

Cataloging-in-Publication data provided by the Inter-American Development Bank Felipe Herrera Library

Chong, Alberto.

Corporate governance and firm value in Mexico / by Alberto Chong, Florencio López-de-Silanes.

p. cm. (Research Department Working paper series ; 564) Includes bibliographical references.

 Corporate governance—Mexico.
 Stock ownership—Mexico.
 López-de-Silanes, Florencio.
 II. Inter-American Development Bank. Research Dept.
 III. Title.
 IV. Series.

338.74 C376-----dc21

©2006 Inter-American Development Bank 1300 New York Avenue, N.W. Washington, DC 20577

The views and interpretations in this document are those of the authors and should not be attributed to the Inter-American Development Bank, or to any individual acting on its behalf.

This paper may be freely reproduced provided credit is given to the Research Department, Inter-American Development Bank.

The Research Department (RES) produces a quarterly newsletter, *IDEA* (*Ideas for Development in the Americas*), as well as working papers and books on diverse economic issues. To obtain a complete list of RES publications, and read or download them please visit our web site at: <u>http://www.iadb.org/res</u>.

Abstract

The objective of this paper is twofold. On one hand, we undertake an analysis of the recent evolution of capital markets and their effect on the availability of external financing in Mexico in the last two decades. On the other hand, based on a newly assembled firm-level data set on corporate governance and firm performance, we show that better firm-level corporate governance practices are linked to higher valuations, better performance and more dividends disbursed to investors. These results hold after controlling for endogeneity. Overall, the evidence shows that the Mexican legal environment poses serious problems for access to capital.

1. Introduction

Throughout the world the role of the state is being redefined to accommodate the needs of a market economy. Institution-building is becoming widely accepted as the principal means of fulfilling this role. As in other emerging markets, the policy process in Mexico has gone beyond macroeconomic stability, and in the next decade that process will be critically focused on institution-building. This includes development of financial institutions such as banks and stock exchanges, development of the legal infrastructure supporting business, and creation of regulatory mechanisms compatible with best world practice.

There is now a long cross-country literature (i.e., La Porta et al., 1997, 1998, 2001, 2002, 2005, 2006) that shows the importance of investor protection for the development of capital markets as it allows firms to gain access to the external funding needed to undertake investments at lower costs. The legal approach based on the agency model goes beyond the simple Modigliani-Miller framework, where the size of capital markets is determined only by the cash flows that accrue to investors. The separation between ownership and control can have a large effect on the access to finance as one recognizes that securities are more than the cash flows they represent. This approach recognizes that securities entitle investors to exercise certain rights. Therefore, this approach can explain why some countries have much larger capital markets than others, as legal protections for investor differs enormously from country to country.

Mexico is no exception to the rule. The first goal of this paper is to look at the evolution of Mexico's capital markets and shareholder protections in the last 25 years. The paper provides a comparison of the status of investors in Mexico and the rest of the world, and traces the main evolutions that have occurred in terms of corporate governance. The establishment of self-sustaining capital markets has gained particular importance among some sectors in Mexico as the rate of integration into the global economy has speeded up. Without self-sustaining capital markets, local firms will find it hard to survive in the long run, because they will not be able to secure the funding needed to reach the appropriate scale for international competition. As the paper shows, the last 10 years have brought about a series of reforms to improve corporate governance, but there is still more ground to cover to reach the upward-moving level of shareholder protections brought about by corporate governance scandals all over the world. This

section of the paper also ends with some suggestions for reforms to develop and strengthen Mexico's stock markets.

In an environment of intense competition brought by NAFTA and the absence of wholesale legal reforms, some Mexican firms have started to offer better protections on their own to try to bring in external capital at better terms. For this reason, the second goal of this paper is to provide the first set of empirical results on corporate governance at the firm level in Mexico. The econometric estimates show that better firm-level corporate governance practices are linked to higher valuations, better performance and greater dividends disbursed to investors. This approach follows the recent evidence by Gompers, Ishii and Metrick (2003), Klapper and Love (2002) and Black and Jang (2005) that have provided similar results for other countries.

The evidence gathered in this paper shows that the legal environment faced by corporations in Mexico poses serious problems for their access to capital, but that those firms that have started to use the available differentiating tools are rewarded by the market with lower costs of capital as they provide better returns to their investors. Overall, the country and firm-level evidence for Mexico is supportive of the growing literature arguing that it is only through the development of efficient institutions and security of investors that firms can secure the basis for sustainable long-run access to finance.

The paper is organized as follows. After this introduction, Sections 2 and 3 analyze the development of Mexico's capital markets and investor protections in the last 25 years. With the use of comparative statistics from other papers (La Porta et al. 1997, 1998, 2005 and 2006) we are able to follow the development of corporate governance in recent times and assess the relatively low shareholder protection environment that has characterized most of this period. The result of a long history of poor investor protection has left Mexico with some of the smallest and least developed stock markets in the world. This is also matched with high levels of ownership concentration and recent efforts by large firm effort to "migrate" or issue securities abroad in order to raise capital.

Section 4 presents the set of new data and results that constitutes the core of the paper and complements the previous market-wide analysis. This section analyzes the firm-level data specifically gathered for this study. In 2000, the Mexican private sector and market authorities created the first "Code of Corporate Governance" in Latin

America. This code compelled all publicly traded firms to include a list of corporate governance practices at the end of their annual reports. We have collected this data and matched it with firm-level characteristics to analyze the link between corporate governance practices, valuations and performance. The results show that better corporate governance leads to improved valuations, better operational performance, and higher levels of dividend payout ratios. As in other existing papers with firm-level data on governance, endogeneity is a potential concern. We undertake several steps to address this problem, and our results persist.

Finally, the last section of the paper concludes with some ideas on how to capitalize on the new laws approved in December 2005 for publicly listed firms, and how to push forward the development of Mexico's local markets with a combination of market mechanisms that align incentives, as well as corporate law and judicial reforms.

2. Investor Protection in the Last 20 years

Shareholder Protection in the Law

La Porta, López-de-Silanes, Shleifer, and Vishny (1997 and 1998) assembled a data set covering legal rules pertaining to the rights of investors, and to the quality of enforcement of these rules, for forty-nine countries with publicly-traded companies. Laws tend not to be written from scratch, but rather to be transplanted—intentionally or coincidentally— from a few legal families or traditions. In general, *commercial* laws come from two broad traditions: common law and civil law. Most English-speaking countries belong to the common-law tradition based on the British Company Act. The rest of the world belongs to the civil-law tradition, derivative of Roman law. Although there are numerous differences among company laws in different countries, we focus on those basic rules that scholars believe to be essential to corporate governance.

Shareholders have residual rights to the cash flows of the firm, and the right to vote is the shareholders' main source of power. This right to vote in the general meeting to elect directors and make major corporate decisions guarantees shareholders that management will channel the firm's cash flows to shareholders through the payment of dividends rather than divert the funds to pay themselves higher compensation, undertake poor acquisitions or take other measures not in the interest of shareholders.

Therefore, voting rights and the rights that support voting mechanisms are the defining features of equity. Appendix A provides a detailed description of all the variables used in this paper, and Table 2.1 presents the evidence on shareholder rights for the cross-section of 49 countries included in the original La Porta et al. (1998) paper. The table only includes a few countries that are useful comparison as well as the means for the common law and civil law families.

A useful way to begin the discussion of shareholder rights is to assume the role of an investor in a U.S. firm and then become an investor in a Mexican corporation. The six columns of Panel A of Table 2.1 provide different measures of how strongly the law governing corporations protects minority shareholders against oppression by managers or dominant shareholders. These rights are thus labeled as "anti-director" rights. The first four anti-director rights measure how easy it is for an investor to exercise any voting rights that she may have. Shareholders in the United States will receive proxy statements two weeks in advance of the shareholders' meeting with detailed information on the items to be discussed at the meeting. They do not need to appear in person at the meeting; they can mail their proxy vote instead. The shares of investors who have indicated that they will participate in the shareholders' meeting will not be blocked in the days prior to the meeting, because the freedom to trade shares before shareholders' meetings is an important right for those who may want to form alliances to challenge management proposals. Directors are not necessarily chosen one at a time through a majority vote, and thus shareholders are entitled to have proportional representation or cumulative voting for directors. Our hypothetical investor has the right to call an extraordinary shareholders meeting (ESM) to consider a resolution if he owns 10 percent of the share capital.

The next right listed in Table 2.1 measures the protection of minority shareholders against a particular type of expropriation: issuing shares at favorable prices to, for example, associates of the controlling shareholders. Out of the six rights in this table, this is the only one that shareholders in U.S. corporations do not have. The law does not guarantee shareholders a preemptive right to buy new issues of stock in their holdings. Finally, U.S. investors who feel they have been hurt by the decisions of the majority can seek redress through the courts. When the court believes that oppression has indeed taken place, it may order that the oppressed members' shares be bought out at a fair price or that the firm remedy the matters at issue. More generally, best-practice countries such as the United States provide legal mechanisms for the protection of oppressed minorities. To give just another example, a dissenting investor in Chile has the right to request—at the meeting—that the firm buy back his shares at the market price prevailing before the meeting.

In Mexico, as in the United States, not all shares are endowed with the same right to vote. However, unlike in the United States, investors in Mexico are not usually sent detailed information about the agenda when they are notified of forthcoming shareholders' meetings. Only by going to the meeting will they know what is discussed. In fact, attending the meeting—or designating someone to do so in their place—is the only way in which they can vote; proxy by mail is not allowed. Furthermore, announcing that they intend to vote their shares will cause them to be blocked, making it impossible for them to trade the shares in the days surrounding the meeting. At the meeting, shareholders vote on the slate of directors proposed by management and are not allowed proportional representation on the board. Investors in Mexican firms must have at least 33 percent of share capital to have a resolution considered by the ESM. Fortunately, investors in Mexico do have a preemptive right that prevents dilution. Regrettably, this is the only right (of those that we collect) that shareholders in Mexico have, because they do not have any legal recourse against the decisions of the majority. To summarize, Table 2.1 paints a very bleak picture of shareholder rights in Mexico.

A convenient way of summarizing shareholder rights is to aggregate anti-director rights into an index, adding 1 if the corporation law protects minority shareholders and zero otherwise. For the case of the percentage of share capital needed to call an ESM, we give a 1 to those countries where this percentage is at or below the world median of 10 percent. When we add up these six anti-director rights scores, the United States and Canada have a score of 5, while Mexico's score is only 1.

A corroboration of the findings in this table can be exemplified by the opinions of various institutions that advise institutional investors around the world. As Table 2.2 illustrates, associations such as the Investor Responsibility Research Center and Institutional Shareholders Services argue that the corporate practices of Mexican firms are not best-practice (see Table 2.2 for some examples.)

A new calculation of shareholder rights undertaken by La Porta, López-de-Silanes and Shleifer (2006) shows that, keeping constant the definitions used for the 1995 data, Mexico has not improved in its measure on the Anti-directors index, staying constant at an aggregate score of 1. Nonetheless, the revised set of measures with tighter definitions are more closely linked to firms trading in stock markets show that Mexico would have moved up to a score of 3. These data are shown in Panel B of Table 2.1.

If we consider market regulation and corporate law with respect to the ability to call a meeting, for example, 33 percent of capital is required for non-publicly traded corporations, but only 10 percent for publicly traded firms. This improvement is consistent with the fact that it is in the area of securities laws that the progress in corporate governance has taken place in Mexico in recent years.

The discrepancy shown above between corporate law and securities laws portrays the image of the difficulties involved in reforming corporate governance. The government has more direct ways to reinforce or modify securities laws, while reforming the Commercial Code involves intense interactions with Congress, which prove to be difficult. One may think that by reforming securities laws we can bypass this road block, but in fact, for most relevant circumstances where investor protections are key, the regime that is put in place draws from both corporate and securities laws, as well as from a series of other regulations that even include civil procedure (i.e., rules of evidence, etc.).

Based on the recent evidence from Djankov et al. (2005) one can try to see where Mexico lies if we were to concentrate on the regulation of a classic self-dealing transaction where various sets of laws and regulation interact to create a framework of protection of investors against expropriation by a controlling set of shareholders. As evidenced in Tables 2.3 and 2.4, up until the end of 2005, Mexico does not score well on these measures. In fact, Mexico's shareholder protection is still among the lowest in the world.

Enforcement of Laws

Legal rules are only one element of investor protection; the enforcement of these rules may be equally or even more important. If good laws are not enforced, they cannot be effective. Likewise, investors may enjoy high levels of protection despite bad laws if an efficient judiciary system can redress expropriations by management. In this way, strong legal enforcement may serve as a substitute for weak rules.

Table 2.4 presents several categories for the quality of enforcement of laws in different countries. These measures are collected by private credit-risk agencies for the use of foreign investors interested in doing business in the respective countries. (The agencies include Business International Corporation and Political Risk Services). Table 2.4 shows three measures: efficiency of the judicial system, rule of law, and corruption. The first two of these proxies pertain to law enforcement, while the last one captures the government's general attitude toward business. In addition to these measures, the table also shows data on the quality of accounting standards of publicly traded firms in different countries. Accounting is central to corporate governance, as it may be difficult to assess management performance without reliable accounting standards. More broadly, cash flows may be very difficult to verify in countries with poor accounting standards; consequently, the menu of financial contracts available to investors may be substantially narrower in such countries. The index of accounting standards in Table 2.4 is provided by the Center for International Financial Analysis and Research based on examination of company reports of firms in each country. It is available for 41 of the 49 countries in the sample.

Compared with the English-origin average, as well as with Canada and the United States, Mexico has very weak legal institutions and accounting standards. Mexico's scores for all enforcement variables are below the world's average. In fact, Mexico ranks between thirtieth and fortieth in the world for all of these measures. Mexico shares poor enforcement with the rest of the French legal family, which has the lowest quality of legal enforcement and accounting standards. Note that rule of law is the only measure where differences in means between common law and French legal origin are not statistically significant. Scandinavian countries have the strongest enforcement mechanisms, with German civil-law and common-law countries close behind. Common-law countries, although behind Scandinavian nations, are still ahead of the French civil-law countries.

These results do not support the conclusion that the quality of law enforcement substitutes or compensates for the quality of laws. An investor in Mexico—and more generally in a French civil-law country—is poorly protected by both the laws and the system that enforces them. On average, the converse is true for an investor in a common-

law country. Poor enforcement and accounting standards aggravate, rather than cure, the difficulties faced by investors in French civil-law countries. The weak scores obtained by Mexico in shareholder and creditor rights may actually understate the severity of the corporate governance problem in Mexican corporations.

3. Consequences of Investor Protection in Mexico

There are at least two reasons why legal institutions may have no effect on the pattern of external financing of firms. First, laws may not be necessary to support external financing if, for example, companies keep their promises not because they are forced to but because they want to build a good reputation to facilitate their access to capital markets.¹ Their reputations unravel if the gains from cheating ever exceed the value of keeping external financing open, because investors, once they employ inductive reasoning, would never extend financing to such a firm to begin with.

Second, poor laws and their enforcement may have no real consequences if firms can easily opt out of the laws of their legal jurisdictions. Easterbrook and Fischel question whether legal rules are binding in most instances, because entrepreneurs can offer better investor rights, when it is optimal to do so, through corporate charters that effectively serve as contracts between entrepreneurs and investors.² In practice, however, opting out may be costly both for firms that need to write non-standard contracts and for investors who need to study them. In addition, courts may be unwilling or unable to enforce nonstandard contracts, further limiting the scope for opting out.

Alternatively, if legal institutions matter, ownership concentration should be higher in countries with poor investor protection than in countries with strong protections for investors for at least two reasons: First, agency problems may call for large-scale shareholders to monitor managers and thus prevent or minimize expropriation. Second, minority shareholders may be unwilling to pay high prices for securities in countries with weak legal protection. At the same time, entrepreneurs will be more reluctant to offer shares at discounted prices, thus resulting in higher ownership concentration as well as smaller and narrower markets for external equity.³ Similarly, bad creditor rights may have

¹ Diamond (1989 and 1991); see also Gomes (1996).

² Easterbrook and Fischel (1991).

³ Ownership concentration per se may be efficient, because the existence of large-scale shareholders monitoring management reduces the agency problem between management and shareholders; see Jensen and Meckling (1976) and Shleifer and Vishny (1986). But large-scale concentration comes at a cost,

analogous price and quantity effects on debt markets. In other words, if laws do not protect the rights of creditors, debt markets may be small because creditors may demand high interest rates. Moreover, firms may be reluctant to borrow from arm's-length sources under such conditions.

Ultimately, the question of whether legal institutions matter is fundamentally empirical: if opting out were cheap and simple, the patterns of ownership and external finance of firms would not be affected by differences in legal institutions across countries. Accordingly, in this section, we examine two types of evidence regarding the influence of legal institutions on external finance: ownership concentration, and the size and breadth of capital markets. Table 2.5 summarizes the results.

Ownership Concentration

The first striking result of Table 2.5 is that, in the world as a whole, dispersed ownership is a myth: In a typical top-10 firm in the world, 45 percent of the common shares are held by the three largest shareholders.⁴ The second result is that those countries with weaker investor protections have larger share ownership concentration. In particular, countries of the French legal family have an average ownership concentration of 55 percent. Statistically this number is significantly higher than the mean for the rest of the world and for the mean for each of the other three legal families individually.

Like the rest of the French origin countries, Mexico has highly concentrated ownership. With the exception of Chile, which has strong shareholder rights, all Latin American countries in the sample have higher ownership concentration than the world mean. After Greece and Colombia (68 percent), Mexico has the third-largest ownership concentration level in the world (67 percent). In sum, these data indicate that Mexico has unusually high ownership concentration, possibly as an adaptation to weak legal protection.

because it creates another agency problem: the expropriation of minority shareholders' stakes by largescale shareholders. An additional cost of heavily concentrated ownership is that the core investors are not diversified.

⁴ To measure ownership concentration, a 1998 study assembled data for the 10 largest publicly traded, nonfinancial private domestic firms in each of forty-five countries. For each country the study measures ownership concentration as the median percentage owned by the three largest shareholders in each of these ten firms; see La Porta, López-de-Silanes, and Vishny (1998b).

The Size and Breadth of Local Capital Markets

Several interesting patterns emerge from looking at our categories for external equity finance in Table 2.5.5 First, access to external equity financing is most limited in countries such as Mexico and the rest of the French civil-law countries. Specifically, the ratio of external capital to GNP is roughly half the world mean and one-third of that in the United States. Meanwhile the ratio of domestic firms to total population is between 10 and 15 times lower than the world mean and the U.S. number. Finally, the ratio of Initial Public Offerings (IPOs) to population is roughly 30 to 50 times lower than the equivalent number for the world mean and for the United States. In contrast, all three equity measures indicate that, on average, access to external equity is easiest in commonlaw countries: The ratio of outsider-held stock market to GNP is 60 percent, vs. 40 percent for the world mean; the number of listed firms per 1 million people is 35, vs. 21.6 for the world mean; and the number of IPOs per million people is 2.2, vs. 1.02 for the world mean. Finally, equity markets in countries of Scandinavian origin are smaller but broader than in countries of German origin. To summarize, external equity markets line up rather well with shareholder rights and legal institutions: They are smallest in French civil-law countries and largest in common-law countries.

Several authors have argued that there is an important movement towards "functional convergence" in corporate governance in which firms around the world are adopting U.S.-type mechanisms to protect investors. There is certainly a move towards issuing American Depositary Receipts (ADRs), and these seem to improve access to external capital markets. An ADR is equivalent to listing a foreign company's securities

⁵ This paper uses the three measures of equity finance developed in La Porta, López-de-Silanes, Shleifer and Vishny (1997). The first measure is the 1994 ratio of external equity finance to GNP in each country. To compute a rough proxy of external equity finance, they multiply the total market value of common stock of all publicly traded firms by the average fraction of the equity not held by the largest three investors (i.e., the complement of the ownership variable just described). They scale the total market value of common stock by the fraction of equity held by minority shareholders to avoid overestimating the availability of external financing. For example, when 90 percent of a firm's equity is held by insiders, looking at the market capitalization of the whole firm gives a tenfold overestimate of how much it has actually raised externally. The procedure followed may still overestimate the level of external financing, because the ownership concentration figures are based on the largest firms and because they ignore cross-holdings. Still, this procedure is conceptually better than looking at the ratio of market capitalization to GNP.

The remaining two measures of external equity finance capture market breadth. The first is the number of domestic firms listed in the stock exchange of each country relative to its population. The second is the number of initial public offerings of shares in each country between mid-1995 and mid-1996, also relative to the population. They look at both the stock and flow of new companies obtaining equity financing, because the development of financial markets has accelerated greatly in the last decade, and hence the IPO data provides a more recent picture of external equity financing.

on an exchange that protects shareholders, mainly through stricter disclosure requirements. This, in fact, is done by many companies when they list they shares as ADRs in New York. Such a listing in New York (or London), supported in part by the threat of delisting, raises the level of shareholder protection.

Lins, Strickland, and Zenner⁶ show that the sensitivity of investment to cash flow falls when an ADR is issued by a company from a country with a weak legal system and a less-developed capital market (as defined by La Porta, López-de-Silanes, Shleifer and Vishny⁷). Weisbach and Reese⁸ show that companies in civil law countries are more likely to list ADRs on an organized exchange in the United States, thus committing themselves to greater disclosure. In particular, Mexico is the country with the highest percentage of locally listed firms that have ADRs in the United States. As Figure 3.7 shows, close to 38 percent of all Mexican firms listed on the Mexican Stock exchange have some listing in United States stock markets. The percentage of firms from Mexico that have an ADR is also among the highest, reaching close to 15 percent. This evidence supports the view that in the current environment of weak investor protection, firms try to find ways to access external capital markets.

A related mechanism of opting into a more protective legal regime is an acquisition by a company already operating in such a regime. When a U.S. company acquires a Mexican company, the possibilities for legal expropriation of investors diminish. In a friendly acquisition, the controlling shareholders of the Mexican company can be compensated for the benefits they lose, making it more likely that they will go along. Such acquisitions enhance efficiency, because wasteful expropriation is replaced by publicly shared profits and dividends. Some of the acquisitions in the NAFTA region in the last few years reflect this particular phenomenon.

4. Corporate Governance, Valuation and Investor Returns in Mexico

The Sample

The literature on corporate governance has established that national and state laws and regulations affect the valuation of firms (La Porta et al., 2001, and Daines, 2001) and dividend payout ratios (La Porta et al., 2000). In this section, we follow the approach

⁶ Lins, Strickland and Zenner (2000).

⁷ La Porta, López-de-Silanes, Shleifer and Vishny (1997).

⁸ Weisbach and Reese (2002).

used in recent papers (i.e., Gompers, Ishii and Metrick, 2003; Klapper and Love, 2002; and Black and Jang, 2005) and analyze whether the variation of firm-level governance practices is also associated with firm valuation, performance and dividend payments. For this purpose, we have collected firm-level financial data and a set of indices on corporate governance practices for Mexican corporations during the period 2002-2005.

There were 159 listed companies in the Mexican Stock Exchange in 2002. To obtain historical financial data for all these companies, we put together information from several data sets. Our main data source is Bloomberg, from where we were able to get the main financial and operation data. The coverage from Bloomberg was not enough for the goals of the project since it did not have a long history for all firms and it did not cover all firms across sizes; we also wanted to include firms that had issued bonds rather than shares. The data also had some missing companies due to suspension, delisting, or lack of trading activity. In order to solve all of these potentially important selection and survivorship biases, we complemented the data with historical and financial information from the actual annual reports of each company. The annual reports contain general information on the firm, financials, administrative standards, shareholders situation, as well as information on the market behavior of the equity prices. Using all of these sources, we obtained complete financial information for 150 companies listed for the fiscal year 2002-2003.

Table 4.1 provides the main financial characteristics of the firms in our sample. The detailed definitions of each variable are provided in Appendix A.2. In order to avoid sometimes large year-to-year variations in profitability and performance ratios, the table provides data for the average of the two fiscal years of 2003-2004 and 2004-2005. As the table shows, this is a period of relatively positive growth. The average firm shows an income to sales ratio of almost 5 percent and average sales growth of almost 3 percent. ROA and ROE for the mean firm is 2.3 and 6.3 percent, respectively. Past profitability had also been growing during the 1997-2002 period at a similar 5 percent rate, as measured by lagged income to sales. The average Mexican firm with listed securities had a debt to assets ratio of close to 50 percent, which is very standard.

There are five outcome variables that we use in this paper. The first are valuation measures. We use the classic valuation measure of Tobin's Q used by the initial studies in governance (Demsetz and Lehn, 1985, and Morck, Shleifer and Vishny, 1988) as well

as in more recent papers (La Porta et al., 2001, and Gompers, Ishi and Metrick, 2003). But we also supplement it with the Price to Book multiple for robustness. As Table 4.1 shows, valuation multiples for the average company were 0.943 and 0.901, respectively, when we calculate Tobin's Q and Price to book ratios. The maximum valuation measures reached between 2.2 and 2.5 respectively. As another set of alternative outcome measures, we also use return on assets (ROA) and return on equity (ROE) as measures to proxy for operating performance.⁹ For our sample, the average ROA is 2.3 percent, while the mean ROE is three times as large at 6.4 percent. Finally, firms were disbursing positive dividends on average, with a mean dividend payout ratio of 14.4 percent.

As the table also shows, 84 percent of the sample had listed stock while the remaining companies had only public bond issues. Close to 60 percent of firms in our sample have their headquarters in Mexico City.

Later in this section, we will analyze the relationship between various corporate governance indicators and measures of valuation, performance and dividend payouts. But before doing this, let us explain the origin and configuration of the data on corporate governance practices put together for this paper.

Data on Corporate Governance Practices in Mexico

The second database on corporate governance practices was obtained from the annual governance reports that each firm has to present to the Mexican Stock Exchange at the same time as their annual report. These reports were required by the Committee on Best Corporate Practices, which was created by pulling forces from the private (*Consejo Coordinador Empresarial*) and the public sector. The Committee was formed by a multidisciplinary group including academics in the area, controlling shareholders of large and small corporations, managers, and representatives of the accounting, finance and legal professions.

In 1999, this Committee published a Code of Best Practices that included a series of recommendations on what were regarded as good corporate governance practices at the time. The recommendations fell on the four basic areas: (1) disclosure of information

⁹ Like other papers (i.e., Klapper and Love, 2002), due to the volatility of returns, particularly in emerging markets, we do not use returns as a proxy for performance.

related to the administrative structure, the objectives and functioning of the various Board Committees; (2) the existence of adequate channels for timely disclosure and the existence of good quality of financial information; (3) the adequacy of communication processes between management and board members; and (4) the protection of shareholders rights, as well as the appropriate disclosure and communication mechanisms with them.

Mexico was concerned about corporate governance mainly as a result of the lack of growth in its markets and the damaging experience of East Asian countries that were emerging from their 1997-1999 crises. This was the first such effort was undertaken in Latin America, and one of the first in the world, as it came before the U.S. corporate governance scandals. At the time, only the United Kingdom and a few other countries had implemented such an approach to try to foster more transparency in the market and a mechanism that facilitated the transmission of information to investors.

The philosophical principle underlying these codes is that the disclosure of information about corporate governance practices and investor protections by the firm allows the market to perceive the differences among the policies followed by various companies. Information should allow shareholders to distinguish those firms that adhere to investor protections, in turn making shareholders more willing to give the companies funds. In the end, those firms with better practices should find it easier to access capital and at lower cost, as they provide a more certain environment for the investor.

The adoption of the principles of the Code of Best Practice in Mexico, as in most other countries, is voluntary, but the disclosure by each firm in the stock is compulsory. Starting with fiscal year 2000, all publicly-traded firms on the Mexican Stock Exchange must state in their annual report to the shareholders which rules of the code they follow, and which they do not. They may state why they do not follow the rules they have elected not to follow, and describe any alternate mechanisms they may have for the protection of investors. All firms with publicly trading securities, both equity and debt, have to disclose the information.

The list of corporate governance practices that was created at the time consists of mandatory answers to 55 questions. Although firms are not required to meet the recommendations of the code, the fact that all firms with publicly traded securities have to disclose this has been useful to investors. We should also mention that, although the

answers are provided by the firms themselves, analyst and market participants can request specific information about these issues and constantly monitor the veracity of the information. The reputation loss from a deviation from truthful answers could be substantial, since the nature of the information requested is verifiable by market participants and is published as part of the annual report of the firm, which needs to be approved by the board of directors.

From the corporate governance questionnaire, we construct a firm-level Corporate Governance (CG) index by adding one point for every question where the company meets the recommendation of the code. We standardize the index to lie between 0 and 1 by dividing the number of positive answers by the total number of questions in the questionnaire. Table 4.1 shows the main descriptive statistics of our CG index for the 150 firms in our sample. Our CG index is the average of the indices for the two years (2003 and 2004) for which we have disaggregated company data. The mean company in Mexico met 78.4 percent of all the recommendations in the code. The best firm showed a 98.2 percent rate of compliance, while the worst firm met less than 30 percent of the code's recommendations. In 2004, close to 90 firms out of the 150 in our sample, met more than 80 percent of the code, bringing the cumulative percentage of firms above 70 percent compliance to 83 percent of the sample.

Although we do not have firm-by-firm disaggregated data for previous years, Figure 4.3 shows that the number of recommendations met by the average company in the market, according to the National Banking and Stock Market Commission.¹⁰ Compliance has increased over time. In 2000, the first year of the code, the mean firm followed 64 percent of the principles while the following year the number jumped to 70 percent. The period 2002-2004 saw smaller increases leaving the total compliance close to 77 percent at the end of the period. Compliance increased only one percent from 2003 to 2004, suggesting a slow-down in change of corporate practices. The seemingly large initial jump from 2000 to 2001 could mean that some firms may have been confused on the exact meaning of the questions the first year, or that the code introduced some pressure for firms to change quickly.

¹⁰ The number of companies used for this statistic is different than the 150 companies in our sample as the data of the Commission includes all firms with publicly listed securities each year. There were 159 firms with listed securities in 2004, for example.

As Table 4.1 shows, 84 percent of the firms in our sample are equity issuers, while the rest have public bonds trading in the Mexican Stock Exchange. Both kinds of firms are required to provide answers to the corporate governance questions in their annual report. In general, equity issuers, who tend to be larger and older firms, met 81 percent of the recommendations, while firms with publicly traded bonds only met 65 percent on average in 2004 (see bottom of Table 4.2).

Figure 4.2 also shows the differences between firms issuing equity and those issuing public debt in the market. Debt issuers have a flatter distribution and a lower mean and median. These tend to be smaller firms which have just now started to access the public credit market due to changes in regulation that have produced a very large boom, as Section 2 of the paper shows. In 2004, 56 percent of equity issuers met over 80 percent of all code recommendations, while this number was only 15 percent for debt issuers. The lower tail of the distribution for debt issuers is also thicker: close to 30 percent of public bond issuers met less than 60 percent of all recommendations, whereas this number reached only 4 percent for issuers of stock.

The 55 questions of the index are grouped in eight sections from which we have created sub-indices that have also been standardized to lie between 0 and 1. The eight sub-indices are: (1) Composition of the Board of Directors; (2) Board functions and the general structure of board committees; (3) Board operational rules; (4) Board member's duties; (5) The structure and functions of the Evaluation and Compensation Committee; (3) The structure and functions of the Audit Committee; and (7) The structure and functions of the Finance and Planning Committee; and (8) Protection of shareholder rights and shareholder meetings. Table 4.1 also shows the percentage of questions in each category that are met by the mean company in our sample. These numbers range from 53 percent for the committee of evaluation and compensation to 90.3 percent for the questions related to directors' duties.

Table 4.2 goes into the finer details of the data we gathered, showing the percentage of firms that meet the each specific recommendation for the years 2003 and 2004 separately. The bottom of the table shows that compliance with the recommendations of the code of best practices has increased. In 2004, corporations with publicly traded securities in Mexico met 78.5 percent of all code recommendations, while that number was only 78.4 percent a year before. Table 4.2 lumps equity and debt issuers

together, but the paragraphs below describing the data in the table point out the main differences between these groups.

An analysis of the specific questions in each of these categories reveals several interesting corporate governance patterns of Mexican corporations. There are three areas of the code that deal with the board's functions, structure and operations. In terms of board composition, Mexican firms have substantially reduced the size of their boards in the last 10 years. Today, over 91 percent of firms that issue either equity or debt have boards between 5 and 15 members. It is also the case that in 98 percent of the firms that issue equity, at least 20 percent of the members of the board are independent. This number is only 40 percent for firms issuing debt, therefore explaining the low overall average in the table. While these are clear advances from what the classic board of a Mexican firm looked like 10 years ago, firms are still not clearly communicating information about board members to their shareholders. Only between 50 and 65 percent of firms specify in their annual reports the classification of directors as independent, owner, and related. This number reaches 65-70 percent for firms issuing equity and only 15 to 30 percent for firms issuing debt. Another area where more progress may be needed is with "substitute" board members. In Mexico, board members have the right to nominate a substitute that can go to the meetings and take their place. Only a quarter of firms have adopted a structure without substitute directors. In fact, on 63 percent of occasions only a pre-established substitute can take the place of the actual board member. These are not best corporate governance practices, as actual directors could be detached from their functions if the substitute is the one doing the work or going to the meetings.

The second area of the code deals with the functions of the board and the general structure of the specialized board committees. As in the previous area, most boards have shrunk the size of the committees, and close to 90 percent of those firms issuing equity, but only 55 of those issuing debt, meet the target size of three to seven members recommended by the code. Importantly, over 80 percent of boards have established specialized committees to deal with management evaluation and compensation, auditing and financial planning. An independent director is the chair of the audit committee in 90 percent of equity issuers, but only in 35 percent of occasions in firms with public bonds. The operation or internal working of the board is one of the areas where most firms follow the suggested principles, with close to 90 percent of all issuers meeting the targets

in terms of number of meetings per year, devoting time to the strategy of the firm, ease of calling a meeting, and training of first-time directors. In the area of access to relevant information in a timely fashion, however, the percentage of firms falls to about 80 percent.

The forth area of the index talks about the duties of directors, where close to 90 percent of the firms meet all principles. In basically all firms, board members are said to report conflicts of interest and abstain from voting, to only use the assets of the firm's business, to keep confidentiality, and to dedicate the appropriate time to their job as board members. The only two questions where the number of firms responding "yes" falls to 60-70 percent are those that ask about the existence of specific policies for the personal use of the firm's assets and the communication between the board member and her substitute. The picture painted by this sub-index is one of strong boards of directors with clearly defined duties that deal with conflicts of interest. This is probably one of the areas that are harder to objectively verify by market participants, and thus we want to make sure our results in the econometric work do not depend crucially on these answers.

The following three areas of the index deal with the specific functions and inner working of specialized committees. The questions of the compensation and evaluation committee show one of the largest deficiencies in Mexican corporate governance practices. More than half of listed companies do not disclose the policies employed in this area, and 40 percent of firms declare that they either do not have such a committee or, if it exists, it does not deal with the evaluation of compensation packages for highlevel executives. The numbers for debt issues are only about 10 percent below those of equity issuers: this is an area where there is clearly a great deal of room to grow for both kinds of firms. The audit committee, which was the object of substantial changes in regulation in the last five years, is an area where most firms meet best corporate governance practices, as specified in the code. The vast majority of Mexican firms have an external auditor different from the "comisario," who is supposed to be an additional check in this area, as he is required to report problems to shareholders. Curiously enough, only one in two firms discloses the profile of the comisario in the annual report. In over 90 percent of cases, firms limit the income of the external auditor and require audit partner rotation every six years. Most firms have internal audits and control systems, but the board has a role in setting up and approving those policies in only 75-80 percent of cases. The third committee with specific recommendations in the code has the functions of looking into the investment policies and planning of the firm. The numbers show that close to 30 percent of the firms do not have the board analyze these kinds of issues in a systematic manner or through a specific committee. The numbers are remarkably similar for equity and bond holders. This is one of the functions of the board that has least permeated Mexico's companies.

The final area of the code deals with shareholder rights. As previous work has shown, corporations rarely deviate from the package of shareholder rights that is mandated by laws and regulations. Therefore, this area of the code is mostly devoted to issues involving the flow of information to holders of shares and the way in which shareholder meetings are carried out, which allows room for abuse of power. Mainly as a result of regulation, a substantial change has occurred in terms of the way in which firms disclose the agenda for the meeting. Today, the old practice of grouping various issues under a vague agenda point or including an area for "various issues," has virtually disappeared in stock issuers and reaches 80-90 percent of firms with public bonds. But the rest of the numbers in the section show a couple of more deficiencies in this area. Only half of the firms include the proposal for the board and a description of the potential board members in the information given to shareholders. Additionally, in only 57 percent of cases does the information include relevant issues of specialized board committees. Not surprisingly, only two in three firms say that their shareholders have enough information and voting alternatives to be able to instruct others to vote on their behalf. The data show that the average Mexican corporation is far from providing complete and timely information to shareholders to consider relevant issues and facilitate their voting in meetings.

To end the description of corporate governance practices of Mexican listed firms, it is worth mentioning that the practices of bond issuers substantially trail those of equity issuers in regard to board composition and structure. In these two areas, the number of bond issuers meeting all recommendations is only half of equity issuers. There are only three areas where the differences between the two groups are negligible: director duties, audit committee and finance committee. In the rest of the categories, there are between 10 to 15 percent more equity issuers meeting all requirements.

Econometric Results

The previous section provided a first look at the main corporate governance and financial characteristics of publicly listed corporations in Mexico. The goal of the rest of the section is to examine the relationship between firm-level governance measures, valuation, performance and dividend payout ratios. As discussed in the introduction, it is possible that certain types of firms, such as those that need to raise capital in the future, are more likely to adopt better corporate governance. Endogeneity is certainly a concern in other papers in the area of firm-level practices (e.g., Gompers, Ishii and Metrick, 2003, and Klapper and Love, 2002).

There are several potential sources of endogeneity in these data. First and foremost, unobserved future growth opportunities could lead controlling shareholders and managers to improve their levels of disclosure and minority protections in order to raise capital at lower cost. This means that our valuation measures are also likely to be determined by expected future growth prospects. A second source of endogeneity could come from the intrinsic nature of the firm, its assets or cash flows. Firms with large free cash flows (Jensen, 1986) would make investors concerned about potential expropriation and may thus adopt better corporate governance measures to allay those concerns. Similarly, it may be particularly difficult for investors to monitor firms with lower tangible assets; this may consequently require better governance practices (Klapper and Love, 2002). Finally, the size or the age of a firm may also affect corporate practices. The operations of a small firm could be easier to understand and monitor, while larger firms or firms in multiple industries would have potentially larger agency problems and would thus try to adopt better corporate governance.

In this paper, we will follow the approach used in similar papers to try to disentangle the corporate governance effect on performance and valuation measures by controlling for various company characteristics likely to be associated with higher growth prospects, higher needs of monitoring due to the nature of the firm's assets and cash flows, and firm size. At the end of the section, we also use instrumental variables methods to provide a further robustness check to our initial results.

As a result of endogeneity concerns, it is important to establish the association between our measures of governance and firms' characteristics. In Table 4.3, we analyze these relationships to establish patterns that help us identify important company traits that we should take into account in the following econometric work. Table 4.3 shows pairwise correlations between our aggregate Corporate Governance (CG) index, valuation and performance measures, and company characteristics for the cross-section of 150 firms in our sample.

There are four sets of results that emerge from this table. First, the first column of correlations between the CG index and the rest of the variable shows that firms with better corporate governance have higher valuations, as measured by Tobin's Q and Price/Book value, but not higher performance in the form of ROA and ROE. Firms with better corporate governance practices tend to be larger in terms of sales, domiciled in Mexico City, and/or firms that have issued equity locally and abroad in the form of American Depository Receipts (ADRs). These results are consistent with the view that those firms that have entered the U.S. market have higher levels of corporate governance, probably resulting from the fact that they have to meet higher international requirements. We should also be aware that the opposite may be taking place; in other words, it is those firms that had better governance to begin with that were able to raise capital internationally. Importantly, current growth rates and lagged profitability are not significantly correlated to our CG index, and lagged profitability has in fact a negative correlation with our index. This should help alleviate some concerns about the main source of potential endogeneity here. In terms of cash flow or asset characteristics that may explain higher corporate governance, we do not observe a clear pattern of association of our CG index with industries that could be a priori regarded as having higher free cash flows or intangible assets (results not included in the table).

Overall, the data contained in the first column of the table do not show signs of serious endogeneity problems, with the exception of firm size, but in order to disentangle the true effect of corporate governance on valuation, performance and dividend payments, we will control for several company characteristics in the regressions that follow.

The second set of results in Table 4.3 addresses the relationship between the dependent variables in the regression work below. The two valuation measures and the two profitability measures have a correlation of 0.86 with each other. The correlations between valuation and profitability measures are also very high, ranging from 0.36 to 0.45, and all statistically significant at one percent. The table also indicates that the most

valuable and profitable firms have the highest dividend payouts. Overall, these series of correlations show that all of our future dependent variables move together very strongly.

In terms of other predictors of other variables correlated with our outcome measures, we can observe three basic patterns. First, larger firms and those with higher current and past sales growth have higher Tobin's Qs and Price/Book ratios, as well as higher measures of performance. But it is only the firms with larger sales and those with the highest past growth that pay more dividends now. There is really no clear relationship among measures of indebtedness, valuation, performance or dividend payout. Finally, there is some evidence that firms located in Mexico City have higher valuation multiples, but not those that have issued an ADR. Neither of these two types of firms has higher profitability, as proxied by ROA and ROE. The only other thing worth mentioning in the table is the fact that firms that only have public debt are more profitable, i.e., they show higher ROE and income to sales ratios, than those that have only a local equity listing.

Making use of the patterns shown in Table 4.3, the econometric work in the following tables controls for various company characteristics that could be determinants of valuation and performance. Tables 4.4, 4.5 and 4.6 show the results of regressing each of our five dependent variables of interest on the Corporate Governance index and other company and industry controls. All regressions control for key company characteristics that the theory predicts should have an impact on valuation or performance measures. In each regression we include a measure of indebtedness, a size control, a measure of profitability (except where the dependent variable is performance) and a measure of growth, either current or lagged.¹¹

We also take into account room for potential endogeneity problems emerging from the nature of the firm's assets or cash flows according to differences across industries. Tables 4.4, 4.5, and 5.6 present the results of industry-level fixed effects regressions. In order to try to proxy for the differences in assets and cash flows, we use a fairly detailed industry breakdown. The industry classifications in our sample is the Bloomberg industry group-level classification, which is similar to a 2-digit SIC coding. Finally, all regressions present robust standard errors.

¹¹ Other financial control measures were also tried and produced the same kind of results.

The regressions shown in these tables use the average of the two years for which we have data (2002-2003 and 2003-2004). Therefore, there is one observation per firm in the regressions. This approach has several advantages, as it eliminates the high volatility of yearly financials and helps avoid problems with standard errors. But it also has the disadvantage of not exploiting panel data. We have also run alternative econometric specifications for each year separately, and for a panel regression with two-year observations per firm, adding year dummies in the specification. The results do not significantly change, so we only present the average regressions in the paper for space reasons.¹²

Table 4.4 presents valuation results. Panel A uses Tobin's Q as the dependent variable, while Price/Book value is the outcome variable in Panel B. As Table 4.3 shows, these two measures are highly correlated, but we still use both to provide a robustness check of the results. There are some results worth mentioning. First, the only company characteristic that is related to valuation is size. Bigger firms tend to have higher valuation multiples, but significance at 10 percent is only reached in two out of the six specifications in each case. According to the theory, sales growth is positively associated with higher valuation, but not at a statistically significant level. Neither of the two measures of indebtedness is statistically related to Tobin's Q or Price/Book ratios in our sample.

The aggregate index of Corporate Governance appears as positive and significant in all Tobin's Q regressions and in half of those with Price/Book ratios. The economic impact of the index is large: a two-standard deviation increase in the CG index, increases Tobin's Q between 0.17 and 0.23, or between 18 and 25 percent above the mean Tobin's Q of 0.94 for the sample. The same two-standard deviation jump increases Price/Book multiples between 0.21 and 0.26, or 23 and 26 percent above the mean 0.90 Price/book ratio.

The results on the impact of corporate governance practices on valuation are large and significant. They support previous results in Klapper and Love (2002) and Black and Jang (2003), as well as other recent papers relating to this subject. We would in fact expect that valuation measures would be the prime variable capturing the effect of

¹² In alternative specifications, we have also used the lagged CG index. Results are robust to this alternative also. We are currently working on collecting the data of the Corporate Governance index for the previous three years of information and plan to expand the specifications into a panel across the five years of data.

improved corporate governance. According to the model in La Porta et al. (2001), improved valuations as a result of better corporate governance results from the fact that investors' higher confidence that controlling shareholders will not expropriate the cash flows of the firm. Investors are thus more willing to provide capital to firms at lower cost, which is reflected in higher valuation multiples for those firms with better governance practices.

Table 4.5 has the same format of the previous table but the dependent variables here are ROA and ROE as proxies for operating performance. As in the previous table, larger firms in terms of sales have higher performance, and in two of the four specifications in each panel this relationship is statistically significant. In the case of ROA, both financial leverage and debt over assets ratios come in negative, but again, this is only significant for two of the four regressions. Current sales growth and lagged profitability do come in positive and strongly associated with higher performance in both panels.

As noted above, we would expect the first order impact of corporate governance to be captured by the valuation measures used in Table 4.4. Nonetheless, an argument can be made that better-governed firms are better run, probably due to the existence of better mechanisms to face changing conditions or new opportunities. These firms would then be thought of as being able to provide a higher return per dollar. The logic behind a positive association between performance and governance has to rely on some form of market inefficiency, as investors underestimate the higher agency costs associated with poor governance practices. Some recent papers have tested this hypothesis for other countries and have found a positive effect of governance on operating performance (see Gompers, Ishii and Metrick, 2003, Klapper and Love, 2002, and other recent papers on this topic). An additional incentive for us to add this analysis is because operating performance measures allows us to include in our analysis all firms that have publicly traded bonds trading on the market.¹³ The results on the association between our CG index and ROA are positive and significant in all four regressions, while for ROE they only reach significance in one specification. For the case of ROA, the economic significance is also large: a between 29 and 40 percent above the mean ROA of 2.53 for

¹³ As explained above, we did not use returns as a measure of performance due to the high volatility of this variable in emerging markets, including Mexico.

the running sample. For the case of ROE, the impact of a similar two-standard deviation jump in governance is only between 7 and 15 percent above the mean.

Finally, Table 4.6 performs the same kind of analysis as in the previous two tables but for dividend payout ratios. Following the "outcome" agency model of dividend payments specified in La Porta et al. (2002), firms with stronger governance practices should be associated with higher dividend payouts. The results of the Tobit regressions in the table support this view: stronger firm-level governance practices are associated with higher dividend payouts, which are statistically significant in two of the six specifications. To provide a magnitude of the effect, a two-standard deviation increase in the CG index is reflected in an increased dividend payout ratio between 0.37 and 1.44 percentage points, equivalent to a 2.5 to 9.6 percent increase in the mean ratio.

Overall, the results in Tables 4.4, 4.5 and 4.6 show a positive and significant impact of firm-level corporate governance measures on valuation, operating performance and dividend payouts. In line with previous evidence for other countries, these results support the view that firms that provide a better package of governance measures are more highly valued by markets and distribute more profits to their shareholders.

Robustness Checks

Although the regressions in the previous tables control for several variables that capture other firm characteristics that could be associated with higher valuations as well as with better corporate governance, one may still be concerned about endogeneity. As seen in most papers in the firm-level governance literature, it is hard to find a perfect set of instruments. Table 4.7 represents our attempt to deal with this issue through instrumental variables. The table uses three instruments that could arguably, though not perfectly, be said to have some exogenous variation on governance practices. The first instrument is a dummy for the location of the firm's headquarters. The distribution of headquarters in Mexico has certainly been impacted by the search for political connections, but since NAFTA—and even before—several firms and industrial sectors have chosen to locate themselves outside of Mexico City in either the north or in other regional capitals for other reasons. About 60 percent of the firms in our sample are headquartered in Mexico City. The second instrument is a size dummy for the biggest decile of firms. We have argued in the previous section that size is a potential determinant of corporate

governance, if for example bigger firms are harder to monitor or their higher visibility as the top corporations makes them more prone to adopt better governance practices. Our third and final instrument is a dummy equal to 1 for those firms that have equity issues and 0 for those that have public bonds in the market. There are close to 16 percent of firms in our sample that are bond issuers alone. These firms are typically new entrants into the markets arena and have been subjected to a very different world of scrutiny and market pressures than long-time stock issuers. We can only use this instrument in the subset of regressions of operating performance and dividend payments. Although there are some plausible arguments for the use of these instruments, they are admittedly imperfect. Statistically, as shown in Table 4.3, the correlation between these measures and our corporate governance index is high and significant. Meanwhile, they show a mixed correlation pattern with valuation, operating performance and dividend payout measures.

The results of this table, although weaker than the tables before, also show a positive pattern of association between our CG index and all outcome measures. In close to half of the specifications statistical significance is reached. The magnitude of the coefficients and their economic impact more than double for all measures.

The results on the previous sections are encouraging for firms trying to improve their access to capital at lower cost. The evidence is much more on the side of positive effects than on lack of impact. The next section breaks down the CG index into its components to determine whether it is worthwhile to concentrate on improving certain measures.

Impact of Different Areas of Firm-Level Governance

Given the positive effects of firm-level corporate governance variables, corporations that want to benefit may want to know if there are any specific areas where they should be concentrating their efforts. This may be particularly important if one believes that there is limited room on what a firm can do to change structures that are likely to be sustained by a large tradition of strong insiders with large discretionary powers.

Table 4.8 takes a look at the correlations between our CG index, its components and our outcome measures. To the initial eight components of the index, we have added an area called "Board of Directors," which groups the first three areas of the index that have to do with the Board. The first thing to notice from Table 4.8 is that all sub-indices are highly and statistically significantly correlated with each other. The only exception is the relationship between director duties, board composition, and the committee of evaluation and compensation. But by and large, the data suggest that firms that tend to do well in one category also do well in the rest of the categories or sub-indices. The second thing worth mentioning is that, although the first column shows that there is a significant positive correlation between the aggregate index of governance and valuation measures, this is not the case for most of the sub-indices on their own. Only the sub-indices of the Audit Committee and the Finance and Planning Committee have an independent positive correlation with valuation measures. In the case of measures of performance and dividends, neither the aggregate nor the independent components manage to have a significant positive correlation.

Table 4.9 takes a closer look at the same question in a multivariate setting. The table presents the same kind of regressions as the ones run in tables before, but we only show one of the specifications of controls across our five outcome measures.¹⁴ Although all subindices have a positive impact on valuation and performance, only a few of them are statistically significant on their own. Moreover, there is no clear pattern on what works best. In terms of valuation, it seems that the impact of the audit committee and the finance committee are the most significant, along with directors' duties. Meanwhile, the Board of Directors indices work best for operating performance and dividends in general.

5. Reforms for Deepening Mexico's Financial Markets

The previous sections have two broad implications. First, they show that the most developed financial markets are protected by regulations and laws. However, they do not tell us what the best form of regulation is, which may well include self-regulation as well as government regulation. Still, totally unregulated financial markets do not work well, presumably because they allow corporate insiders to expropriate too much from outside investors. One dramatic illustration of this phenomenon is the evidence presented on cross-listing for Mexican firms in Figures 3.6 and 3.7. In fact, the most sought-after place for listing by Mexican publicly held companies happens to be New York—a heavily regulated exchange when it comes to disclosure and protection of minority shareholders—rather than Mexico City.

¹⁴ Similar results are obtained for the other specifications.

Second, better firm-level corporate governance practices within Mexico have real benefits in terms of valuation, performance and higher disbursement of profits. The analysis in the previous pages suggests that the objective of both kinds of measures should be to protect outside investor rights. As the empirical research shows, the benefits of such changes would be to expand a country's financial markets, to facilitate external financing of new firms, to move away from concentrated ownership, and to improve the efficiency of investment allocation.

What can be done to achieve this goal, and what are the obstacles? This analysis raises a number of questions for firm-level and countrywide legal reforms. How can a policymaker try to improve markets? What can a firm do in a poor legal environment? We address these questions in the concluding section.

The improvement of investor protection would require rather radical changes in the legal system and/or unilateral internal company-level governance changes. Securities and Company laws will need to be amended, and the regulatory and judicial mechanisms of enforcing investor rights need to be radically improved. But effective legal reform in Mexico, as in many other countries, runs into tremendous political obstacles. Perhaps the most important objections come from the controlling shareholders at the top of large corporations. Under the status quo, the existing firms can finance their own investment projects through internal cash flows as well as relationships with either captive or closely tied banks. But the opposition to reform may also be supplemented by opposition from labor interests. After all, these interests are also receiving some rents from the existing arrangements.

Further Legal Reform

As the evidence in this paper shows, the law and its enforcement are a good predictor of the development of capital markets. Although the market-based mechanisms outlined above may help foster the growth of external funding, they have limitations. Firms might adopt improved protections with non-standard contracts, but when violations occur, enforcement of the contracts may be harder in weak legal systems. For these reasons, further countrywide reforms are necessary. The strategy for reform is not to create an ideal set of rules and then see how they can be enforced, but rather to enact the rules that can be enforced within the existing enforcement structure. Mexico's recent success in passing a new Securities Law that substantially increases the level of disclosure and improves corporate governance requirements for listed firms should be complemented with a revamping of the current "Ley de Sociedades Anónimas" of the Commercial Code. In some instances, this might require refining existing principles to make them more applicable. In other cases, it is necessary to create rights that are easily enforceable. The reform of Mexican corporation law may not need to follow the U.S.-type mechanisms that rely heavily on the judicial system by means of derivative or class-action suits. Instead, once one recognizes the state of the legal system, the application of more "automatic" principles may be a better answer for Mexico.

Judicial reform is another key ingredient in this agenda. Without a serious restructuring of the rules of civil procedure, among other things, the tax of an inefficient judicial system for all companies is a large drawback when they face international competition for resources. Judicial reform along the lines suggested in López-de-Silanes (2002) should be pushed forward.

Finally, a government measure that may be more politically feasible in Congress is the improvement of corporate governance practices for those firms that still have participation of the state. Despite widespread privatization in Mexico, there are still close to 150 state-controlled enterprises, and these firms could set an example for private firms by adopting better investor protections. Most of the state-run firms in Mexico are large public utilities or in natural resources. External funding is just as important for them, if not more important, than for private firms, because of substantially reduced government expenditures. They need higher levels of investment to meet the demand from the growing private sector. Therefore, it becomes imperative for them to find mechanisms to fund their projects from capital markets. Reform of corporate charters and improved investor protection would also alleviate the government budget constraint. The adoption of the code of best practices outlined above can provide a quick and easy way for these state-controlled firms to substantially transform themselves and secure access to funds at better rates.

Market-Based Mechanisms

Slow and difficult as it is, real legal reform needs to take place in Mexico. But for this reason, it is necessary to complement it with the use of market-based mechanisms that

push firms to unilaterally improve their firm-level governance practices. The evidence about the benefits of firm-level measures corroborates the importance to push for the creation of such mechanisms.

Market-based mechanisms should be designed to temporarily substitute or complement the reform of laws and regulations. These measures should be, as the current Corporate Governance Code is, a set of public measures that facilitate competition and ratings, making it possible for the firms that adhere to such measures to access capital at lower cost. At the same time, these mechanisms also have the objective of extending/publicizing the concept of better corporate governance practices. This code is a substantial step forward in the creation of a culture of investor protection, as it allows investors: (1) to distinguish firms that do have effective corporate governance mechanisms in place and (2) to reward firms that offer better protection with higher valuation multiples or lower costs of capital.

Enhanced disclosure requirements may not be sufficient to push firms to engage in unilateral changes. An additional desirable complementary measure could be to restrict institutional investors to investment in companies that meet minimum corporategovernance standards. These standards may be determined in relation to the code of best practices or by independent best-practice commissions. This recommendation is based on purely prudential reasons as well as on the need to create an incentive for firms to agree on better investor protection. A similar idea has been implemented in Chile, also a civil law country, where a commission detailed a large list of minimum requirements that issuers of securities must meet in order to be the object of investment by institutional investors (Decree. No. 3.500 in Chile).

The adoption of such measures should constitute a useful first step in Mexico as they will facilitate the unilateral movement for better firm-level changes in governance and create precedent for future legal reform.

6. Conclusions and Policy Implications

In this paper we have provided an analysis of the recent evolution of capital markets, laws governing investor protection, the quality of enforcement of these laws, and their effect on the availability of external financing in Mexico in the last two decades. The evidence gathered in this paper shows that the legal environment faced by corporation in Mexico poses serious problems for their access to capital. But the set of new results at the firm-level show that those firms that have started to use the available differentiating tools to improve their corporate governance are rewarded by the market with lower costs of capital as they provide better returns to their investors.

Finally, based on Mexico's evolution and a cross-country comparison, the last section of the paper has outlined the possibilities for legal reform and the use of further market-based incentives for individual firms to successfully increase investor protection and thus deepen Mexican financial markets.

Overall, the country and firm-level evidence for Mexico is supportive of the growing literature arguing that it is only through the development of efficient institutions and investor security that firms can secure the basis for sustainable long-run access to finance.

Bibliography

American Bar Association. 1989 and 1993. *Multinational Commercial Insolvency*. Chicago, United States: American Bar Association.

Bank of New York. 2005. http://www.bankofny.com/.

- Beck, T., R. Levine, and N. Loayza. 2000. "Finance and the Sources of Growth." *Journal* of Financial Economics 58 (1-2): 261-300.
- Berglof, E., and L. von Thadden. 1999. "The Changing Corporate Governance Paradigm: Implications for Transition and Developing Countries." Stockholm, Sweden: Stockholm Institute of Transition Economics. Mimeographed document.
- Carlin, W., and C. Mayer. 1999. "Finance, Investment and Growth." London, United Kingdom: University College. Mimeographed document.
- Coffee, J. 1999. "The Future as History: The Prospects for Global Convergence in Corporate Governance and its Implications." *Northwestern Law Review* 93: 631-707.
- Daines, R. 2001. "Does Delaware Law Improve Firm Value?" Journal of Financial Economics 62(3): 525-558.
- Demirguc-Kunt, A., and V. Maksimovic. 1998. "Law, Finance and Firm Growth." Journal of Finance 53(6): 2107-2139.
- Demsetz, H., and K. Lehn. 1985. "The Structure of Corporate Ownership: Causes and Consequences." *Journal of Political Economy* 93(6): 1155-77.
- Diamond, D. 1989. "Reputation Acquisition in Debt Markets." *Journal of Political Economy* 97: 828-62.
- ----. 1991. "Debt Maturity Structure and Liquidity Risk." *Quarterly Journal of Economics* 106: 1027-54.
- Djankov, S. et al. 2003. "Courts." Quarterly Journal of Economics 118: 453-518.
- ----. 2005. "The Law and Economics of Self-Dealing." NBER Working Paper 11883. Cambridge, United States: National Bureau of Economic Research.
- Dyck, A., and L. Zingales. 2004. "Private Benefits of Control: An International Comparison." *Journal of Finance* 59: 537-600.
- Easterbrook, F., and D. Fischel. 1991. *The Economic Structure of Corporate Law*. Cambridge, United States: Harvard University Press.

- Glaeser, E., S. Johnson and A. Shleifer. 2000. "Coase v. the Coasians." Cambridge, United States: Harvard University.
- Gomes, A. 1996. "The Dynamics of Stock Prices, Manager Ownership, and Private Benefits of Control." Cambridge, United States: Harvard University.
- Gompers, P., J. Ishii and A. Metrick. 2003. "Corporate Governance and Equity Prices." *Quarterly Journal of Economics* 118(1): 107-155.
- Grossman, S., and O. Hart. 1986. "The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration." *Journal of Political Economy* 94: 175-202.
- Hart, O. 1999. "Different Approaches to Bankruptcy." Cambridge, United States: Harvard University. Mimeographed document.
- Hart, O. et al. 1997. "A New Bankruptcy Procedure that Uses Multiple Auctions." *European Economic Review* 41: 461-73.
- Hellwig, M. 1999. "On the Economics and Politics of Corporate Finance and Corporate Control." Mannheim, Germany: University of Mannheim. Mimeographed document.
- Hirschman, A. 1963. *Journeys Toward Progress*. New York, United States: Twentieth Century Fund.
- Institutional Shareholder Services (ISS), Inc. 1994. *Proxy Voting Guidelines* for several countries. Washington, DC, United States: ISS Global Proxy Services.
- Investor Responsibility Research Center (IRRC). 1994. *Proxy Voting Guide*. Washington, DC, United States: IRRC Global Shareholder Service.
- Jensen, M. 1986. "Agency Cost of Free Cash Flow, Corporate Finance, and Takeovers." *American Economic Review* 76(2): 323-329.
- Jensen, M., and W. Meckling. 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." Cambridge, United States: Massachusetts Institute of Technology. Mimeographed document.
- Johnson, S. et al. 2000. "Corporate Governance in the Asian Financial Crisis." *Journal of Financial Economics* 58: 141-186.
- King, R., and R. Levine. 1993. "Finance and Growth: Schumpeter Might be Right." *Quarterly Journal of Economics* 108(3): 717-738.

- Klapper, L., and I. Love. 2002. "Corporate Governance, Investor Protection, and Performance in Emerging Markets." Washington, DC, United States: World Bank. Mimeographed document.
- La Porta, R., F. López-de-Silanes, A. Shleifer and R.W. Vishny. 1997. "Legal Determinants of External Finance." *Journal of Finance* 52: 1131-50.
- ----. 1998a. "Law and Finance." Journal of Political Economy 106(6): 1113-1155.
- ----. 1998b. "Agency Problems and Dividend Policies Around the World." NBER Working Paper 6594. Cambridge, United States: National Bureau of Economic Research.
- ----. 1999. "Corporate Ownership Around the World." *Journal of Finance* 54(2): 471-517.
- La Porta, R., F. López-de-Silanes and Andrei Shleifer, 2006, What works in securities laws?, *Journal of Finance* 61, 1-33.
- Levine, R. "Law, Finance, and Economic Growth." 1999. Journal of Financial Intermediation 8(1-2): 8-35.
- Levine, R., and S. Zervos. 1998. "Stock Markets, Banks and Economic Growth." *American Economic Review* 88(3): 537-558.
- Lins, K., D. Strickland and M. Zenner. 2000. "Do Non-US Firms Issue Equity on US Stock Exchanges to Relax Capital Constraints?" Chapel Hill, United States: University of North Carolina. Mimeographed document.
- Martinez, L., and A. Werner, 2002, Capital Markets in Mexico: Recent Developments and Future Challenges. Paper prepared for the Seminar organized by Banco de México "Estabilidad Macroeconómica, Mercado Financieros y Desarrollo Económico", November 12-13, 2002.
- McCraw, T.K. 1984. Prophets of Regulation. Cambridge, United States: Belknap Press.
- Modigliani, F., and M. Miller. 1958. "The Cost of Capital, Corporation Finance, and the Theory of Investment." *American Economic Review* 48: 261-97.
- Morck R, A. Shleifer and R. Vishny. 1988. "Management Ownership and Market Valuation: An Empirical Analysis." *Journal of Financial Economics* 20: 293-315.
- Rajan, R., and L. Zingales. 1995. "What Do We Know about Capital Structure: Some Evidence from International Data." *Journal of Finance* 50: 1421-60.

- ----. 1998. "Financial Dependence and Growth." *American Economic Review* 88(3): 559-586.
- Reynolds, T., and A. Flores. 1989. *Foreign Law: Current Sources of Basic Legislation in Jurisdictions of the World*. Littleton, United States: Rothman and Company.
- Shleifer, A., and R.W. Vishny. 1986. "Large Shareholders and Corporate Control." *Journal of Political Economy* 94: 461-88.
- Standard & Poor's. 2005. *Global Stock Markets Factbook*. New York, United States: McGraw-Hill.
- Vishny, R. 1994. *Guide to International Commerce Law*. New York, United States: McGraw-Hill.
- Weisbach, M.S., and W.A. Reese. 2002. "Protection of Minority Shareholder Interests, Cross-Listings in the United States, and Subsequent Equity Offerings." *Journal of Financial Economics* 66: 65-104.
- White, M. 1993. "The Costs of Corporate Bankruptcy: The U.S.-European Comparison." Ann Arbor, United States: University of Michigan, Department of Economics. Manuscript.
- World Bank. 2005. World Development Indicators. Washington, DC, United States: World Bank.
- Wurgler, J. 2000. "Financial Markets and the Allocation of Capital." *Journal of Financial Economics* 58: 187-214.

Section 2. Investor Protection Evolution in the Last 25 Years (Tables)

Table 2.1. Shareholders' Rights in 1995

This table classifies countries by legal origin. Definitions for each of the variables can be found in Appendix A.1. Panel A includes data for 42 countries, and Panel B includes data for 72 countries.

Country	Proxy by mail allowed	Shares not blocked	Cumulative voting	Capital to call a meeting	Preemptive rights	Oppressed minority	Anti-director rights
			der rights (1= Panel A: Share			he law)	
Common Legal Origin							
Malaysia	0	1	0	0.1	1	1	4
New Zealand	1	1	0	0.05	0	1	4
UK	1	1	0	0.1	1	1	5
US	1	1	1	0.1	0	1	5
Mean Common Law	0.39	1	0.28	0.09	0.44	0.94	3.06
Civil Law Legal Origin	,						
Chile	0	1	1	0.1	1	1	5
Mexico	0	0	0	0.33	1	0	1
Spain	0	0	1	0.05	1	1	4
South Korea	0	0	0	0.05	0	1	2
Mean Civil Law	0.18	0.71	0.27	0.11	0.53	0.53	2.65
World average	0.18	0.71	0.27	0.11	0.53	0.53	2.65
		ł	anel B: Share	eholders rig	hts in 2005		
	Vote by mail	Shares not deposited	Cumulative voting	Capital to call meeting	Preemptive rights	Oppressed minority	Anti-director Index
Common Legal							
Origin							
Malaysia	1	1	0	10%	1	1.0	5.0
New Zealand	0	1	0	5%	1	1.0	4.0
United Kingdom	1	1	0	10%	1	1.0	5.0
United States	1	1	0		0	1.0	3.0
Mean Common Law	0.81	1.00	0.10	9%	0.52	0.90	4.24

Civil Law Legal Origin

World average	0.33	0.68	0.28	10%	0.79	0.49	3.39
Mean Civil Law	0.14	0.55	0.35	10%	0.90	0.31	3.04
Korea	1	0	1	3%	1	0.5	4.5
Morocco	0	0	0	10%	1	0.0	2.0
Mexico	0	1	0	10%	1	0.0	3.0
Chile	0	1	1	10%	1	0.0	4.0
Oligili							

Sources: Panel A: La Porta et al. (1998); Panel B: Djankov et al. (2005).

Table 2.2. Example of Management Proposals to be Voted on
at Annual General Meetings in Mexico

PROPOSAL No. 1: Amend statutes

Status: Non-routine

Sponsor: Management

Opposition: None known

Proxy materials contained no information on this agenda item. Most likely it is intended to restate the Company's capital stock in its statutes.

PROPOSAL No. 2: Approve financial statements

Status: Routine Sponsor: Management Opposition: None known

PROPOSAL No. 3: Set dividend

Status: Routine

Sponsor: Management

Opposition: None known

Management is asking of shareholders to approve a dividend of 0.08 pesos per share. It is not clear from materials furnished by the company whether this is full dividend or just the fourth-quarter payment.

PROPOSAL No. 4: Authorize share repurchase

Status: Routine

Sponsor: Management

Opposition: None known

Management is asking for shareholders' authorization to repurchase its shares. It gives no reason, time limit, or maximum or minimum amount for this proposal.

PROPOSAL No. 5: Proforma Ratification of board actions, elect directors, and appoint shareholder representative

Status: Routine

Sponsor: Management

Opposition: None known

The proposal wants shareholders to approve any board candidates who might be standing for election or reelection. As is common in Mexico, the Company does not include information identifying the nominees in its proxy statement. If directors are to be elected, their names will be announced at the annual meeting.

Shareholders are asked to approve the fees for the directors, their alternates, and the stockholders examiners. The amounts are not disclosed in the proxy materials.

PROPOSAL No. 6: Appoint auditors and set their fees

Status: Routine

Sponsor: Management

Opposition: None known

Shareholders are being asked to approve the appointment of "independent" auditors and their fees. Managementhas not published the name of the authors, but will announce both that and the proposed fees at the annual meeting itself.

Table 2.3. Securities Laws in 2001

-

This table classifies countries by legal origin. Definitions for each of the variables can be
found in Appendix A.1. Data are available for 49 countries.

Country	Disclosure requirements	Liability standards	Public enforcement
Common Legal Origin			
Malaysia	0.92	0.66	0.77
New Zealand	0.67	0.44	0.33
United States	1.00	1.00	0.90
United Kingdom	0.83	0.66	0.68
Mean common law	0.78	0.58	0.62
<i>Civil Law Legal Origin</i> Chile	0.58	0.33	0.60
0 0	0.59	0.22	0.60
Mexico	0.58	0.11	0.35
Spain	0.50	0.66	0.33
Korea	0.75	0.66	0.25
Mean civil law	0.54	0.32	0.39
	0.60	0.41	0.52

Source: La Porta et al. (2004).

Table 2.4. Anti-Self-Dealing Regulations in 2005

Country	Ex-ante private control o self-dealing	of Ex-post private control of self-dealing	Anti-self-dealing index	Public enforcement of self-dealing
Common Legal Origin				
Malaysia	1.00	0.90	0.95	1.00
New Zealand	1.00	0.90	0.95	0.00
United States	0.33	0.97	0.65	0.00
United Kingdom	1.00	0.85	0.93	0.00
Mean common law	0.58	0.76	0.67	0.27
Civil Law Legal Origin				
Chile	0.50	0.75	0.63	1.00
Mexico	0.19	0.16	0.18	0.50
Spain	0.22	0.52	0.37	0.75
Korea	0.25	0.67	0.46	0.50
Mean civil law	0.31	0.44	0.37	0.42
World average	0.39	0.53	0.46	0.38

This table classifies countries by legal origin. Definitions for each of the variables can be found in Appendix A.1. Data are available for 72 countries.

Source: Djankov et al. (2005).

Table 2.5. Enforcement of Laws

This table classifies countries by legal origin. Definitions for each of the variables can be found in Appendix A.1. Data are available for 49 countries for all variables, except "Court formalism to collect bounced checks," which is available for 109 countries.

	Efficiency of			Accounting	Court Formalism to
Country	judicial system	Rule of law	Corruption	standards	collect bounced check
Common Legal Origin					
Malaysia	9.00	6.78	7.38	76	2.34
New Zealand	10.00	10.00	10.00	70	1.58
United Kingdom	10.00	8.57	9.10	78	2.58
United States	10.00	10.00	8.63	71	2.62
Mean Common law	8.15	6.46	7.06	69.62	2.76
Civil Law Legal Origin					
Chile	7.25	7.02	5.30	52	4.57
Mexico	6.00	5.35	4.77	60	4.71
Spain	6.25	7.8	7.38	64	5.25
South Korea	6.00	5.35	5.3	62	3.37
Mean Civil law	7.38	7.07	6.80	56.89	4.48
World average	7.67	6.85	6.90	60.93	3.53

Source: La Porta et al. (1997 and 1998) and Djankov et al. (2003).

Table 2.6. Market Outcomes

Country	Stock market capitalization to GDP	Listed firms per million population	IPO's to GDP	Block premium	Ownership concentration
Common Legal Origin			· ·		
Malaysia	148.4	34.6	6.18	5%	54%
New Zealand	40.1	36.9	0.06	4%	48%
United Kingdom	157.7	33.1	11.27	0%	19%
United States	142.1	22.8	5.47	2%	20%
Mean Common law	85.5	32.6	3.7	4%	44%
Civil Law Legal Origin					
Chile	89.7	16.7	0.51	15%	45%
Mexico	21.9	1.7	0.22	47%	64%
Spain	79.9	45.9	2.41	2%	51%
Korea	54.1	29.4	5.32	17%	23%
Mean Civil law	48.6	25.7	2.54	14%	49%
World average	59.4	27.7	2.97	11%	47%

This table classifies countries by legal origin. Definitions for each of the variables can be found in Appendix A.1. Data are available for 72 countries.

Source: La Porta et al. (1998) and Dyck and Zingales (2004).

Section 3. Capital Markets in Mexico (Figures)

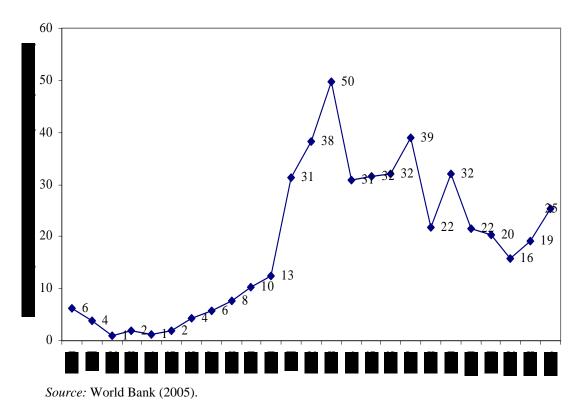


Figure 3.1. Market Capitalization to GDP

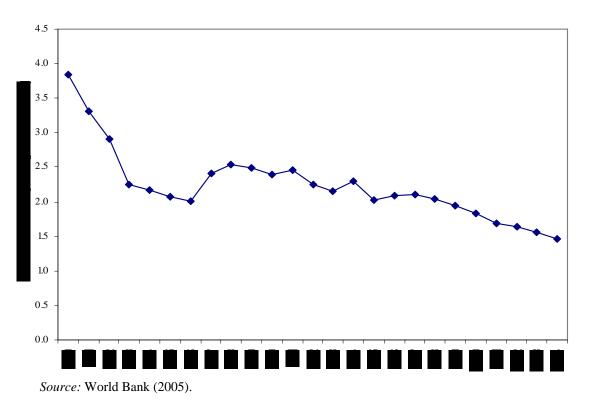
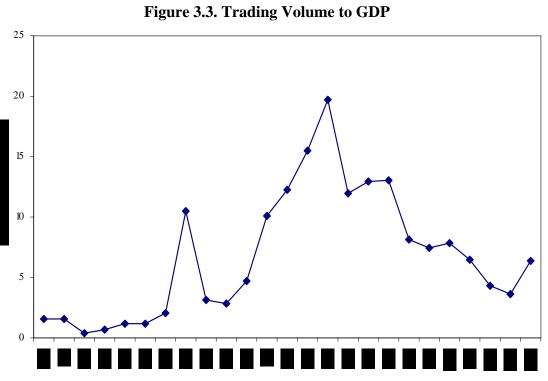
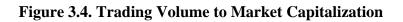


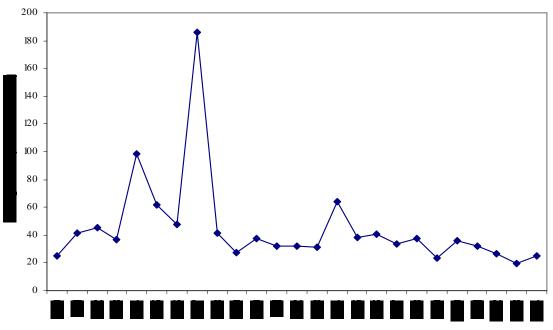
Figure 3.2. Listed Domestic Companies per Million People

47



Source: Authors' calculations based on data from Standard & Poor's (2005) and World Bank (2005).





Source: Authors' calculations based on data from Standard & Poor's (2005) and World Bank (2005).

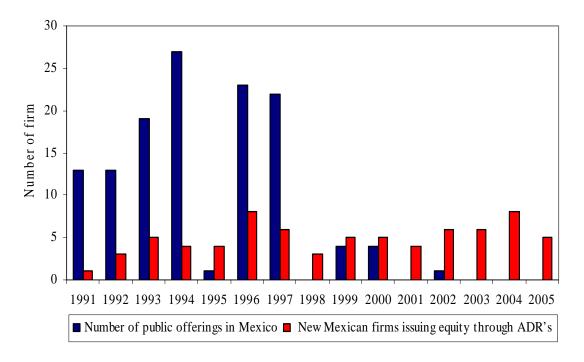


Figure 3.5. Number of Public Offerings and ADR's in Mexico

Source: Authors' calculations based on data from Martínez and Werner (2002) and Bank of New York (2005). The series from Martinez and Werner is only available until year 2002.

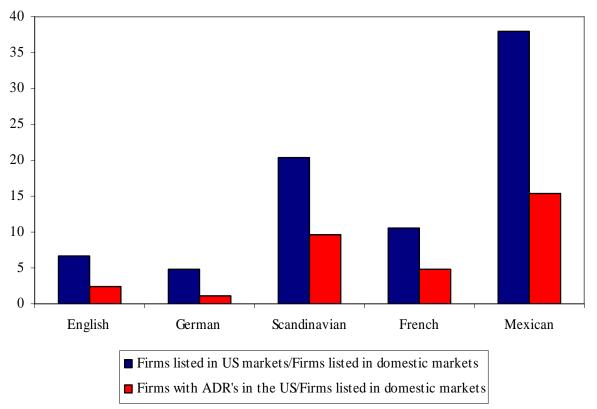


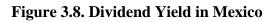
Figure 3.6. Firm Migration by Legal System and in Mexico

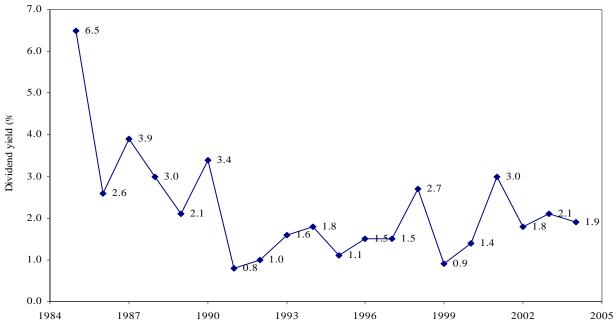
Source: Authors' calculations based on data from Bank of New York (2005) and Standard & Poor's (2005).

3.0 2.6 2.5 2.5 2.3 2.2 2.2 2.0 2.02.01.8 .7 1.7 1 ∧¶√] 1.5 1.5 1.4 1.0 1.0 • 0.7 0.6 0.5 0.0 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006

Figure 3.7. Price to Book Value of Equity in Mexico

Source: Standard & Poor's (2005).





Source: Standard & Poor's (2005).

Section 4. Corporate Governance, Valuation and Investor Returns in Mexico (Tables and Figures)

Table 4.1. Descriptive Statistics

This table shows the descriptive statistics of the main variables used in the empirical section of the paper. All variables were taken from each firm's annual financial report, the Corporate Governance Code of Best practices and from each firm's general statement. All reports are available on the Mexican Stock Exchange web site.

Variable	Obs.	Mean	Median	Std. Dev.	Min	Max
Tobin's Q	108	0.943	0.86	0.361	0.372	2.280
Price to book ratio	102	0.901	0.75	0.604	0.036	2.518
ROA	139	2.312	2.27	5.701	-12.762	17.814
ROE	135	6.353	6.98	11.703	-25.895	34.515
Dividend payout	120	14.375	0.00	23.649	0.000	106.067
Log (net sales)	145	5.373	5.62	2.413	-6.623	9.328
Financial leverage	140	2.853	2.18	2.497	1.005	15.742
Debt to assets	143	52.393	53.92	20.571	0.498	95.592
Sales growth	137	2.710	2.93	23.077	-99.733	71.429
Income to sales	141	4.799	4.12	20.783	-105.772	74.979
Lagged income to sales	98	5.10	0.06	9.6	-31.1	36.4
Size (top 10%)	150	0.09	0.00	0.292	0.000	1.000
Located in Mexico city	150	0.591	1.00	0.493	0.000	1.000
Equity listing	150	0.840	1.00	0.368	0.000	1.000
CG index	150	0.783	0.81	0.132	0.273	0.982
Board composition	150	0.667	0.67	0.194	0.111	1.000
Board structure	150	0.693	0.80	0.258	0.000	1.000
Board functions	150	0.890	0.92	0.150	0.167	1.000
Director's duties	150	0.903	0.89	0.099	0.714	1.000
Evaluation and compensation committee	150	0.530	0.50	0.364	0.000	1.000
Audit committee	150	0.842	0.89	0.162	0.143	1.000
Finance and planning committee	150	0.712	1.00	0.422	0.000	1.000
Shareholders meeting	150	0.779	0.75	0.167	0.375	1.000

Table 4.2. Mexico's Corporate Governance Code of Best Practices

This table shows the percentage of listed firms that answered YES to the each of the questions of the Corporate Governance Code of Best Practices developed by Mexico's *Comisión Nacional de Valores*. The table includes the data of the 150 firms in our sample.

Questic	on	Total	
		2003	2004
Board C	Composition		
1	The board of directors has between 5 and 15 members.	90.8%	91.1%
2	Board members do not have substitutes	24.8%	26.0%
3	Only pre-established substitute directors can take the place of the actual board member	86.5%	64.4%
4	Actual board member suggests the substitute	67.4%	42.5%
5	Independent directors and owner directors jointly represent at least 40 percent of the board	89.4%	87.0%
6	Independent directors represent at least 20 percent of the total members of the board.	90.1%	89.0%
7	The classification of directors as independent, owner, and related is included in the annual report.	58.9%	63.0%
8	The annual report indicates the category to which each owner director belongs.	52.5%	54.1%
9	The annual report indicates the positions and functions of each board member	66.0%	65.8%
Mean		69.58%	64.76%
	unctions and Committees' Structure		
10	The board performs the functions of evaluation and remuneration; auditing; and finance and planning through one or various intermediate governance bodies.	79.4%	82.2%
11	Substitute directors are not part of board committees	60.3%	61.6%
12	Board committees have between 3 and 7 members.	80.1%	82.9%
13	In addition to his/her board duties, each independent director participates in at least one committee.	46.8%	45.2%
14	An independent director chairs the Audit committee.	40.0 <i>%</i> 79.4%	81.5%
Mean		69.22%	70.68%
	Deration		
15	The board meets at least 4 times a year.	95.7%	96.6%
16	The board defines long-term strategies at least once a year.	93.6%	93.2%
17	At least 25 percent of the directors can call for a board meeting.	90.1%	89.7%
18	Directors have access to all the relevant information for the decisions to be taken according to the agenda for the meeting, at least 5 business days prior to the meeting.	84.4%	83.6%
19	A mechanism is established to enable directors to adequately assess the proposal related to confidential strategic matters.	77.3%	79.5%
20	First-time directors are given adequate information of their responsibilities and duties, as well as data related to the corporation and its business environment.	92.9%	90.4%
Mean		89.01%	88.81%
Deerst			
Board n 21	nembers' duties		
21	Disclose to the Chairman and secretary of the board any situation that may result in a conflict of interest and refrain from participating in such matters.		
ว ว		97.2%	97.9%
22 23	Use of the assets and/or services of the corporation only for matters related to it, and clearly define the policies that would apply for the use of such assets for personal matters.	97.2%	98.6%
13	i nere are specific policies that regulate private lise of the assets of the firm		

25	Maintain absolute confidentiality of all information, which may affect the operation of the corporation as well as of the deliberations that take place at the board meetings.	100.0%	100.0%
26 27	Directors and their alternate directors, if any, must keep mutually informed in relation to the matters discussed in the board meetings they attend.	81.6%	74.7%
21	Participate in the board of directors with opinions, recommendations and suggestions that derive from the analysis of the corporation's operations.	97.2%	99.3%
Mean		90.78%	89.82%
Comper	nsation and evaluation committee		
28	The board should be supported by reviewing the terms and conditions on which the CEO and the high ranking officers are being hired, as well as the possible payments in case of separation from the corporation; such terms and conditions should follow the general guidelines approved by the		
29	board. The annual report presented by the board of directors, discloses the policies adopted and the terms and conditions of the remuneration package of the directors, the CEO and the corporation's high-	63.1%	63.4%
	ranking officers.	43.3%	43.2%
Mean		53.19%	53.30%
Audit co	mmittee		
30	For the financial statements external audit and any other external review, board should not hire any accountant firm whose income for fees for all the services rendered to the corporation		
31	represent more than 20 percent of its total income. In order to ensure objectivity in the audit report, a rotation mechanism of the partner in charge of the preparation of the audit report should be recommended to the board. It is suggested that this	92.2%	92.5%
32	rotation be made at least every six years. The person who signs the audit report of the annual financial statements of the corporation should not be the same person who acts as the Statutory Auditor. Nevertheless, both persons may be	88.7%	96.6%
33	partners of the same firm. The committee should ensure that the professional profile of the Statutory Auditor enables him/her to adequately perform its duties. Furthermore, it is also recommended that the annual report presented by the board of directors disclose relevant information regarding the professional	86.5%	90.4%
	profile of the Statutory Auditor.	51.8%	50.7%
34 25	The company should have an internal audit department.	87.2%	90.4%
35 36	The committee should submit to the approval of the board of directors the accounting policies used in the preparation of the financial information. The board is assured that the midterm financial information is prepared with the same criteria, policies and practices as the annual financial information is. In the process, the board may obtain support from the internal auditor, the external auditor and the Statutory Auditor of the	73.0%	77.4%
	corporation.	82.3%	83.6%
37 28	There is an internal control system.	97.9%	97.9%
38	The committee should submit for board approval the general guidelines of the internal control system.	77.3%	78.8%
39 40	The committee should assist the board by evaluating the effectiveness of the internal control system and by giving an opinion on the financial and operational controls.	77.3%	78.1%
40 41	The external auditors should validate the effectiveness of the internal control system and present a report on such controls. The committee should ensure the existence of mechanisms that allow the board to determine if	85.8%	84.2%
42	the corporation duly complies with all applicable laws and regulations. The board revises the applicable laws and regulations at least once a year and holds a review on	83.0%	84.9%
43	the matter at least once a year. The board is informed about the legal situation	94.3%	95.9%
45 Mean	The board is morned about the legal situation	92.9%	92.5%
		83.59%	85.27%

Finance and planning committee

44	The committee should submit to the board of directors an evaluation of the feasibility of the main investments and financing transactions of the corporation, same that should be in line with the		
	existing policies.	69.5%	74.0%
45	The committee should periodically evaluate the strategic position of the corporation in terms of		
	the strategic plan.	68.8%	72.6%
46	The committee should assist the board in reviewing the consistency of the investment and	68.8%	71.2%

	financing policies with the strategic plan of the corporation.		
47	The committee should assist the board in reviewing the financial projections of the corporation while assuring their consistency with the strategic plan.	68.8%	71.2%
Mean		68.97%	72.26%
Sharaha	Iders meeting		
48			
	It is suggested not to include in the agenda an item referred to as "General Matters".	92.9%	93.2%
49	It is suggested to avoid the grouping of matters related to different topics within a single item. The latter has the purpose to allow stockholders to vote each item separately, in addition to		0.0 404
50	provide them with information on all topics to be discussed at the meeting.	98.6%	98.6%
50	The company should make available 15 days prior to the day of the meeting, all information on each item of the shareholders meeting agenda.	96.5%	95.9%
51	The shareholders with enough information and voting alternatives has the power to twist the	20.570	15.170
	voting according to their interests	66.7%	64.4%
52	The company should include the proposals of members to be appointed for the board of directors		
	and a brief professional profile of each candidate, as part of the information delivered to the		
	shareholders.	50.4%	52.7%
53	The information disclosed includes the relevant issues of the work of the intermediate governance bodies.	51.8%	58.9%
54	The board of directors should include in its annual report to the shareholders meeting the relevant	31.8%	30.9%
54	aspects involved in the tasks performed by each intermediate governance body and make		
	available to the shareholders the reports of each governance body submitted to the board together		
	with all other material for the Meeting, with the exception of information which confidentiality		
	may affect the competitiveness of the corporation. In addition, it is recommended to include in the		
	annual report the names of the members of each intermediate governance body.	66.0%	71.2%
55	In order to keep communication channels open with shareholders and potential investors, each		
	corporation should have in place policies, mechanisms and designate responsible parties to inform	05.50	0.6.60
Mean	these investors.	95.7%	96.6%
		77.30%	78.94%
All firms	with publicly traded securities	78.4%	78.5%
		(5.410/	(= (0)
Firms wi	th publicly traded bonds	65.41%	65.62%
Firms wi	th publicly traded stocks	80.32%	80.78%

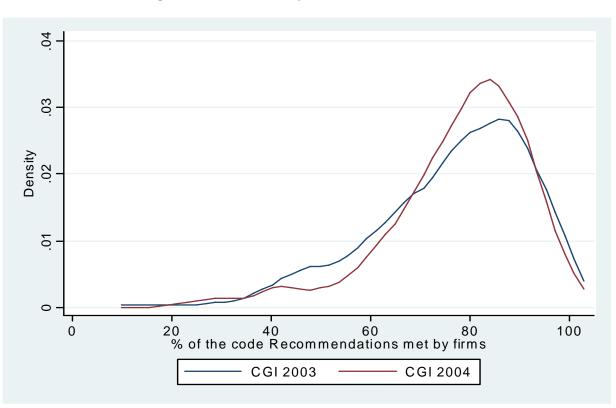


Figure 4.1. CGI Density for 2003 and 2004

Source: Authors' calculations based on data from Comisión Nacional Bancaria y de Valores (2004). *Note:* The horizontal axis represents the percentage of the code recommendations met by firms. The vertical axis measures the density function, which shows the proportion of firms that meet each percentage range of principles of the code.

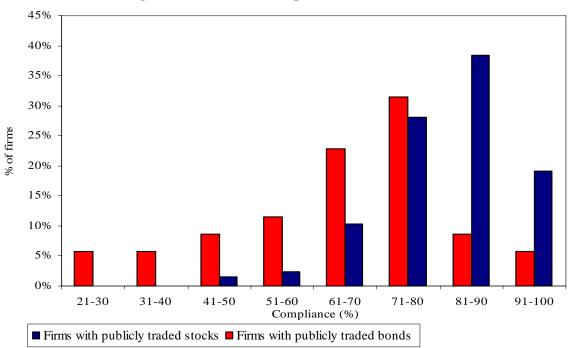


Figure 4.2. Level of Compliance of the CPMC

Source: Authors' calculations based on data from Comisión Nacional Bancaria y de Valores (2004).

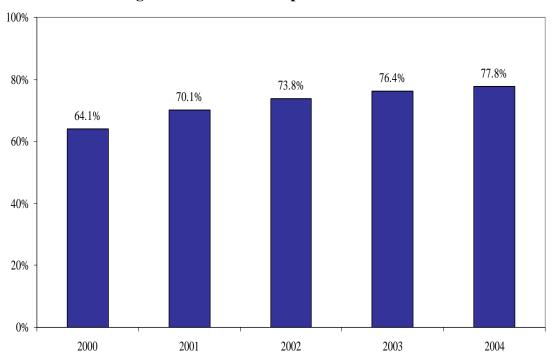


Figure 4.3. Level of Compliance of the CPMC

Source: Authors' calculations based on data from Comisión Nacional Bancaria y de Valores (2004). *Note:* The table shows the average level of compliance with all of the Code of Best Practices recommendations by all firms with publicly traded equity and bonds listed in the Mexican Stock Exchange. The number of firms each year changes according to new listings and delisting.

	CG	Tobin's Q		ROA	ROE	Dividend	Log	Financial	Debt to	Sales	Income	Lagged	Located in	ADR	Size (top
	index		book ratio			payout	(Net sales)	leverage	assets	Growth	to sales	income to sales	Mexico city	holder	10%)
Tobin's Q	0.2309														
	0.0162														
Price to book	0.1834	0.8667													
ratio	0.0651	0.0000													
ROA	0.0880	0.4139	0.4015												
	0.3030	0.0000	0.0000												
ROE	-0.0136	0.4533	0.3652	0.8602											
	0.8760	0.0000	0.0003	0.0000											
Dividend payout	0.1024	0.2708	0.2334	0.3387	0.2988										
	0.2655	0.0079	0.0286	0.0002	0.0015										
Log (net sales)	0.2947	0.3753	0.2969	0.2092	0.1719	0.3015									
	0.0003	0.0001	0.0026	0.0134	0.0463	0.0008									
Financial	-0.1972	0.0080	0.0273	-0.1035	0.2619	-0.0850	-0.0402								
everage	0.0195	0.9354	0.7864	0.2307	0.0022	0.3666	0.6374								
Debt to assets	-0.0992	0.0051	-0.1257	-0.1700	0.1815	-0.0923	0.1768	0.7276							
	0.2385	0.9582	0.2103	0.0455	0.0351	0.3202	0.0347	0.0000							
Sales Growth	0.0417	0.2713	0.2682	0.2965	0.4357	0.0739	0.3808	0.1144	0.1658						
	0.6289	0.0053	0.0082	0.0006	0.0000	0.4347	0.0000	0.1916	0.0546						
ncome to sales	-0.1585	0.1577	0.1653	0.5583	0.6184	0.0867	-0.0471	0.3443	0.1121	0.3295					
	0.0605	0.1047	0.1002	0.0000	0.0000	0.3546	0.5790	0.0000	0.1856	0.0001					
Lagged income o sales	-0.0688	0.2817	0.1574	0.5175	0.4710	0.2767	0.1860	-0.2186	-0.3323	0.0591	0.4397				
	0.5011	0.0068	0.1478	0.0000	0.0000	0.0104	0.0682	0.0323	0.0009	0.5692	0.0000				
Located in Mexico city	0.1467	0.2112	0.2390	-0.0259	0.0465	-0.0153	0.0653	0.0908	0.0688	0.0212	0.1300	0.0236			
-	0.0741	0.0282	0.0155	0.7623	0.5924	0.8681	0.4353	0.2858	0.4145	0.8057	0.1245	0.8175			
ADR issuer	0.2283	0.0084	0.1147	0.0984	0.0130	0.2015	0.3237	-0.1145	-0.0745	0.0339	-0.1758	0.0180	0.0678		
1. (1. 100()	0.0050	0.9310	0.2508	0.2490	0.8813	0.0273	0.0001	0.1781	0.3762	0.6943	0.0371	0.8603	0.4115		
Size (top 10%)	0.0561	0.2095	0.1090	0.1082	0.1625	0.1044	0.3993	0.1323	0.1675	0.0643	0.1279	0.1565	0.0342	0.1100	
	0.4953	0.0295	0.2753	0.2047	0.0597	0.2567	0.0000	0.1190	0.0456	0.4553	0.1307	0.1238	0.6786	0.1802	
Equity listing	0.4499	•	•	-0.0468	-0.2003	0.1427	0.1670	-0.3774	-0.3273	-0.1182	-0.2553	•	-0.0157	0.1905	0.0775
	0.0000	1.0000	1.0000	0.5841	0.0198	0.1201	0.0447	0.0000	0.0001	0.1690	0.0022	1.0000	0.8491	0.0196	0.3458

Table 4.3. Correlation Matrix of the Main Variables

This table presents the pair-wise correlation matrix of the main variables used in the empirical section of the paper. P-values are shown below the correlation coefficients.

Table 4.4. Valuation Regressions

Industry-level fixed effects regressions of the firms included in the sample. We regress our valuation measures against standard controls and include the Corporate Governance index as the interest variable. The dependent variable in Panel A is Tobin's Q and in Panel B is Price to Book Ratio.

* significant at 10%; ** significant at 5%; *** significant at 1%. Robust standard errors are shown in parentheses. All variables are described in Appendix A.2.

			Panel A: T	Tobin's Q		
CG index	1.010	1.025	0.991	0.792	0.855	0.973
	(0.432)**	(0.370)***	(0.437)**	(0.423)*	(0.385)**	(0.465)**
Log (net sales)	0.042	0.033	0.061	0.032	0.029	0.066
-	(0.024)*	(0.025)	(0.036)*	(0.026)	(0.026)	(0.041)
Financial	0.014	0.003	0.021			
leverage						
	(0.017)	(0.014)	(0.017)			
Debt to assets				-0.000	-0.000	-0.001
				(0.003)	(0.003)	(0.004)
Sales growth	0.001			0.003		
C	(0.002)			(0.003)		
Income to sales		0.005			0.004	
		(0.002)*			(0.003)	
Lagged income			0.007			0.005
to sales			(0.587)			(0.607)
Constant	-0.172	-0.119	-0.343	0.120	0.074	-0.248
Collstallt						
Observations	(0.374)	(0.309)	(0.453)	(0.330)	(0.286)	(0.420)
Observations Number of	102 31	105 31	90 30	104 31	107 31	91 31
Number of industries	51	51	30	51	51	51
R-squared	0.17	0.20	0.21	0.15	0.15	0.21
Log likelihood	-9.90	-6.03	-2.64	-11.86	-9.92	-2.54
Rho	0.30	-0.03	-2.04 0.26	0.29	-9.92	-2.34
NIIO	0.30		nel B: Price			0.24
CG index	1.175	1.088	0.903	1.050	1.082	0.930
	(0.663)*	(0.620)*	(0.711)	(0.655)	(0.632)*	(0.712)
Log (net sales)	0.038	0.066	0.030	0.050	0.076	0.051
Log (liet sales)	(0.034)	(0.039)*	(0.056)	(0.033)	(0.036)**	(0.051)
Financial	0.040	0.012	0.035	(0.055)	$(0.030)^{++}$	(0.031)
leverage	0.040	0.012	0.055			
levelage	(0.023)*	(0.024)	(0.034)			
Debt to assets	$(0.023)^{*}$	(0.024)	(0.034)	-0.001	-0.003	-0.004
Debt to assets					(0.005)	-0.004 (0.006)
Sales growth	0.004			(0.005) 0.003	(0.003)	(0.000)
Sales glowill	(0.004)			(0.003)		
Income to sales	(0.004)	0.003		(0.004)	0.003	
medine to sales						
Laggad income		(0.004)	0.001		(0.004)	0.007
Lagged income			0.001			0.007

to sales

			(0.939)			(0.789)
Constant	-0.394	-0.394	-0.156	-0.222	-0.277	0.026
	(0.538)	(0.497)	(0.703)	(0.504)	(0.502)	(0.684)
Observations	96	100	85	96	100	85
Number of	31	31	30	31	31	30
industries						
R-squared	0.13	0.11	0.10	0.11	0.12	0.10
Log likelihood	-50.92	-60.56	-43.08	-51.69	-60.21	-42.90
Rho	0.42	0.37	0.52	0.40	0.35	0.50

Table 4.5. Performance Regressions

Industry-level fixed effects regressions of the firms included in the sample. We regress our performance measures against standard controls and include the Corporate Governance index as the interest variable. The dependent variable in Panel A is ROA and in Panel B is ROE.. * significant at 10%; ** significant at 5%; *** significant at 1%. Robust standard errors are shown in parentheses. All variables are described in Appendix A.2.

		Panel	A: ROA	
CG index	7.368	12.898	7.615	12.099
	(4.434)*	(5.826)**	(4.501)*	(5.840)**
Log (net sales)	0.555	0.490	0.742	0.522
	(0.301)*	(0.480)	(0.341)**	(0.507)
Financial leverage	-0.488	-0.045		
C	(0.213)**	(0.354)		
Debt to assets	× /		-0.085	-0.028
			(0.034)**	(0.059)
Sales growth	0.089		0.063	()
	(0.021)***		(0.031)**	
Lagged income to sales	(0.021)	0.231	(0.001)	0.219
		(9.237)**		(9.654)**
Constant	-5.328	-12.100	-3.457	-10.316
	(3.893)	(6.475)*	(4.369)	(6.253)
Observations	128	94	131	95
Number of industries	31	31	32	31
R-squared	0.23	0.31	0.23	0.31
Log likelihood	-358.23	-253.62	-372.61	-256.35
Rho	0.44	0.49	0.39	0.47
Kilo	0.77		B: ROE	0.47
CG index	13.005	20.076	12.491	19.174
	(9.353)	(11.282)*	(9.160)	(11.494)
Log (net sales)	1.334	1.168	1.383	1.006
Log (net sules)	(0.621)**	(0.962)	(0.629)**	(1.070)
Financial leverage	0.311	0.151	(0.02))	(1.070)
T manetar le verage	(0.510)	(1.172)		
Debt to assets	(0.510)	(1.172)	0.012	0.052
			(0.060)	(0.119)
Sales growth	0.217		0.219	(0.117)
Sales growin	(0.055)***		(0.056)***	
Lagged income to sales	(0.055)	0.411	(0.050)	0.439
Lagged medine to sales		(18.749)**		(21.251)**
Constant	-13.055	-20.342	-12.602	$(21.231)^{++}$ -20.978
Constant	(8.414)	-20.342 (12.417)	(8.629)	-20.978 (11.810)*
Observations	126	92	(8.629)	<u>(11.810)*</u> 92
Number of industries	30	92 30	31	92 30
R-squared	0.25	0.27	0.25 -444.78	0.27
Log likelihood	-441.44	-312.16		-311.89
Rho	0.39	0.48	0.39	0.48

Figure 4.2. Partial Regression Plot of CG Index and Tobin's Q

The independent variables include Log (net sales), Financial Leverage and Sales Growth.

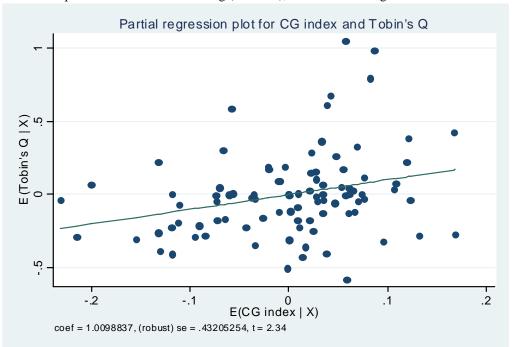
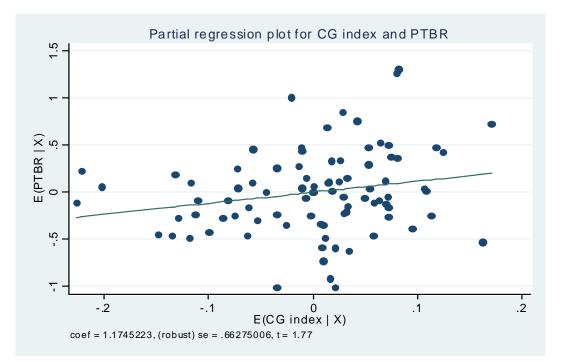


Figure 4.3. Partial Regression Plot of CG Index and Price to Book Ratio.





Partial regression plot for CG index and ROA f_{0} f_{0}

Figure 4.4. Partial Regression Plot of CG Index and ROA

The independent variables include Log (net sales), Financial Leverage and Sales Growth.

Figure 4.5. Partial Regression Plot of CG Index and ROE

The independent variables include Log (net sales), Financial Leverage and Sales Growth.

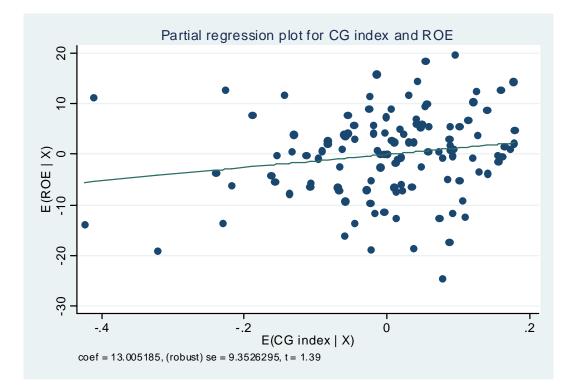


Table 4.6. Dividend Regressions

Tobit regressions including industry level dummies of the firms included in the sample. We regress our dividend measures against standard controls and include the Corporate Governance index as the interest variable. The dependent variable is the dividend payout. * significant at 10%; ** significant at 5%; *** significant at 1%. Robust standard errors are shown in parentheses. All variables are described in Appendix A.2.

	Distantes					
	Dividend payout					
CG index	93.726	23.243	65.213	74.107	22.644	57.726
	(42.878)**	(38.593)	(49.781)	(40.993)*	(37.873)	(51.364)
Log (net sales)	10.488	8.238	7.306	10.272	8.865	7.308
suicsy	(2.987)***	(2.857)***	(3.570)**	(2.882)***	(2.827)***	(3.856)*
Financial leverage	4.418	-0.875	13.457		× ,	× ,
10,01080	(2.785)	(2.301)	(4.590)***			
Debt to assets				-0.029	-0.227	0.683
				(0.251)	(0.248)	(0.354)*
Sales growth	0.401			0.335		
-	(0.288)			(0.282)		
Income to sales		0.436			0.426	
		(0.215)**			(0.213)**	
Lagged income to sales			0.272		`````	0.255
sales			(80.760)***			(87.564)***
Constant	-157.051	-70.945	-148.821	-125.754	-63.837	-147.088
Constant	(49.259)***	(41.501)*	(59.755)**	(47.175)***	(41.207)	(62.708)**
Observations	109	113	84	112	116	85
Pseudo R-sq	0.12	0.10	0.15	0.11	0.11	0.14

Table 4.7. Instrumental Variable Regressions

Instrumental variable regressions including industry level dummies of the firms included in the sample. We regress our dependent variables against standard controls and include the instrumented Corporate Governance index. Panel A presents regressions for the valuation measures (Tobin's Q and PTBR), here we use a size dummy (=1 for firms on the top 10% of the total asset distribution) and Mexico City (=1 for firms legally located on Mexico City). Panel B presents regressions for the performance measures; here we instrument the CGI using the size dummy and an equity-listing dummy (this variable is not available for the valuation measures because firms with bonds does not have any market valuation measure available). Finally, panel C presents the results for the dividend payout tobit instrumental variables regressions, where we use the same instruments as in Panel B. * significant at 10%; ** significant at 5%; *** significant at 1%. Robust standard errors are shown in parentheses. All variables are described in Appendix A.2.

			luation regressions				
		Tobin's Q			PTBR		
CG Index	3.429	3.100	3.316	5.596	7.545	8.747	
	(2.024)*	(1.851)*	(2.147)	(3.315)*	(4.749)	(6.760)	
log(Net sales)	0.039	0.017	0.076	0.020	-0.012	0.009	
	(0.030)	(0.034)	(0.038)*	(0.052)	(0.081)	(0.096)	
Financial leverage	0.039	0.009	0.035	0.087	0.041	0.098	
initiational to voluge	(0.039)	(0.026)	(0.040)	(0.061)	(0.063)	(0.108)	
Sales growth	-0.001	(0.020)	(0.040)	-0.002	(0.005)	(0.100)	
Sales glowin	(0.003)			(0.002)			
r ()	(0.003)	0.007		(0.000)	0.004		
Income to sales		0.006			0.004		
		(0.003)*			(0.007)		
Lagged income to sales			0.004			0.004	
			(0.585)			(1.546)	
Constant	-2.189	-1.727	-2.349	-3.995	-5.243	-6.520	
	(1.679)	(1.428)	(1.838)	(2.749)	(3.654)	(5.592)	
Observations	95	98	83	88	92	78	
Number of industries	31	31	30	31	31	30	
R-sq overall	0.09	0.12	0.18	0.04	0.03	0.03	
		2.33	2.15	1.21	0.03	0.03	
F test	2.11				0.92	0.33	
		ROA	formance regression:	S	ROE		
CG index	19.370	Ron	16.848	45.336	KOL	163.476	
eo maex	(9.655)**		(162.571)	(20.438)**		(912.525)	
T (, 1)							
Log (net sales)	0.272		0.501	0.811	1.816		
	(0.327)		(0.574)		(0.644) (4.377)		
Financial leverage	-0.399		-0.018	0.321			
	(0.230)*		(1.176)	(0.460)		(6.383)	
Sales growth	0.087			0.215			
C .	(0.028)***			(0.057)***			
Income to sales							
r 1. , 1			0.000			0.005	
Lagged income to sales			0.228			0.285	
			(12.559)*	(83.352)			
Constant	-13.579		-15.437	-35.689 -142.795			
	(7.257)*		(137.360)	(15.496)**		(779.293)	
Observations	122		94	123		92	
Number of industries	31		31	30		30	
R-sq overall	0.11		0.26	0.08		0.05	
F test	5.76		5.55	6.97		1.34	
	5.70	Danal C. J	5.55 Dividend regressions	0.97		1.34	
		Funei C: I	-	end payout			
CG index		201.662	Divide	pujou	289.307		
		(136.052)			(219.096)		
Log (net sales)		9.514			7.288		
Log (liet sules)		(2.820)***			(4.001)*		
Financial lawarana							
Financial leverage		3.705			0.783		
		(3.218)			(0.008)		
Sales growth		0.316					
		(0.316)					
Income to sales					0.466		
					(0.506)		
Constant		-239.088					
Constant		(116.731)**		-290.529			
Observations		109			(0.084)*** 113		
Wald chi2		28.36			22.61		
		78 36			7761		

 Table 4.8. Correlation Matrix of the Dependent Variables, the CG Index and its Components

 This table presents the pair wise correlation matrix of the dependent variables used in the regressions, the Corporate Governance Index and its components. P-values are shown below the correlation

 coefficients.

coencients.	CG index	Administrative board	Board composition	Board structure	Board functioning		Evaluation and compensation committee	Audit committee		Shareholders meetings	Tobin's Q	Price to book ratio	ROA	ROE
Administrative board														
	0.696													
	0.000													
Board composition	0.696	0.496												
	0.000	0.000												
Board structure	0.757	0.589	0.534											
	0.000	0.000	0.000											
Board operation	0.605	0.906	0.395	0.420										
	0.000	0.000	0.000	0.000										
Directors' and Board	0.304	0.188	0.099	0.138	0.197									
members' duties	0.000	0.021	0.228	0.091	0.016									
Compensation and	0.646	0.335	0.296	0.479	0.297	0.258								
evaluation committee	0.000	0.000	0.000	0.000	0.000	0.001								
Audit committee	0.825	0.518	0.490	0.539	0.451	0.161	0.396							
	0.000	0.000	0.000	0.000	0.000	0.049	0.000							
Finance and planning	0.601	0.306	0.176	0.313	0.230	0.098	0.567	0.399						
committee	0.000	0.000	0.032	0.000	0.005	0.235	0.000	0.000						
Shareholders meetings	0.697	0.397	0.413	0.506	0.363	0.197	0.381	0.499	0.269					
	0.000	0.000	0.000	0.000	0.000	0.016	0.000	0.000	0.001					
Tobin's Q	0.231	0.057	0.131	0.033	0.071	0.229	0.081	0.177	0.191	0.145				
	0.016	0.560	0.176	0.733	0.465	0.017	0.403	0.067	0.048	0.133				
Price to book ratio	0.183	0.118	0.050	0.018	0.071	0.145	0.138	0.156	0.165	0.136	0.867			
	0.065	0.236	0.620	0.856	0.477	0.146	0.168	0.117	0.098	0.173	0.000			
ROA	0.088	0.099	0.026	0.129	0.108	0.034	0.109	0.053	0.065	-0.004	0.414	0.402		
	0.303	0.248	0.761	0.130	0.207	0.694	0.202	0.535	0.444	0.960	0.000	0.000		
ROE	-0.014	0.032	-0.117	-0.042	0.079	0.037	0.101	-0.037	0.084	-0.051	0.453	0.365	0.860	
	0.876	0.717	0.176	0.628	0.360	0.667	0.246	0.668	0.331	0.560	0.000	0.000	0.000	
	0.102	0.007	0.158	0.105	0.063	0.062	0.032	0.080	-0.040	0.059	0.271	0.233	0.339	0.299
Dividend payout	0.266	0.940	0.085	0.254	0.497	0.503	0.730	0.388	0.665	0.523	0.008	0.029	0.000	0.002

Table 4.9. Regressions for Corporate Governance Sub-Indices

This table shows the regression coefficients taken from industry fixed effects models controlling by log (net sales), financial leverage and sales growth. For the case of the dividend payout ratio, we ran a tobit model controlling for all the above and industrial sector dummies. * significant at 10%; ** significant at 5%; *** significant at 1%. Robust standard errors in parentheses

		Price to book			Dividend
	Tobin's Q	ratio	ROA	ROE	payout
CG index	1.010	1.175	7.368	13.005	93.726
	(0.432)**	(0.663)*	(4.434)*	(9.353)	(42.878)**
Administrative board	0.605	1.619	8.698	17.580	53.442
(Aggregate of all three bellow)	(0.575)	(0.868)*	(4.160)**	(9.527)*	(43.745)
Board composition	0.358	0.360	3.770	5.430	76.031
	(0.246)	(0.405)	(3.172)	(5.995)	(28.685)***
Board structure	-0.137	-0.385	4.747	8.535	23.797
	(0.216)	(0.340)	(2.197)**	(4.782)*	(20.794)
Board operation	0.599	1.029	8.528	17.021	64.080
	(0.382)	(0.630)	(3.584)**	(8.230)**	(37.694)*
Director's and Board members' duties	0.780	0.875	4.863	6.662	91.951
	(0.418)*	(0.610)	(5.391)	(10.458)	(51.153)*
Compensation and Evaluation	0.120	0.167	2.131	5.009	22.506
committee	(0.090)	(0.156)	(1.360)	(2.868)*	(12.677)*
Audit committee	0.922	0.664	1.814	0.440	47.971
	(0.458)**	(0.737)	(4.455)	(9.027)	(38.369)
Finance and planning committee	0.183	0.280	1.396	2.324	8.289
	(0.086)**	(0.125)**	(1.216)	(2.418)	(10.505)
Shareholders meetings	0.414	0.714	2.555	7.930	33.978
	(0.259)	(0.467)	(3.362)	(6.415)	(29.647)

Appendix A.1. Variable Definitions

This table describes the variables collected for the 49 countries included in our study. The first column gives the name of the variable. The second column describes the variable and gives the range of possible values. The third column provides the sources from which the variable was collected.

Variable	Description	Sources
Legal Origin	Identifies the legal origin of the Company Law or Commercial Code of each country. Equals 1 if the origin is English Common Law; 2 if the origin is the French Commercial Code; and 3 if the origin is the German Commercial Code.	La Porta et al., (1998) collected from "Foreign Law Encyclopedia of Commercial Laws of the World."
Proxy by mail allowed	Equals one if the Company Law or Commercial Code allows shareholders to mail their proxy vote to the firm, and zero otherwise.	La Porta et. al., (1998)
Vote by mail	Equals one if the law explicitly mandates or sets as a default rule that: (a) proxy solicitations paid by the company include a proxy form allowing shareholders to vote on the items on the agenda; (b) a proxy form to vote on the items on the agenda accompanies notice to the meeting; or (c) shareholders	Djankov et al. (2005)
	vote by mail on the items on the agenda (i.e. postal ballot); and zero otherwise.	
Shares not blocked	Equals one if the Company Law or Commercial Code does not allow firms to require that shareholders deposit their shares prior to a General Shareholders Meeting thus preventing them from selling those shares for a number of days, and zero otherwise.	La Porta et al. , (1998)
Shares not deposited	Equals 1 if the law does not require, nor explicitly permits companies to require, shareholders to deposit with the company or another firm any of their	Djankov et al. (2005)
	shares prior to a general shareholders meeting.	
Cumulative voting or proportional representation	Equals one if the Company Law or Commercial Code allows shareholders to cast all of their votes for one candidate standing for election to the board of directors (cumulative voting) or if the Company Law or Commercial Code allows a mechanism of proportional representation in the board by which minority interests may name a proportional number of directors to the board, and zero otherwise.	La Porta et al. , (1998) Djankov et al. (2005)
Capital to call a Meeting	It is the minimum percentage of ownership of share capital that entitles a shareholder to call for an Extraordinary Shareholders' Meeting. It ranges from one to 33 percent.	La Porta et al. , (1998) Djankov et al. (2005)
Preemptive rights	Equals one when the Company Law or Commercial Code grants shareholders the first opportunity to buy new issues of stock and this right can only be waved by a shareholders' vote, and zero otherwise.	La Porta et al. , (1998) Djankov et al. (2005)
Oppressed minorities	Equals one if the Company Law or Commercial Code grants minority shareholders either a judicial venue to challenge the decisions of management or of the assembly or the right to step out of the company by requiring the company to purchase their shares when they object to certain fundamental changes, such as mergers, assets dispositions and changes in the articles of incorporation. The variable equals zero otherwise. Minority shareholders are defined as those shareholders who own 10 percent of share capital or less.	La Porta et al. , (1998) Djankov et al. (2005)
Anti directors rights index	An index aggregating the shareholder rights which we labeled as "anti-director rights." The index is formed by adding 1 when: (1) the country allows shareholders to mail their proxy vote to the firm; (2) shareholders are not required to deposit their shares prior to the General Shareholders' Meeting; (3) cumulative voting or proportional representation of minorities in the board of directors is allowed; (4) an oppressed minorities mechanism is in place; (5) 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); or (6) shareholders have preemptive rights that can only be waved by a shareholders' vote. The index ranges from 0 to 6.	La Porta et al. , (1998) Djankov et al. (2005)
Disclosure requirements index	The index of disclosure equals the arithmetic mean of: (1) Prospect; (2) Compensation; (3) Shareholders; (4) Inside ownership; (5) Contracts Irregular; (6) and Transactions.	La Porta et al. (2006)

Variable	Description	Sources
Liability standards index	The index of liability standards equals the arithmetic mean of: (1) Liability standard for the issuer and its directors; (2) Liability standard for distributors; and (3) Liability standard for accountants.	La Porta et al. (2006)
Public enforcement index	The index of public enforcement equals the arithmetic mean of: (1) Supervisor characteristics index; (2) Rulemaking power index; (3) Investigative powers index; (4) Orders index; and (5) Criminal index.	La Porta et al. (2006)
Ex-ante private	Index of ex-ante control of self-dealing transactions. Average of approval by	Djankov et al. (2005)
control of self dealing	disinterested shareholders and ex-ante disclosure.	Djunkov et ul. (2000)
Ex-post private	Index of ex-post control over self-dealing transactions. Average of disclosure	Djankov et al. (2005)
control of self dealing	in periodic filings and ease of proving wrongdoing. Ranges from zero to one.	Djulkov et ul. (2005)
Anti self dealing index	Average of ex-ante and ex-post private control of self-dealing.	Djankov et al. (2005)
Public enforcement of self dealing	Index of public enforcement. Ranges from 0 to 1. One quarter point when each of the following sanctions is available: (1) fines for the approving body; (2) jail sentences for the approving body; (3) fines for Mr. James; and (4) jail	Djankov et al. (2005)
	sentence for Mr. James.	
Efficiency of judicial Assessment of the "efficiency and integrity of the legal environment as it affects business, particularly foreign firms" produced by the country-risk rating agency <i>Business International Corporation.</i> It "may be taken to represent investors" assessments of conditions in the country in question". Average between 1980-1983. Scale from 0 to 10, with lower scores lower efficiency levels.		La Porta et al. , (1998)
Rule of law	Assessment of the law and order tradition in the country produced by the country-risk rating agency <i>International Country Risk</i> (ICR). Average of the months of April and October of the monthly index between 1982 and 1995. Scale from 0 to 10, with lower scores for less tradition for law and order.(We changed the scale from its original range going from 0 to 6).	La Porta et al. , (1998)
Corruption		
Accounting standards		
Court formalism to collect a bounced to be the control of evidence, (v) control of superior review, (vi) engagement formalities, and (vii) independent procedural actions. The index ranges from 0 to 7, where 7 means a higher level of control or intervention in the judicial process.		Djankov et al. (2003)
Stock market capitalization to GDP	Ratio of the market capitalization (also known as market value, which is the share price times the number of shares outstanding) of listed domestic companies (the domestically incorporated companies listed on the country's stock exchanges at the end of the year) divided by the GDP (in millions).	La Porta et al. (1998) for Tab 2.6 and World Bank (2005) for Figure 3.1.

Variable	Description	Sources
Listed firms per million pop.	Ratio of the listed domestic companies are the domestically incorporated companies listed on the country's stock exchanges at the end of the year (this indicator does not include investment companies, mutual funds, or other collective investment vehicles) to its population (in millions).	La Porta et al. (1998) for Table 2.6 and World Bank (2005) for Figure 3.2.
IPO's to GDP	Average of the ratio of the equity issued by newly-listed firms in a given country (in thousands) to its gross domestic product (in millions) over the period 1996-2000.	La Porta et al. (2006)
Block premium	"The block premia is computed taking the difference between the price per share paid for the control block and the exchange price two days after the announcement of the control transaction, dividing by the exchange price and multiplying by the ratio of the proportion of cash flow rights represented in the controlling block." We use the country's sample media.	La Porta et al. (2006), taken from Dyck and Zingales (2004)
Ownership concentration	Average percentage of common shares not owned by the top three shareholders in the ten largest non-financial, privately-owned domestic firms in a given country. A firm is considered privately-owned if the State is not a known shareholder in it.	La Porta et al. (1999), Hartland-Peel (1996) for Kenya, Bloomberg and various annual reports for Ecuador, Jordan, and Uruguay.
Trading volume to GDP	Total trading volume divided by the country's GDP (expressed in 2001 US\$) of a certain country in a given year.	World Bank (2005)
Trading volume to market capitalization	Total trading volume divided by the country's total market capitalization (expressed in 2001 US\$) of a certain country in a given year.	Standard & Poor's (2005) and World Bank (2005)
Number of public offerings in Mexico	Number of total public offerings registered in the Mexican stock exchange. Source: World Bank and MSE	Martínez and Werner (2002)
Mexican firms issuing equity abroad	Total number of Mexican firms issuing equities in external financial markets.	Martínez and Werner (2002)
New Mexican firms issuing equity through ADRs	Number of Mexican firms incorporated each year to US stock markets through the issuance of ADRs.	Bank of New York
Firms listed in US markets/Firms listed in domestic markets	Quotient of the number of firms listed in US markets and the number of firms listed in domestic markets.	Bank of New York and Standard & Poor's (2005)
Firms with ADRs in the US/Firms listed in domestic markets	Quotient of the number of firms with ADRs in the US and the number of firms listed in domestic markets.	Bank of New York and Standard & Poor's (2005)
Price to book value of equity	Quotient between the market value of equity and the book value of equity	Standard & Poor's (2005)
Dividend yield	Dividend yield, measured in percentage points.	Standard & Poor's (2005)

Appendix A.2. Variable Definitions

This table describes the variables used in the empirical section of the paper. All variables were taken from each firm's annual financial report, the Corporate Governance Code of Best practices and from each firm's general statement. All reports are available on the Mexican Stock Exchange web site.

Tobin's Q	Defined as the market value of equity (actual shares outstanding times the closing price
	of the period)) plus total liabilities divided by total assets.
Price to book ratio	Ratio between the market value of equity and the book value of equity.
ROA	Ratio between net income and total assets. Expressed in percentage points
ROE	Ratio between net income and the book value of equity (total assets minus total liabilities). Expressed in percentage points
Dividend payout	Ratio between the dividends paid and net income. Expressed in percentage points.
Log (net sales)	Natural logarithm of net sales, expressed in millions of US dollars.
Financial leverage	Ratio between the total assets and the book value of equity.
Debt to assets Sales growth	Ratio between total debt and total assets. Expressed in percentage points. Percentage change in net sales.
Income to sales	Ratio between net income and net sales. Expressed in percentage points.
Lagged income to sales	Mean of the ratio between net income and net sales for the period 1997-2001. Expressed in percentage points.
Size (top 10%)	Dummy variable that takes the value of one when the company is on the top 10% of the total asset distribution and zero otherwise.
Located in Mexico city	Dummy variable that takes the value of one when the company is legally located in Mexico City and zero otherwise.
Equity	Dummy variable that takes the value of one when the company has an equity trading in the stock market and zero when it has bonds
CG index	Mean of the corporate governance index for the years 2003 and 2004. This variable is between zero and one and represents the accomplishment of the corporate governance principles stated in the questionnaire that all listed companies have to present to the Mexican Stock Exchange every year.