which control was shared with a widely held financial firm). In South Korea, two of the 10 largest firms were controlled by families and two others by the State. In Mexico, all 10 of the largest firms were family-controlled. At the other extreme, all 10 of the U.K.'s largest firms were widely held when a 20 percent definition of control is used and 9 of 10 still qualify when a 10 percent cutoff is applied (LLS, 1999, Table 2).

Panel D of Table 7 focuses on control of large nonfinancial firms by widely held financial firms—that is, banks, insurance companies, or other financial institutions that are not closely held or controlled by other entities. This definition includes many of the German, Dutch, and Swiss universal banks, and the Japanese city banks, for example, although it does not cover the French or Italian banks in which the State maintains a large equity position.

Do large banks exert a great deal of control over large nonfinancial firms in some countries? The evidence from LLS (1999) is that bank control is the exception rather than the rule even in Europe, the home of universal banking. Private German, Swiss, Scandinavian, Italian, and French financial institutions control only one or two of the 10 largest domestic nonfinancial firms in each country. As expected, this form of control is nonexistent in the high-income English-speaking world. Perhaps surprisingly to some, Japanese financial institutions are also absent from the list of effective owners of large nonfinancial firms.

Our discussion of equity ownership structure across countries provided some evidence consistent with the idea that concentrated ownership may be a response to weak investor protections (in the rich civil-law countries) and/or to a weak climate for the rule of law (in low-income countries of all legal traditions). We saw that it is families, the State, and other nonfinancial firms, rather than banks or other financial institutions, that provide the bulk of concentrated equity investment in the largest firms.

DOES CORPORATE GOVERNANCE AFFECT CORPORATE PERFORMANCE?

Our argument to this point has been built up in two stages. First, we argued that different legal traditions contribute to notable differences in the degree of investor protection written into the commercial codes of various countries. At the same time, higher levels of economic development correlate with a better climate for the rule of law. The second stage in our argument was that these two dimensions of a country's historical, legal, and political legacy are critical determinants of the actual financial structures used by firms. In particular, we found that nonfinancial firms in common-law countries generally used more external finance than their counterparts in civil-law countries. Both outside equity (i.e., contributed by non-controlling shareholders) and bond-market debt were more plentiful in English-origin countries, on average. Consistent with these findings, we found that firms were more likely to have controlling shareholders and that ownership structures were more concentrated outside the English-speaking world and Japan. Although banks are dominant providers of debt finance in most countries, they act as controlling shareholders in only a few of the largest nonfinancial firms in the civil-law countries.

We now turn to the third and final stage in our argument. In this section we ask, Do the legal traditions and patterns of corporate governance sketched so far have any significance for corporate performance? Furthermore, do these firm-level differences in performance, if any, translate into differences in the performance of national economies?

It is worth noting that we have already presented one suggestive piece of evidence that bears on these questions. Table 1 reported differences in the pre-tax ROAs of large internationally active banks from 12 countries. The tentative conclusion from our earlier discussion was that banks from English-speaking countries appeared to enjoy consistently higher levels of core profitability than did other banks. In light of our subsequent discussion, it is plausible to assert that differing corporate-governance practices may be in part responsible. We now turn to more comprehensive sources of empirical evidence that might confirm this conjecture.

Evidence on the Links Between Corporate Governance, Corporate Finance, and Corporate Performance

We will review briefly evidence from industry-level data as well as from national accounts. An empirical investigation at industry level allows a finer partitioning of the data and a larger sample size, important considerations when testing theories that may be difficult to distinguish This is certainly the case here, since corporate-governance explanations of corporate or national economic performance may not be obviously more convincing than a reverse-causation explanation, according to which good performance leads to more external finance, for example. The national-accounts data are important because they are capable, in principle, of picking up all of the indirect and possibly intangible ways in which corporate-governance systems may matter for overall economic performance.

An industry-level view of corporate governance and corporate performance. Rajan and Zingales (1998) begin with a simple maintained hypothesis: firms in industries that require relatively large amounts of external finance to succeed will perform relatively better in countries where financial markets are better developed. First, they estimate the amount of external financing as a fraction of capital expenditures actually used by all the manufacturing firms in the Compustat universe for the United States. They find that Drugs and Pharmaceuticals firms use the most external finance, followed by Plastics and Computing. The sectors with the least need for external finance—in fact, these sectors have a negative need, or excess cash flow—are Leather, Pottery, and Tobacco.

Armed with estimates from U.S. firms of external financing needs by industrial sector, Rajan and Zingales (1998) then apply these financial-dependence measures to 36 industries drawn from 41 countries. They use several proxies for the level of a country's financial development, including accounting standards (their preferred measure), the ratio of total stock-market capitalization to GDP, the ratio of domestic credit to the private sector to GDP, per-capita income, and the LLSV (1998) country groupings. Their empirical tests consist of regressions of the growth of real value added by industries in each country on measures of financial development by country.

Consistent with the hypothesis that corporate governance as we have articulated it matters for corporate performance, Rajan and Zingales (1998) find that firms in industries that require large amounts of external financing grow faster in countries with high scores on their measures of financial development (their Tables 4 and 5). The results are almost identical when they use the LLSV (1998) country classification scheme instead of their own financial-development measures to gauge how easily firms can access sources of external finance. Thus, corporate governance appears to matter for corporate performance in the way one would expect. Better accounting standards, larger capital markets, stronger legal protections of investors, and a stronger rule of law are all good predictors of growth by firms that need external finance.

National economic performance and corporate governance. Another strategy for detecting possible effects of corporate governance on corporate performance is to compare measures of national economic performance while controlling for governance proxies. In a series of papers, Ross Levine (1998, 1999; Levine and Zervos, 1998) has shown that numerous indicators of financial development—including the LLSV (1998) country groupings discussed above—are strong predictors of several measures of aggregate economic outperformance. This is also consistent with the hypothesis that corporate-governance practices are important inputs into corporate performance which, in turn, is related to national performance.

Levine and Zervos (1998, Table 3) find that G.D.P. growth, growth of the capital stock, and productivity growth are all strongly associated with several measures of financial development over the period 1976-93 in a sample of 47 countries. These include the ratio of bank credit extended to the private sector to GDP and the ratio of stock-market turnover to market capitalization, proxies for the ease of access to debt and equity markets, respectively. These results are robust to the inclusion of various controls for the level of economic development of each country.

Levine (1998) repeats the analysis done in Levine and Zervos (1998) but uses the LLSV (1998) country-classification scheme to motivate his search for specific measures of financial-market development. In particular, Levine (1998) uses the LLSV (1998) measures to extract the component of bank credit to the private sector that is due to (i.e., correlated with) these corporate-governance features alone. Levine (1999) uses a similar methodology with several broader measures of financial development. In both cases, the results are strongly supportive of the hypothesis that the elements of corporate governance identified by LLSV (1998) are in fact important determinants of aggregate economic performance over long time periods. In other words, the corporate-governance environment can make a measurable difference not only to individual corporate performance, but also to national economic performance.

A Broader Perspective on Corporate Performance

Despite strong support for the common-law framework of corporate governance that emerges from the performance studies just described, there may be reasons why there appears to be no international rush to jetison existing frameworks where they differ from the English-origin model. Is this due merely to national chauvinism or the inability to recognize a superior model? Or are the issues surrounding corporate governance more complex than might have been inferred from our previous discussions?

The persistence of distinctive systems of corporate governance could be due to the existence of other important aspects of corporate governance and corporate performance that are not reflected adequately in the profitability and growth regressions reported by Rajan and Zingales (1998), Levine and Zervos (1998), and Levine (1998, 1999). For example, common-law countries' financial systems may be proficient in fostering "creative destruction," but some countries may choose a milder—if also less profitable—form of capitalism. Some countries may enjoy comparative advantages in industries that do not require large amounts of external finance, reducing the attraction of large and liquid capital markets. Active capital markets may interfere with various kinds of financial intermediary-based long-term relationships that provide efficient monitoring of nonfinancial firms (Hellwig, 1991) or allocative efficiency (Allen and Gale, 1999). Capital markets that provide "transactional finance" may undermine financial intermediaries' ability to provide socially beneficial intertemporal smoothing of risk (Allen and Gale, 1997) or to resist credit cycles that result in macroeconomic stability (Kiyotaki and Moore, 1997). We turn briefly to these qualifications to our previous conclusion that common-law based corporate-governance systems appear to produce superior performance.

The role of financial intermediaries in monitoring nonfinancial firms. We alluded earlier to the role of financial firms such as banks and insurance companies in exerting control and monitoring the behavior of nonfinancial firms. Clearly, ownership of a controlling equity stake is not the only, or perhaps even the best, way for a financial institution to provide incentives for managers to act in the interests of investors in the firm. A lending relationship is also a potential source of discipline (Diamond, 1984). As we noted, bank lending is the primary source of debt financing in virtually all countries, but it is relatively less important in a few of the English-speaking countries. It is precisely in these countries where bond and outside equity markets are most active. Based on a comparison of the United States and Germany, Hellwig (1991) argues that active capital markets "serve investors who want to reshuffle their portfolios," but do not provide a substitute for the disciplining role of banks that closely monitor their borrowers. Jensen (1993) concurs by observing that the profusion of hostile takeover activity in the United States may be a sign that, in the absense of strong lenders, external capital markets and internal control mechanisms often have failed to serve investors well.

The role of financial intermediaries in producing allocative efficiency. Innovation often involves creativity, entrepreneurial drive, and long-sighted financing. Financial intermediaries such as banks and venture-capital firms appear to be indispensable in providing opportunities for profitable innovation and efficient allocation of society's resources (Allen and Gale, 1999). Active capital markets may indeed play an important role at a later stage in a new firm's life cycle, but financial intermediaries are more important in early stages. Analogously, intermediaries that monitor firms closely are better able to initiate restructurings or liquidation when this is called for. To the extent that capital markets are able to "skim the cream" of profitable investment projects and firms, financial intermediaries may be weakened and their role in producing allocative efficiency undermined.

The role of financial intermediaries in providing intertemporal smoothing of risk. From the standpoint of an economy as a whole, market-dominated financial systems may be efficient in a cross-sectional sense (i.e., funds are auctioned to the highest-value bidder) even when they are not efficient in an intertemporal sense (i.e., avoiding booms and busts, Allen and Gale, 1997). The source of this apparent paradox is that the liquidity created by financial markets is a public good, leading to overconsumption of the good. That is, every participant faces the incentive to economize on holding "safe assets" when financial markets appear able to provide liquidity on demand. However, large shocks to asset values or confidence may induce an abnormally large number of investors to seek to convert risky into safe assets at one time. This flight to safety reveals the ephemeral nature of the liquidity provided by markets. Financial systems that reserve a large (and profitable) role for financial intermediaries, on the other hand, provide incentives for these intermediaries to invest in safe assets so as to provide a genuine store of liquidity. Thus, economies that allow capital markets to reduce the profitability of financial intermediaries too much may run a greater risk of acute liquidity crises.

A related idea is that lending based solely on collateral—as opposed to relationship lending—can lead to destructuve credit cycles in an economy (Kiyotaki and Moore, 1997). When assets serve both as means of production and loan collateral, shocks to the value of the assets has two effects. First, by definition the shock reduces the productivity of the assets and hence the incomes of borrowers. The second, and potentially more damaging, effect is that loan collateral values shrink. Lending that is based solely on these collateral values, rather than stable long-term relationships, then declines. This also reduces income, reinforcing the first effect. Clearly, the Kiyotaki and Moore (1997) account is related to the Allen and Gale (1997) scenario in the sense that there is a public-goods problem. In both cases, the existence of financial intermediaries with some degree of market power allows them to internalize and hence to eliminate this source of fragility in a market economy.

CONCLUSIONS

We have argued that distinctive legal traditions, based on common law and civil law, gave rise to distinctive sets of legal protections of investors. In addition, the climate surrounding enforcement of contracts, the rule of law, appears to correlate with countries' levels of economic development.

Taken together, the degree of investor protection and the strength of the rule of law appear to explain differences in the capital structures of firms and ownership patterns across countries. Finally, we provided evidence that better investor protection and a stronger rule of law are related both to better corporate performance of firms that require external finance and to several measures of aggregate economic outperformance.

These conclusions should not be taken to imply that there is a single, universally accepted model of superior corporate governance. Systems continue to differ significantly. We suggested that the issues surrounding a country's choice of corporate-governance system are complex and there are legitimate objections to a financial system dominated by capital markets. In the end, we can say only that corporate-governance systems are deeply entrenched and corporate performance is too multifaceted to allow unambiguous recommendations for future change and reforms. Nevertheless, stronger legal protections of creditors and shareholders and a strong commitment to the rule of law appear to be no-lose propositions that every country can and should embrace.

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Table 1

Profitability of Large Banks

Panel A. Average pre-tax return on assets (ROA), 1986-88				
Group average	0.89%	0.54%	0.70%	0.76%
Individual countries	*United States 0.70%* *U.K. 0.97%* *Canada 1.02%*	*Sweden 0.77%* *Denmark 0.31%*	*Germany 0.83%* *Japan 0.60%* *Switzerland 0.68%*	*France 0.32%* *Italy 0.72%* *Netherlands 0.71%* *Spain 1.29%*
Panel B. Average pre-tax return on assets (ROA), 1996-98				
Group average	1.32%	0.98%	0.05%	0.59%
Individual countries	*United States 1.67%* *U.K. 1.13%* *Canada 1.15%*	*Sweden 1.02%* *Denmark 0.94%*	*Germany 0.48%* *Japan -0.43%* *Switzerland 0.10%*	*France 0.32%* *Italy 0.34%* *Netherlands 0.74%* *Spain 0.97%*
Panel C. Average pre-tax return on assets (ROA) over both periods				
Group average	1.11%	0.76%	0.38%	0.68%
Individual countries	*United States 1.19%* *U.K. 1.05%* *Canada 1.08%*	*Sweden 0.90%* *Denmark 0.63%*	*Germany 0.65%* *Japan 0.09%* *Switzerland 0.39%*	*France 0.32%* *Italy 0.53%* *Netherlands 0.72%* *Spain 1.13%*

Sources: Panel A, OECD (1992); panel B, OECD (1999b); panel C, authors' calculations.

Table 2

OECD Principles of Corporate Governance

Topic	Principle	Comments
I. The rights of shareholders	The corporate governance framework should protect shareholders' rights.	*General conceptual framework for establishing shareholders' property rights. Recognizes the inevitable separation of ownership and control in widely held firms but does not propose specific approaches to solving the agency problem. Does not argue for one share-one vote rules but advocates transparent takeover markets.*
II. The equitable treatment of shareholders	The corporate governance framework should ensure the equitable treatment of all shareholders, including minority and foreign shareholders. All shareholders should have the opportunity to obtain effective redress for violation of their rights.	*Stresses the importance of protecting the rights of minority and foreign shareholders. Does not take a position on the desirability of one share-one vote rules. Major thrust is on better disclosure and information flows to shareholders.*
III. The role of stakeholders in corporate governance	The corporate governance framework should recognise the rights of stakeholders as established by law and encourage active co-operation between corporations and stakeholders in creating wealth, jobs, and the sustainability of financially sound enterprises.	*Covers employees, suppliers, creditors, and all other non-shareholder individuals and groups with an interest in some aspect of the performance of a corporation's obligations. No inevitable conflict is recognized between shareholders and other stakeholders.*
IV. Disclosure and transparency	The corporate governance framework should ensure that timely and accurate disclosure is made on all material matters regarding the corporation, including the financial situation, performance, ownership, and governance of the company.	*Endorses the maximum practicable flow of information to shareholders. Implies that shareholders' property rights (ought to) extend to insiders' material information about the firm.*
V. The responsibilities of the board	The corporate governance framework should ensure the strategic guidance of the company, the effective monitoring of management by the board, and the board's accountability to the company and the shareholders.	*Argues that independence from management is necessary for a board to carry out its responsibilities effectively. In addition to serving as shareholders' representatives, the board's responsibilities include relations with stakeholders and the public at large.*

Source: OECD (1999a).

Table 3

La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) Country Classification Scheme: Legal Traditions and Economic Development

	Common-law tradition	**Civil-law tradition**		
	English origin	**Scandinavian origin**	**German origin**	**French origin**
OECD member countries (G7 members in bold)	Australia **Canada** Ireland New Zealand **United Kingdom** **United States**	Denmark Finland Norway Sweden	Austria **Germany** **Japan** South Korea Switzerland	Belgium **France** Greece **Italy** Mexico Netherlands Portugal Spain Turkey
Other	Hong Kong India Israel Kenya Malaysia Nigeria Pakistan Singapore South Africa Sri Lanka Thailand Zimbabwe		Taiwan	Argentina Brazil Chile Colombia Ecuador Egypt Indonesia Jordan Peru Philippines Uruguay Venezuela

Source: La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998, Table 2)

Table 4

Between-Group Comparisons of Shareholder Rights, Creditor Rights, and the Rule of Law

	Common-law tradition	**Civil-law tradition**		
	English origin	**Scandinavian origin**	**German origin**	**French origin**
Creditor rights	***	*	**	*
Shareholder rights	***	*		**
Rule of law	*	***	**	
Total	**7**	**5**	**4**	**3**

Source: La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998, Tables 2, 4, and 5). One asterisk is assigned to a country group for each other country group with inferior scores in a head-to-head comparison on this dimension.

Table 5

Importance of Debt and Equity Markets

	Common-law tradition	**Civil-law tradition**		
	English origin	**Scandinavian origin**	**German origin**	**French origin**
Panel A. Ratio of debt owed by the business sector to GDP (1994).				
Group average	68%	57%	97%	45%
Examples	*United States 81%* *Canada 72%* *Singapore 60%*	*Sweden 55%* *Denmark 34%*	*Germany 112%* *Japan 122%* *South Korea 74%*	*France 96%* *Italy 55%* *Mexico 47%*
Panel B. Fraction of the business sector's debt owed to banks (1986).				
Examples	*United States 75%* *Canada 86%* *U.K 96%*		*Germany 99.8%* *Japan 96%*	*France 93%* *Italy 98%*
Panel C. Ratio of the market value of outside equity capital to GDP (1994).				
Group average	60%	30%	46%	21%
Examples	*United States 58%* *Canada 72%* *Singapore 118%*	*Sweden 51%* *Denmark 21%*	*Germany 13%* *Japan 62%* *South Korea 44%*	*France 23%* *Italy 8%* *Mexico 22%*

Sources: Panels A and C, La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997a, Table 2); panel B, Rajan and Zingales (1995, Table 8).

Table 6

Consequences of Narrow Capital Markets

	Common-law tradition	**Civil-law tradition**		
	English origin	**Scandinavian origin**	**German origin**	**French origin**
Panel A. Number of new and existing firms (1994-96).				
Initial Public Offerings per 1,000,000 people	2.23	2.14	0.12	0.19
Domestic listed firms per 1,000 people	35.45	27.26	16.79	10.00
Panel B. Reliance on internal financing (1984-91).				
Percentage of total financing due to cash flows from operations	*United States 77%* *Canada 58%* *U.K. 51%*		*Germany 67%* *Japan 44%*	*France 65%* *Italy 67%*
Percentage of total assets financed by untaxed reserves or "other" liabilities	*United States 5.8%* *Canada 2.6%* *U.K. 3.4%*		*Germany 30.4%* *Japan 4.8%*	*France 6.3%* *Italy 7.8%*

Sources: Panel A , La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997a, Table 2); panel B, Rajan and Zingales (1995, Tables 4, 2).

Table 7

Equity Ownership Structure

	Common-law tradition	**Civil-law tradition**		
	English origin	**Scandinavian origin**	**German origin**	**French origin**
Panel A. Control: Fraction of 10 Largest Nonfinancial Domestic Firms that are Widely Held (20% definition of control).				
Examples	*United States 80%* *U.K. 100%* *Canada 60%* *Singapore 15%*	*Sweden 25%* *Denmark 40%* *Norway 25%* *Finland 35%*	*Germany 50%* *Switzerland 60%* *Japan 90%* *South Korea 55%*	*France 60%* *Italy 20%* *Mexico 0%* *Argentina 0%*
Panel B. Concentration: Median Ownership of 10 Largest Nonfinancial Domestic Firms by Three Largest Shareholders.				
Group average	42%	33%	33%	55%
Examples	*United States 12%* *U.K. 15%* *Canada 24%* *Singapore 53%*	*Sweden 28%* *Denmark 40%* *Norway 31%* *Finland 34%*	*Germany 50%* *Switzerland 48%* *Japan 13%* *South Korea 20%*	*France 24%* *Italy 60%* *Mexico 67%* *Argentina 55%*

Table 7, continued

Equity Ownership Structure

	Common-law tradition	Civil-law tradition		
	English origin	**Scandinavian origin**	**German origin**	**French origin**
Panel C. Fraction of 10 Largest Nonfinancial Domestic Firms Controlled by a Family, the State, or a Widely Held Nonfinancial Firm (20% definition of control).				
Examples	*United States 20%* *U.K. 0%* *Canada 40%* *Singapore 80%*	*Sweden 55%* *Denmark 50%* *Norway 60%* *Finland 50%*	*Germany 35%* *Switzerland 30%* *Japan 10%* *South Korea 40%*	*France 35%* *Italy 65%* *Mexico 100%* *Argentina 95%*
Panel D Fraction of 10 Largest Nonfinancial Domestic Firms Controlled by a Widely Held Financial Firm or "Miscellaneous" (20% definition of control).				
Examples	*United States 0%* *U.K. 0%* *Canada 0%* *Singapore 5%*	*Sweden 20%* *Denmark 10%* *Norway 15%* *Finland 15%*	*Germany 15%* *Switzerland 10%* *Japan 0%* *South Korea 5%*	*France 5%* *Italy 15%* *Mexico 0%* *Argentina 5%*

Sources: Panels A, C, and D, La Porta, Lopez-de-Silanes, and Shleifer (1999, Table 2); panel B, La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998, Table 7).