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## Corporate Governance, Investor Protection, and Performance in Emerging Markets

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#### **Abstract**

Recent research studying the link between law and finance has concentrated on country-level investor protection measures and focused on differences in legal systems across countries and legal families. Klapper and Love extend this literature and provide a study of firm-level corporate governance practices across emerging markets and a greater understanding of the environments under which corporate governance matters more. Their empirical tests show that better corporate governance is highly correlated with better operating performance and market valuation. More important, the authors provide

evidence showing that firm-level corporate governance provisions matter more in countries with weak legal environments. These results suggest that firms can partially compensate for ineffective laws and enforcement by establishing good corporate governance and providing credible investor protection. The authors' tests also show that firm-level governance and performance is lower in countries with weak legal environments, suggesting that improving the legal system should remain a priority for policymakers.

This paper—a product of Finance, Development Research Group—is part of a larger effort in the group to study corporate governance around the world. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Agnes Yaptenco, room MC3-446, telephone 202-473-1823, fax 202-522-1155, email address ayaptenco@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at lklapper@worldbank.org or ilove@worldbank.org. April 2002. (32 pages)

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# Corporate Governance, Investor Protection and Performance in Emerging Markets

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#### 1. Introduction

Previous research studying the link between law and finance has concentrated on corporate governance around the world, focusing on differences in legal systems across countries and legal families. This rapidly developing body of literature began with the finding that the laws that protect investors differ significantly across countries, in part because of differences in legal origins (see La Porta, Lopez-de-Silanes, Shleifer and Vishny (1998). Recent literature finds that cross-country differences in laws and their enforcement affect ownership structure, dividend payout, availability and cost of external finance and market valuations. <sup>1</sup>

However, many provisions in investor protection laws may not be binding since firms have the flexibility in their corporate charters and bylaws to either choose to "opt-out" and decline a specific provision or adopt additional provisions not listed in the legal code (see Easterbrook and Fischel (1991), Black and Gilson (1998)). It is likely, therefore, that not all firms in the same country offer the same degree of protection to their investors. This raises the following questions that we explore: Do differences in investor protection across firms within the same country matter? Can a firm that is "stuck" in a country with a weak legal environment distinguish itself and afford more protection to its investors by adopting good corporate governance practices, such as greater firm disclosure and stronger minority shareholder rights? Finally, does the adoption of good corporate governance practices matter more in countries with overall good or bad legal systems?

<sup>&</sup>lt;sup>1</sup> For example, La Porta, Lopez-de-Silanes, Shleifer and Vishny (1999a, 1999b, 2000), Claessens, Djankov and Lang (2000), Berkowitz, Pistor and Richard (2002), Lombardo and Pagano (2000), Beck, Demirguc-Kunt and Levine (2001) and others.

Most existing literature using firm-level corporate governance provisions has studied exclusively US and OECD firms (see Shleifer and Vishny (1997) and Maher and Andersson (2000) for comprehensive surveys). For example, a recent paper by Gompers, Ishi and Metrick (2001) uses differences in takeover defense provisions to create a corporate governance index of US firms and finds that firms with stronger shareholder rights have better operating performance, higher market valuation, and are more likely to make acquisitions. An exception is Black (2000), which finds that the governance practices of Russian corporations are strongly related to implied value ratios. However, a remaining gap in the literature -- that our paper attempts to fill --is a study of firm-level corporate governance practices across emerging markets and a greater understanding of the environments under which corporate governance matters more.

In a recent report, Credit Lyonnais Securities Asia (further referred as CLSA) produced corporate governance rankings for 495 firms across 25 emerging markets and 18 sectors.<sup>2</sup> The descriptive statistics presented in the report show that companies ranked high on the governance index have better operating performance and higher stock returns. We use the governance rankings produced by CLSA to further investigate the relationship between governance and performance using multivariate regression analysis. Unlike the CLSA report that concentrates on returns, we use Tobin's-Q to measure the market valuation of assets and return on assets (ROA) as a measure of operating performance.<sup>3</sup>

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<sup>&</sup>lt;sup>2</sup> Credit Lyonnais Securities Asia, report titled "Saints and Sinners: Who's got religion", April 2001.

<sup>&</sup>lt;sup>3</sup> We do not use returns as a performance measure for several reasons. The first reason is the extreme volatility in returns over the last several years in emerging markets overall and particularly in Asia, which constitutes 70% of our sample. Second, even though the CLSA report suggests that firms with bad corporate governance have lower returns than better governed firms, the interpretation of this finding has to rely on market inefficiency arguments—instead of considering poor governance as a source of risk (and therefore requiring additional compensation for this risk in the form of higher return –i.e. negative correlation between governance and performance) investors underestimate the degree of agency costs resulting from poor

We find that better corporate governance is associated with higher operating performance and higher Tobin's-Q. Not surprisingly, the country-average governance index is higher in countries with good overall legal systems. To ensure that the governance index is not proxying for country-level variables we include country fixed effects and find that the correlation with governance becomes twice as large and statistically more significant. This suggests that improvements in governance *relative* to the country-average are more important than the absolute value of the index.

We also explore the cross-country nature of our sample to study the correlation between performance measures and country-level indicators of the legal system, such as shareholder rights and the law enforcement index. We find that country-level legal efficiency indices are not robust across specifications, while the effect of the firm-level governance index is always positive and significant.

Finally, we test whether good corporate governance matters more or less in countries with weak shareholder protection and judicial efficiency. One hypothesis is that in a country with weak judicial efficiency, additional charter provisions would not be enforced and therefore firms would be powerless to independently improve investor protection. In this case we should find that governance matters less in countries with weak legal systems. An alternative hypothesis is that in a country with a weak legal system, investors would welcome even small improvements in governance relative to other firms, in which case we should find that good governance matters more in a bad legal environment. We provide an empirical answer to this question by interacting the firm-level

governance practice which results in lower returns (i.e. positive correlation between governance and performance). Gompers et al. (2001) uses a similar argument to explain their results.

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corporate governance index with measures of legal efficiency and shareholder rights. The main contribution of this paper is our finding that good governance practices are more important in countries with weak shareholder rights and inefficient enforcement. This finding has strong policy implications and suggests that recommending to firms to adopt good governance practices is even more important in countries with weak legal systems.

An important caveat of this study is the likely endogeneity of corporate governance practices. For example, a growing firm with large needs for outside financing has more incentive to adopt better governance practices in order to lower its cost of capital. We test this proposition by using the growth rate of sales as one of the determinants of governance and find significantly positive correlation. These growth opportunities should also be reflected in the market valuation of the firm, thus creating a positive correlation between governance and Tobin's-Q.<sup>4</sup> Since our governance data have no time-variation we cannot address the issue of causality directly and leave this issue for future research. However, we attempt to mitigate this problem by adding several control variables that could proxy for growth opportunities such as size, average growth in sales and the rate of investment and find that our governance results are not spuriously caused by these omitted variables.

An additional source of endogeneity could arise as a result of the differences in proportion of intangible to fixed assets. For example, the composition of a firm's assets will affect its contracting environment because it is easier to monitor and harder to steal fixed assets (i.e. machinery and equipment) then "soft" capital (intangibles, R&D capital, and even some short-term assets, such as inventories). Therefore, a firm operating with a

<sup>4</sup> Similar endogeneity problem arises in the studies of ownership and performance, as argued by Himmelberg, Hubbard and Palia (1999) who propose panel data techniques and instrumental variables to address this question.

higher proportion of intangible assets may find it optimal to adopt stricter governance mechanisms to prevent misuse of these assets. We find support for this hypothesis using a capital intensity measure, which is significantly negatively correlated with governance. We also include capital intensity as an additional control variable in our performance regressions and the governance results remain significant.

The paper proceeds as follows: section 2 describes the CLSA corporate governance survey and summarizes our firm- and country-level data. Section 3 discusses potential endogeneity of governance and reports results on the determinants of corporate governance behavior. Section 4 reports our results, which include correlation tests between measures of corporate governance and legality, Tobin's-Q and return on equity (ROE.) Section 5 concludes.

#### 2. Data

The CLSA report contains CG ranking on 495 companies in 25 countries. The CLSA sample is selected based on two criteria – firms' size and investor interest. A recent paper by Khanna et al (2001) uses this data to study convergence of corporate governance practices across countries and confirms the sample selection criteria based on their detailed study of India.

The corporate governance (CG) ranking compiled by CLSA is a composite of 57 qualitative, binary (yes/no) questions, designed to avoid subjectivity. Appendix 1 reports an abbreviated version of the questionnaire. Each question is constructed such that answer 'Yes' adds one point to the governance score. The analysts are given strict instructions to answer negatively if they have any doubts or if there was any unresolved controversy over

the minority shareholder rights. According to CLSA, about 70% of the questions are based on objective facts and remaining questions represent analysts' opinions. Unfortunately, reliance on analysts' opinions worsens the endogeneity problem, as it is likely that analysts could rely on past performance to form their opinions. This is likely to be worse for regressions including past returns and is one of the reasons why we do not study returns.

The questions cover seven broad categories: management discipline, transparency, independence, accountability, responsibility, fairness and social awareness. Our main governance index, further referred as GOV, is the sum of first six categories and excludes the social awareness category, which is not relevant for corporate governance (although our results are robust to inclusion of this category). Furthermore, we do not study the disaggregated indices, since the categories seem to overlap and are categorized with some subjectivity. For example, the distinction between the Independence and Accountability sections is imprecise and the Responsibility and Fairness sections both reflect minority shareholder rights (as are the questions 20 and 22 from the Independence section).

In order to include firm-level accounting data, we merged the CLSA data with Worldscope data (June 2001 CD-ROM). To avoid the anomalous period of the Asian Crisis we included only firms that had available accounting data beginning in at least 1998. We started with 451 firms with non-missing accounting data. After excluding 50 banks, 20 firms in Eastern Europe and China (excluded because of unavailable legal indices), and 7 firms in countries with less than 3 firms each (Argentina, Columbia, Greece and Mexico),

<sup>5</sup> For example, question 28 could easily belong to the Independence section, questions 37 and 39 could belong to the Discipline section, question 45 to Transparency section etc.

<sup>&</sup>lt;sup>6</sup> Our sample contains 29 firms with 1998 as the last available data. We include in all regressions a dummy for year 1998 to control for time effects. The dummy is always negative and significant (it is not reported) but does not affect the significance of our governance results.

our sample was reduced to 374 firms in 14 countries – Brazil, Chile, Hong Kong, India, Indonesia, Korea, Malaysia, Pakistan, Philippines, Singapore, South Africa, Taiwan, Thailand, Turkey.<sup>8</sup>

The distribution of our GOV index across countries is shown in Table 1, Panel A.

Note that our sample is not equally distributed across countries - 68% of firms are in East

Asia, 19% of firms are in South Asia, and 11% of firms are in Latin America. Mean GOV

rankings overall are 54.16 and vary from a country average of 31.85 in Pakistan to 66.53 in

South Korea. There is also great variation within countries – for example, the corporate

governance ranking of firms in Pakistan varies from 17.25 to 66.68. These summary

statistics highlight the firm-specific differences in corporate governance practices even

within countries and families of legal origins.

We use two main performance measures: Tobin's-Q as a measure of market valuation of the firm and return on assets (ROA) as a measure of operating performance. Substituting other measures of operating performance – such as gross margin and return on equity – give similar results. Summary statistics and sample distributions for Tobin's-Q and ROA are given in Table 1, Panel B. For 1999, the average Tobin's-Q is 2.09 and varies from country-average 1.16 in Turkey to 3.67 in Taiwan. The median Q (1.39) is slightly higher then the median reported in other studies (for example La Porta et al. (1999))

<sup>&</sup>lt;sup>7</sup> Since a few variables are missing for some firms, the sample size varies slightly depending on the set of included variables.

<sup>&</sup>lt;sup>8</sup> We further excluded firms with Tobin's Q above 10 (which excludes 17 firms - slightly less than 5% of the sample) and firms with ROA above the 99<sup>th</sup> and below the 1<sup>st</sup> percentiles (6 firms). To use as many observations as possible we exclude only Q outliers in Q regressions and ROA outliers in ROA regressions – therefore the sample in ROA regressions is slightly different from the sample in Q regressions. In addition some of the control variables are missing for some observations which further causes slight variation in the sample size across regressions.

<sup>&</sup>lt;sup>9</sup> Tobin's-Q is defined as the market value of assets (calculated as book value of assets minus book value of equity plus market value of equity) over book value of assets, and return on assets (ROA) is defined as net income over total assets.

reflecting the overall good performance of the global economy in 1999. The standard deviation is 1.68, reflecting the significant variation in performance across firms. The country-average ROA is 0.08, with the highest average performance of 0.11 in India and the lowest performance of 0.01 in Brazil.

We add three country-level measures of legal efficacy. The first is Judicial Efficiency, which is an index constructed by the International Country Risk Guide (2000). The second is Shareholder Rights, which is the sum of dummies identifying one-share/one-vote, proxy by mail, unblocked shares, cumulative vote/proportional representation, preemptive rights, oppressed minority, and % of shares needed to call a shareholders meeting (La Porta et al., 1998.) The third is Legality, which is an index of legal system and institutional environment constructed as a weighted average of Judicial Efficiency (same as our first index), Rule of Law, Corruption, Risk of Expropriation, and Risk of Contract Repudiation (this index is constructed using principal components analysis by Berkowitz, Pistor and Richard, 2002). We use three different measures in order to cover separately the existence of laws (Shareholder Rights) and the effectiveness of their implementation (Judicial Efficiency), as well as the overall legal environment (Legality.)

Summary statistics and sample distributions for the legal indicators are given in Table 1, Panel C. The average Judicial Efficiency is 13.88 (out of 20), the average Shareholder Rights is 3.57 (out of 5), and the average Legality is 6.30 (out of 10.) There is large variation across countries, emphasizing regional and global difference in the quality and effectiveness of laws around the world.

#### 3. Determinants of Governance

#### 3.1. Hypotheses

As discussed in the introduction, corporate governance is likely to be endogenously determined. In this section we discuss variables that in theory could be associated with firms adopting better governance mechanisms and present empirical results in support of these theories. We deliberately do not include any performance-related measures as governance determinants as we will study governance-performance relationships in the next section. Recognizing the endogeneity of the governance, we can only interpret all our results as partial correlations. However, the exercise in this section helps us better understand the potential sources of this endogeneity.

The arguments below follow closely Himmelberg, Hubbard and Palia (1999) who argued that the level of managerial ownership is endogenously determined by the firm's contracting environment and therefore could spuriously pick up the effect of this unobserved heterogeneity in the ownership-performance regressions. As managerial ownership is only one of the governance mechanisms, the arguments could easily be transferred to other mechanisms such managerial compensation, board structure, disclosure and other minority shareholder protections, which are combined into our governance index.

We consider several sources of the variation in contracting environments. The most obvious is the overall country-level measure of shareholder rights and their enforcement. If a country's laws offer weak shareholder protection it might be costly for firms to adopt different provisions in their corporate charters because it will be difficult for investors and judges to understand non-standard contracts, as argued by La Porta et al. (1998). Therefore, firms in countries with overall weak legal environments may not have much flexibility to

improve their investor protection and may therefore have lower corporate governance indices, on average. In the extreme case, for example, firms would be completely powerless to change the overall legal environment with internal governance mechanisms. <sup>10</sup> However, our finding that there is substantial variation in the governance indicators within countries and that governance is significantly correlated with performance after controlling for country effects (as discussed in section 4) implies that firms are not completely powerless and do have some flexibility to improve their governance mechanisms.

In addition to country-level differences in legal efficiency, it is likely that there will be variation across firms within contracting environments, a point proposed by Himmelberg et al. (1999) and further developed by Himmelberg, Hubbard and Love (2001). For example, the composition of a firm's assets will affect its contracting environment because it is easier to monitor and harder to steal fixed assets (i.e. machinery and equipment) then "soft" capital (intangibles, R&D capital, and even some short-term assets, such as inventories). Therefore, a firm operating with a higher proportion of intangible assets may find it optimal to adopt stricter governance mechanisms to prevent misuse of these assets, i.e. we should observe negative correlation between the proportion of fixed assets and governance. It is important to keep this relationship in mind while estimating the effect of governance on performance, since the level of intangibles may result in higher Q since in general, the market values intangibles higher then their book value. Similarly, operating performance should be higher since the denominator (for example, total assets) does not fully account for all intangibles. In our performance

<sup>&</sup>lt;sup>10</sup> In another extreme, if the firm could completely "overwrite" the legal code in their own contracts, we would observe better governance in countries with bad legal system as these firms will be more in "need" of

regressions we control for asset composition and find that the effect of governance on performance is not driven by this source of heterogeneity. We use fixed capital (i.e. property plant and equipment) to total sales ratio, denoted K/S, as a measure of the relative importance of fixed capital in the firm's output. 11

Another source of endogeneity could arise because of differences in unobserved growth opportunities. Firms with good growth opportunities will need to expand and raise external financing and may therefore find it optimal to improve their governance mechanisms as better governance and better minority shareholder protection will likely to lower their cost of cost of capital. 12 If Tobin's-O is higher for firms with good growth opportunities, this could also be a cause of endogeneity of governance in the performance regressions and result in positive spurious correlations with governance. Unfortunately there is no good measure of the growth opportunities besides Tobin's-Q. As an arguably imperfect measure, we use average real growth rate in sales for the last 3 years, denoted SalesGR, as a proxy for future growth (and growth opportunities). 13

Finally, we also explore the effects of differences in firm size on governance. The effect of size is ambiguous as large firms may have greater agency problems (because it is harder to monitor them or because of the "free cash flows" argument of Jensen (1986)) and therefore need stricter governance mechanisms to compensate. Alternatively, small firms

good governance mechanisms to compensate for their bad legal system. However, if the enforcement of contracts is weak, the firm will not be able to do that as is the fact that the legal system does matter.

<sup>&</sup>lt;sup>11</sup> Himmelberg et al. (1999) also use research and development intensity (R&D) and advertising expenses as additional measures of the "intangibility" of the assets. Unfortunately, the Worldscope database does not provide variables with advertising expenses and the R&D data is unavailable for most firms in our sample. <sup>12</sup> See La Porta et. al. (1999a), Lombardo and Pagano (2000) and Himmelberg, Hubbard and Love (2001) among others on the relationship between investor protection and the cost of capital.

<sup>&</sup>lt;sup>13</sup> Past growth rates will be correlated with future growth if there are investment adjustment costs, "time to build" (i.e. it takes several periods to make new investment fully operational), or if the shocks to productivity are serially correlated.