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Predicting corporate governance in emerging markets

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This paper investigates what predicts corporate governance in emerging markets. Specifically, we examine what predicts governance *changes* and the *level* of governance itself. To conduct this study, we utilize a unique dataset from AllianceBernstein that consists of monthly firm-level corporate governance ratings for 24 emerging market countries for almost seven years. Since the AllianceBernstein ratings are time-series data, they allow us to determine the direction of change in a firm's corporate governance, and the timing of these changes. Using these data, we find two main results. First, as firms grow they are more likely to improve their governance. Second, the *level* of political risk where the firm resides is negatively and significantly related to the *level* of firm governance but positively and significantly related to *changes* in firm governance. Hence, firm governance is better in countries with lower political risk but firms are more likely to improve their governance in countries with higher political risk.

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1. Introduction

A large literature has generally found that better governance is linked to better performing and valued firms in emerging markets.¹ Despite this evidence, and the clear incentive to improve their governance, many similar firms make very different governance choices. To better comprehend why firms choose different governance schemes, one needs to examine what predicts firm governance in these emerging economies. This paper adds to this discussion.

There are number of papers that have begun to examine what factors predict firm governance decisions in emerging markets. However, the findings of these papers have been disparate. For example, [Doidge et al. \(2007\)](#) and [Durnev and Fauver \(2010\)](#) find that country conditions explain much more of the variance in firm governance ratings than firm characteristics. Indeed, according to [Doidge et al. \(2007\)](#), firm characteristics don't predict governance much at all. Conversely, [Black et al. \(2006b\)](#), [Durnev and Kim \(2005\)](#), [Klapper and Love \(2004\)](#) and [Klapper et al. \(2006\)](#) all find that some firm characteristics are important to governance decisions, however they find that quite different firm characteristics are predictive.

Case in point, while [Durnev and Kim \(2005\)](#) find that firm growth, the firm's need for equity finance, and the amount of insider ownership predict better governance, [Black et al. \(2006b\)](#) find that none of these characteristics are significant. Instead they find that firm size and firm risk predict better governance but little else does. To make matters more complicated, [Klapper and Love \(2004\)](#) find that capital intensity of the firm is a predictor of worse governance while the other papers do not find such a conclusion. Indeed, the one consistent finding seems to be that few factors, if any, consistently predict governance. In fact, [Black et al. \(2006b\)](#) test 17 different factors and many controls, and find that only firm size and firm risk have any consistent predictive ability governance in Korea. Indeed, other than these two variables nothing else predicts governance decisions in Korea. In another paper, [Balasubramanian et al. \(2010\)](#) also find that very little predicts governance when examining governance decisions in India.

In this paper we also examine what factors predict firm governance in emerging markets. However, we do this in a different way than the previously mentioned papers. While the other papers all use cross-sectional data, in this paper we use a dataset from AllianceBernstein that consists of monthly, time-series, firm-level, corporate governance ratings for 24 emerging market countries that span almost seven years. These data allow us to examine *changes* in corporate governance. Hence, while previous studies can examine what country and firm characteristics are linked to better governance, we can examine what, if anything, is causing firm governance to *improve* or *deteriorate* over a period of time. We feel this is worthy supplement to the cross-sectional approach as it allows us to see the effects of changes (in the country and in the firm) on firm governance and thus assess if such changes are worth pursuing to improve governance. While our major focus is on predicting changes in governance, we also use the more traditional approach of investigating what predicts the level of governance. We do this using a fixed effects, panel approach.

The rest of this paper is organized as follows. Section 2 describes the data used in the study. Section 3 provides the methodology. In Section 4 we present our results and we conclude with Section 5.

2. Data

2.1. AllianceBernstein corporate governance ratings

Our study utilizes corporate governance ratings compiled by AllianceBernstein. These ratings were used for internal purposes and have been used by [Morey et al. \(2009\)](#). They are constructed by

¹ Many studies have found this relationship in emerging markets. In single country studies the list includes [Leal and Carvalhada-Silva \(2005\)](#), and [Braga-Alves and Shastri \(2011\)](#) (Brazil); [Atanasov et al. \(2010\)](#) (Bulgaria); [Bai et al. \(2004\)](#), and [Beltratti and Bortolotti \(2007\)](#) (China); [Black and Khanna \(2007\)](#), and [Balasubramanian et al. \(2010\)](#) (India); [Black et al. \(2006a, 2008\)](#), and [Black and Kim \(2012\)](#) (Korea); [Black \(2001\)](#), and [Black et al. \(2006\)](#) (Russia). In addition there are a number of cross-country studies that have documented the same relationship. These include [Klapper and Love \(2004\)](#), [Durnev and Kim \(2005\)](#), [Doidge et al. \(2007\)](#), [De Nicolò et al. \(2008\)](#), [Aggarwal et al. \(2009\)](#), [Chhaochharia and Laeven \(2009\)](#), [Morey et al. \(2009\)](#), and [Durnev and Fauver \(2010\)](#). Also for an excellent recent survey see [Love \(2010\)](#). The same positive relationship between governance and performance has been found in the U.S. in [Gompers et al. \(2003\)](#), [Larcker et al. \(2007\)](#), [Bebchuk et al. \(2009\)](#), and [Brown and Caylor \(2009\)](#).

AllianceBernstein to improve investment decision making in emerging markets. The ratings are calculated every month for all firms within the AllianceBernstein Capital Emerging Market Universe during the period November 2001 through September 2008 (83 months). The AllianceBernstein Capital Emerging Markets Universe consists of approximately 500 firms from many emerging market countries. Inclusion in the AllianceBernstein universe is determined by firms' inclusion in indexes generated by index providers, particularly the Morgan Stanley Capital International Emerging Markets Index (MSCI EM). While the AllianceBernstein data do not include a number of non-growth oriented firms in the MSCI EM, it does consistently include about 75 percent of the total market capitalization of MSCI EM.²

As stated above, the corporate governance ratings are calculated on a monthly basis for each firm within the AllianceBernstein universe. The ratings are based on AllianceBernstein analysts' answers to a questionnaire that consists of 58 questions.³ The questions primarily require answers of yes or no, with scores provided for each yes or no answer. For example, one question asks "Is senior management accessible to investors?" If the analyst answers "yes", then the firm receives five points; if the analyst answers "no", then the firm receives zero points. The highest possible score, representing the highest firm-level corporate governance rating that a firm can receive, is 111 while the lowest is zero.

Executives from AllianceBernstein would only allow a broad sketch of what is contained in the questionnaire to be disclosed, as they felt that their competitors would gain from the disclosure of the full questionnaire. Given that they were generous enough to provide us the data, we respected their position.⁴ Despite the lack of full disclosure, we provide some broad outlines of the questionnaire below:

2.1.1. Information disclosure

This section determines whether the company produces financial reports in a timely fashion, maintains an English language webpage, has an American Depositary Receipt (ADR), and other disclosure issues.⁵ There are eight questions with the highest possible score being an eight. Hence only eight out of 111 points, or about seven percent of the final firm-level corporate governance score, come from this section.

2.1.2. Management access and fair disclosure

In this section there is a question for the analyst on the accessibility of management. There are two questions that deal with whether or not the company has an investor relation program and whether the analyst feels it is useful and effective to investors. These questions on investor relations are put in the questionnaire because many companies deny access to their executives out of fear of insider trading and, instead, use investor relations department as the main voice of information to investors. The analyst also answers a question regarding whether the company discloses information to all investors at the same time (fair disclosure) or it selectively discloses information to certain investors first. Finally the analyst is asked a question about the possibility of insider trading on the firm (due to unfair disclosure). There are five questions with the highest possible score being a 12. Hence, about 11 percent of the score is formed from this section.

² AllianceBernstein does not run a quantitative screen to determine which firms to include in their universe. Instead, this is determined on a case-by-case basis. One of the requirements for inclusion in the AllianceBernstein Capital Emerging Markets Universe is that firms provide enough information so that corporate governance ratings can be assessed.

³ Note that the analysts who answer the questionnaire all live in the same region as the firms they survey. Most grew up in the local culture and speak the local language. Also, most of the analysts have advanced graduate degrees from top U.S. and foreign business and economics programs and have extensive experience as analysts.

⁴ For more questions regarding the questionnaire contact Ben Godridge at Benjamin.godridge@alliancebernstein.com.

⁵ We should note here that it is often difficult to disentangle governance from performance when using disclosure measures. For example, the lack of timely financial reporting is a signal of poor governance to AllianceBernstein but is also likely a sign of poor performance as it is positively correlated with financial troubles. What this means is that some of the measures that AllianceBernstein uses could be as much related to performance as they are related to governance. We thank the anonymous referee for making this point.

2.1.3. Representation of data (accounting)

The questions in this section examine the rigor and consistency of accounting methods, treatment of items such as goodwill, deferred taxation, research and development, and auditor independence. According to AllianceBernstein the best practice for firms is to use the International Financial Reporting Standards (IFRS) or U.S. GAAP. The questionnaire also evaluates transactions such as related-party loans and takes into account the company's accounting track record, deducting points for a non-mandatory change in auditors or qualification to the financial statements in the past five years. There are ten questions in this section worth a total of 13 points (about 12 percent of the overall score).

2.1.4. Value creation

This section examines whether management understands the concept of value creation and has a track history of creating value. Issues include stability of management and compensation packages that are linked to suitably challenging performance criteria. The analyst has to determine whether the company is clearly articulating a business direction.⁶ There are nine questions in this section worth a total of 24 points (about 22 percent of the overall score).

2.1.5. Board and shareholder structure

The questionnaire also examines board and ownership structure. The questionnaire contains questions on whether the board of directors is suitably qualified, including whether they have been convicted of bribery or fraud in the last three years. In addition, the questionnaire examines the degree of board independence and uses the best practices of the Institute of International Finance's Code of Corporate Governance (see [Appendix B](#)) as the role model for board independence.⁷ Basically the questions here get at the issue of whether the board and ownership structure have been set up to be beneficial to outside owners of the firm. There are 12 questions in this section worth a total of 24 points (about 22 percent of the overall score).

2.1.6. Capital management

This section examines the degree of the firm's capital efficiency, and whether the capital is used for the benefit of minority shareholders. Capital management issues are important as they explain the firm's leverage and tax positions which obviously can influence firm value in the future. For example, the questionnaire asks whether the company is making satisfactory use of its cash flow in the form of dividends or share buybacks, hedging its risks adequately and using appropriate sources of financing for projects and acquisitions.⁸ There are seven questions in this section worth 14 points (about 13 percent of the overall score).

2.1.7. Ethics, social responsibility and other

In this section, the questionnaire asks if the company has a code of ethics, whether it has an equal opportunity policy and whether it explicitly avoids employing under-age labor. It also asks whether the company does business in countries that support terrorism or deals with parties suspected of terrorist

⁶ Again value creation is a very subjective measure. Moreover, as with information disclosure we face the same issue that value creation may not be solely a governance measure but also a performance measure as firms with good value creation probably have good performance. We again thank the referee for making this point.

⁷ The Institute of International Finance's Code of Corporate Governance is a set of practical guidelines that is a standard by which investors assess corporate governance practices in emerging markets. It draws on best practices and legislation throughout the world and is tempered by consideration of practicality and enforceability. The Code was developed by a working group of the Institute of International Finance's (IIF) Equity Advisory Group (EAG), a team of senior representatives from leading international asset management firms. First published in February 2002, the Code was updated in May 2003 to reflect a changing global environment for corporate governance. The IIF Code addresses the following three areas: Company Practices and Policies, Exchange Rules and Listing Requirements, and Securities and Company Law. The Code covers the following broad elements of corporate governance: Minority Shareholder Protection, Responsibilities of the Board of Directors, Accounting and Auditing, Transparency of Ownership and Control, and the Regulatory Environment. We report the specific code in [Appendix B](#) of the paper.

⁸ As with the information disclosure and value creation sections, one could argue that the effectiveness of capital management is related to return on investment and thus represents firm performance rather than solely governance. We thank the referee for making this point.

activity. In addition, analysts are required to answer the most subjective question of the questionnaire, “Do you trust management?” This question is asked because experience has shown that management’s statements may be accurate, but they may still behave in a way that hurts minority shareholders. There are nine questions in this section worth 16 points (about 14 percent of the overall score), with the “Do you trust management” question receiving five points (about 4.5 percent of the total score) for a yes answer.

To calculate the firm-level corporate governance ratings, AllianceBernstein gives firms an A rating if their total score is above 84 out of a total of 111 points; a B rating if their score is between 56 and 83; a C rating if their score is between 28 and 55; and a D if their rating is 27 or below (note that there are no D-rated firms in our sample). Finally, at the completion of the questionnaire, the analyst is asked to provide a directional indicator as to whether he or she thinks the firm’s corporate governance is improving or deteriorating. If improving, the analyst gives a plus sign, if deteriorating the analyst gives a minus sign, and if no change is perceived then the analyst provides no sign.⁹ The plus or minus sign is then added to the above-mentioned grade to arrive at the final grade. Hence, a firm that scored a 77 on the questionnaire and was seen by the analyst as improving its corporate governance would receive a final grade of B+.

While it would be extremely useful to have the raw scores from the questionnaire to examine, for example, how each firm scored in terms of the seven categories on the questionnaire, the raw scores are not available to us as prior to 2008 AllianceBernstein did not save scores for further use. Moreover, AllianceBernstein is not willing to provide scores for the period since 2008 due to privacy concerns. Hence, the only data we have are the A, B, C, and D ratings and the plus and minus signs. Still, even with the disclosure constraints imposed by AllianceBernstein, we feel our data are extremely useful as, to the best of our knowledge, they represent the first cross-country time-series data on corporate governance in emerging markets.

Before concluding this section there are several issues we should discuss about the AllianceBernstein rating methodology. First, since the firms in the MSCI EM are generally large firms that foreign investors are interested in investing in, the AllianceBernstein ratings are disproportionately focused on large firms that have foreign investor interest and hence do not cover small firms much. As a result, we can’t assess what predicts the governance of smaller firms.

Second, another issue with the dataset is that some firms do get dropped from coverage by AllianceBernstein during our sample period while other firms are added. This happens rarely. Indeed, there are two main reasons why a firm would get dropped. The first is that the firm is deemed by analysts and their superiors to be inappropriate. This may happen due to the firm decreasing in size or due to new legal developments concerning the firm. The second reason is when one analyst is replaced by another; the new analyst may decide to cover a different firm than that covered by the previous analyst. In general, the firms that are dropped are smaller, less-well-known firms. However, since we are concerned with rating changes between the earliest and latest rating observations we do not think it is major problem with the dataset. Note also that in our research and from talking to AllianceBernstein officials there is no evidence that the governance rating drops or dramatically changes right before the firm is dropped from coverage by AllianceBernstein.

Third, and finally, we understand that the AllianceBernstein rating system is not perfect. For the most part the questions answered by the analyst tend to be objective yes or no questions, but there are many that are subjective. More importantly, the analysts may use past performance as a measure of the firm’s governance as there are a number of questions that seem to be more related to past firm performance than governance, e.g., information disclosure, value creation, and capital management. However, this being said, measuring performance rather than governance is a relatively common problem with governance indices. Indeed, a similar rating system, Credit Lyonnais Securities Asia (CLSA) has many of the same problems and has been widely used in research on governance in emerging markets. Indeed, Klapper and Love (2004, p. 708) note:

⁹ Note that the plus and minus signs are not automatically added after a firm’s governance rating changes by a grade. For example, consider a firm with B+ rating in one month. Let’s say the following month the firm’s rating was upgraded to A as the analyst’s answers to the questionnaire changed enough from the previous month. Now the firm would be considered an A firm and could be seen as improving even more than it previously did to get the A+ rating. Indeed, according to AllianceBernstein, there was no rule that before an upgrade a + had to go on; the only rule was to rate the company and put on a ± if warranted.

“According to CLSA, about 70% of the questions are based on objective facts and the remaining questions represent analysts’ opinions. Unfortunately, reliance on analysts’ opinions worsens the endogeneity problem in the governance–performance regressions, as it is possible that analysts could rely on past performance to form their opinions.”

2.2. International Country Risk Guide indices

Measuring changes in country conditions is a difficult exercise as the measures used by the previous literature are based on cross-sectional studies and thus only provide levels of country conditions rather than changes. For example, Doidge et al. (2007) use country-level variables from three previously completed studies that are based on slightly varying time periods.

Since the previous studies data do not allow us to directly measure changes in country conditions, we instead use the International Country Risk Guide (ICRG) indices provided by Political Risk Services (PRS). These indices solve the problem of computing changes in country conditions as they are time-series data. More specifically, the indices are updated monthly for 140 countries for a period beginning in the mid-1980s for most countries. ICRG calculates three types of country risk indices: an economic risk index (*ICRGE*), a financial risk index (*ICRGF*), and a political risk index (*ICRGP*). These indices range from zero through 100, with country risk increasing as the index declines. They have been used in previous literature, notably Bekaert et al. (2005, 2006).

The *ICRGE* index is composed of five variables: GDP per capita, real GDP growth, the annual inflation rate, the budget balance as percentage of GDP, and the current account balance as a percentage of GDP. The *ICRGF* index is also composed of five variables, which are foreign debt as percentage of GDP, foreign debt as a percentage of exports of goods and services, current account as a percentage of exports of goods and services, a measure of international currency reserves, and a measure of exchange rate stability. The *ICRGP* index is composed of twelve variables. These include government stability, socioeconomic conditions, corruption, law and order and other variables related to the political climate of the country. In Appendix A we explain in detail the various variables used in the ratings.

Although the ICRG indices allow us to examine changes in country conditions, they are not without limitations. For example, ICRG does not have specific data on investor protection and hence we cannot specifically examine changes in investor protection laws. This is a serious limitation because other papers such as Doidge et al. (2007) and Klapper and Love (2004) have found that stronger investor protection laws are predictive of better firm governance.

2.3. Firm characteristics

To measure changes in firm characteristics we use data from Worldscope. We use the natural log of firm sales (in U.S. dollars), return on assets, the debt to equity ratio, annual sales growth, standard deviation of weekly returns over a year, and capital expenditure (CAPEX) to the sales ratio. These data are provided on an annual basis for years 2001–2008. For market valuation purposes, we measure Tobin’s *Q* using the same method as used by Klapper and Love (2004), i.e., market value of equity plus total liabilities divided by total assets. The market value of equity is determined using the month-end price in local currency and the total liabilities and total assets are determined on an annual basis in local currency from the end of the last fiscal year. We discuss the rationale for using these variables in the next section.

We also use information from Thompson One Banker, Bank of NY Mellon’s DR Directory and Citibank’s DR Universe to gauge whether and when a firm in our sample introduced an American Depositary Receipt (ADR) during the period of our sample, November 2001–September 2008.

3. Methodology

We use an approach where the dependent variable is the change in the corporate governance rating between the latest and earliest monthly observations of the firm in the AllianceBernstein corporate governance ratings in our sample. We do this as it gives us the longest possible time horizon and thus avoids the issue of limited short-run change in country or firm characteristics. For some firms, the period between the latest and earliest rating observations represents the difference in the

AllianceBernstein ratings between the last month of the sample (September 2008) and the first month of the sample (November 2001), but for other firms the period between the last and first observations are considerably shorter in duration. Indeed, the mean number of months between the latest and earliest observations is 47.50.¹⁰ The reasons that some firms are rated for only a shorter duration are that the firms merge and or disappear, or that AllianceBernstein no longer considers the firm among its investment universe. The latter happens more frequently when the analysts change and the new analyst decides to focus on a different set of firms.

To measure the change in the AllianceBernstein ratings between the latest and earliest observations we use two methods. First, we define the highest rating, an A+, as a 9, and then for each rating that is one-quarter grade lower we subtract 1. As a result, the second highest rating, an A, is equal to 8, an A– rating receives a 7; while the lowest rating in our sample, a C–, receives a 1. Thus a firm whose latest rating observation was an A– and earliest rating observation was a B– would have a change of +3 over the period of observation. Conversely, a firm whose latest rating was a B– and earliest rating observation was a B+ would have a change of –2. We then use OLS to examine what predicts these changes in governance.

Second, since the + and – values are not based on the questionnaire survey but rather on the analysts' own opinion of whether the firm's governance is improving or deteriorating, we use an additional method where we only use the A, B and C ratings themselves to determine the governance rating of the firm (note that there were no firms with a D rating in our sample).¹¹ Using these A, B and C ratings, we then define firms into three categories: 1) firms that improved their governance rating between the earliest and latest observations; 2) firms that did not change their rating between the earliest and latest observations; 3) firms that had their governance rating reduced between the earliest and latest observations. These three categories are then used to create a trichotomous dependent variable where category 1 receives a 1, category 2 receives a 0, and category 3 receives a –1. We then follow [Cremers and Ferrell \(2010\)](#) and use ordered logit regressions to examine what predicts these changes in governance.

For the independent variables, we use two sets of variables. One in which we use *changes* in the variables between the latest and earliest rating observations and one in which we use the *levels* of the variables as of the earliest rating observation. We explain each of these sets of variables below.

3.1. Changes in independent variables

We use the changes in the economic, financial and political risk (ICRGE, ICRGF and ICRGP respectively) indices of the country where the firm resides over the period between the firm's latest and earliest AllianceBernstein corporate governance rating. For example, for a firm with an initial AllianceBernstein rating observation in June 2002 and its last in May 2006, we would have a period of 48 months. Moreover assume this firm was located in Brazil. Hence the changes in ICRGE, ICRGF and ICRGP would be changes in Brazil's ICRGE, ICRGF and ICRGP respectively over the period May 2006–June 2002.

In addition to the changes in country risk, we also use as independent variables the *changes* in the firm's natural log of sales, return on assets, debt to equity ratio, Tobin's Q, annual sales growth, CAPEX to sales ratio, and standard deviation of the returns over the period between the latest and earliest AllianceBernstein corporate governance rating observations. Hence, again, if the firm's earliest governance rating observation was in June 2002 and its latest was in May 2006, the change in sales, debt to equity ratio, Tobin's Q, and other variables would be defined as the change over the period from May 2006 to June 2002.¹² Our rationale for using these variables is that firm sales, the debt to equity ratio, sales

¹⁰ Note that if the difference between the latest and earliest AllianceBernstein rating observations was a year or less, we did not include the firm in our sample.

¹¹ We thank an anonymous referee for this suggestion.

¹² Note that besides Tobin's Q, the firm characteristic data are only available on an annual basis. Specifically, the data are culled from the firm's annual report which is produced at the fiscal year end (which could be any time during the year). In all cases, we use the firm characteristic data that are the closest to the monthly rating observation. For example, consider a situation where the fiscal year end of the firm was September and yet the firm's last AllianceBernstein rating observation was in May 2006 and its first was in June 2002. For this situation, we would define the change in the firm's sales and debt to equity between September 2006 and September 2002.

growth, and CAPEX have been found by Klapper and Love (2004) and Durnev and Kim (2005) to be related to better governance. Similarly, we use the standard deviation of returns (a proxy for the risk of the firm) as Black et al. (2006b) find that this variable is related to firm governance. We use Tobin's Q as it has been widely speculated that governance decisions may arise out of market valuation changes rather than the reverse. We also use return on assets (ROA) to control for the level of profitability of the firm.

We also add a dummy to indicate whether the firm added an ADR during the time period between the latest and earliest AllianceBernstein rating. We do this as Lang et al. (2003) and Doidge et al. (2004) have documented that overall governance increases when firms cross-list on foreign exchanges.

We also include the *level* of Tobin's Q at the time of the earliest rating observation in addition to the *change* in Tobin's Q between the latest and earliest rating observations. We do this as it provides yet another control for firm characteristics and was suggested by an anonymous referee.

Finally, we also use industry and country dummies to control for any possible industry or country effects that may exist as Gillan et al. (2004) have found that industries and Doidge et al. (2007) and Durnev and Fauver (2010) find that countries are important predictors of governance.

3.2. Levels of independent variables

In addition to testing what predicts changes in firm governance using changes in independent variables, we also examine what predicts changes in firm governance using level data. Again the dependent variable is the change in rating between the latest and earliest rating observation, but the independent variables are the levels of the variables at the time of the earliest rating observation. The specific independent variables that are used are the levels of ICRGE, ICRGF, and ICRGP, ROA, Tobin'Q, In (Sales), Debt/Equity, Sales Growth, Standard Deviation of returns, Capex/Sales at the time of the earliest rating observation. Finally, we include an ADR dummy equal to 1 if the firm has an American Depository Receipt (ADR) outstanding at the time of the earliest rating observation and 0 otherwise.

4. Results

Our results are presented in Tables 1–11. In Table 1 we present the distribution of the number of months between the latest and earliest AllianceBernstein rating observations (Panel A), the distribution of the AllianceBernstein ratings themselves (Panel B), and the distribution of the changes in the ratings between the latest and earliest rating observations. We present the changes in ratings using both the + and – indicators (Panel C) and without them (Panel D). In Panel A, we find that the mean number of months between the latest and earliest AllianceBernstein rating observations is approximately 47.50 months. There are 39 firms that have a governance rating for the first and last months of our sample (November 2001 and September 2008) while there are 122 firms where the difference between the first and last rating observations is between 12 and 35 months. In Panel B we see that at the time of the earliest rating observation there are 87 firms rated in the A range, 209 in the B range, and 22 in the C range respectively. In terms of changes in the ratings (panel C), the largest positive change was a seven, meaning that a firm improved its rating between the earliest and latest rating observation by seven-quarter grades, e.g., from a C (2) to an A+ (9). The largest negative change was a minus six which means a firm's governance rating decreased by six-quarter grades, e.g. an A (8) to a C (2). In Panel D, we see that there are 227 firms with no change in the governance ratings while there were 38 firms that experienced declines and 53 firms that experienced increases in the governance rating when we do not use the + and – indicators.

In Table 2, we report some additional descriptive statistics on the *changes* in the variables between the latest and earliest rating observations (Panel A). We also report descriptive statistics on the *levels* of the variables as of the earliest AllianceBernstein rating observations (Panel B). The table shows several interesting findings. First, in Panel A, we find the mean change in the ratings is close to zero regardless of using the +, – indicators or not. Second, we report the mean percentage change in the $ICRG_{latest} - ICRG_{earliest}$ for each of the three ICRG measures. Hence, a positive (negative) value indicates that the ICRG measure increased (decreased) from the beginning to the end of the sample period. As can be seen, the mean percentage changes in the ICRGE, ICRGF and ICRGP are 4.23, 2.29 and 2.13, respectively, indicating that, on average, countries in which the firms are located have reduced their

Table 1

Frequency distribution. In Panel A, we present the distribution of the number of months between the latest and earliest AllianceBernstein rating observations. For each firm, the period of change is defined as the period between the latest and the earliest AllianceBernstein corporate governance rating. Hence, consider a firm in which the first AllianceBernstein rating observation was June 2002 and the last was May 2006. This would represent a period of 48 months. Thus all the changes for this firm would be calculated between May 2006 and June 2002. In Panel B, the distribution of ratings is as of the earliest rating observation. In Panel C, changes consider both + and – indicators. And, in Panel D, changes do not take + and – indicators in consideration, hence the highest rating possible is an A, the intermediate rating is a B, and the lowest rating is a C. Since there were only two cases where firms changed from a C to A and only three cases where firms changed from an A to C, we divide the firms into only three categories: declines, no change and improvements.

<i>Panel A: Mean number of months and number of firms</i>	
Mean number of months between the latest and earliest AllianceBernstein rating	47.50
# of firms where the difference between the latest and earliest rating is 83 months	39
# of firms where the difference between the latest and earliest rating is 60–82 months	71
# of firms where the difference between the latest and earliest rating is 36–59 months	86
# of firms where the difference between the latest and earliest rating is 12–35 months	122
<i>Panel B: AllianceBernstein's ratings (considering + and –) at time of the earliest observation</i>	
# of firms with an AllianceBernstein's rating A+	12
# of firms with an AllianceBernstein's rating A	68
# of firms with an AllianceBernstein's rating A–	7
# of firms with an AllianceBernstein's rating B+	68
# of firms with an AllianceBernstein's rating B	131
# of firms with an AllianceBernstein's rating B–	10
# of firms with an AllianceBernstein's rating C+	9
# of firms with an AllianceBernstein's rating C	9
# of firms with an AllianceBernstein's rating C–	4
<i>Panel C: Ratings changes between latest and earliest observations (considering + and –)</i>	
# of firms with a 7	1
# of firms with a 5	1
# of firms with a 4	3
# of firms with a 3	27
# of firms with a 2	18
# of firms with a 1	15
# of firms with a 0	169
# of firms with a –1	42
# of firms with a –2	10
# of firms with a –3	20
# of firms with a –4	9
# of firms with a –6	3
<i>Panel D: AllianceBernstein's rating changes (without considering + and –)</i>	
# of firms with declines in the corporate governance rating between the latest and the earliest ratings	38
# of firms with no change in the corporate governance rating between the latest and the earliest ratings	227
# of firms with improvement in the corporate governance rating between the latest and the earliest ratings	53

country risk over time (again as the ICRG measures increase, country risk is reduced). Third, also in panel A, we report the mean changes in firm characteristics (presented as raw changes rather than percentage changes) between the latest and earliest AllianceBernstein rating observations and the number of firms that introduced an ADR during the period between the latest and earliest AllianceBernstein rating observations. As can be seen, the mean size of a firm (as proxied by sales in U.S. dollars) increased over the interval between the earliest and latest rating observations. Also note that there were 24 firms that took on ADRs during the observation period. In panel B of Table 2 (levels data), we find that the mean rating of a firm as of the earliest rating was 5.83 if we consider the + and – indicators and 2.20 if we do not consider them. We also find that the mean annual sales growth is about 27 percent. Finally, there are 92 of the firms that already had ADRs as of the earliest rating observation.

In Table 3 we present the number of firms by country and industry. Of the 24 emerging market countries, Taiwan, South Africa, Brazil, India, South Korea, and Hong Kong have the largest numbers of firms. Of the 10 industries, Information Technology, Materials, Consumer Discretionary and Telecommunications Services are the ones with the largest number of observations.

Table 2

Descriptive Statistics. In Panel A, a change in the corporate governance rating between the latest and the earliest AllianceBernstein rating observations is -1 if the rating declined, 0 if the rating did not change, and 1 if the rating improved during the sample period. Changes in ICRGE, ICRGF, ICRGP (International Country Risk Guide economic, financial and political indices respectively) are changes in these indices for the country where the firm is incorporated between the latest and the earliest AllianceBernstein rating observations. Changes in Tobin's Q, return on assets, natural log of sales, debt to equity ratio, annual sales growth, standard deviation of returns, and CAPEX to sales ratio are defined as the changes in these variables between the latest and the earliest AllianceBernstein rating observations. We also count the number of firms that introduced an ADR during the period between the latest and the earliest AllianceBernstein governance rating. In Panel B we present the descriptive statistics of the levels of the variables as the earliest AllianceBernstein rating observation. Hence, the data for a firm are measured in February 2003 if a firm's earliest rating observation was estimated at this time.

Variables	Mean	Std. dev.
<i>Panel A: Changes between latest and earliest rating observations</i>		
Δ in the AllianceBernstein rating (considering + and -)	-0.0597	0.6830
Δ in the AllianceBernstein rating (without considering + and -)	0.0472	0.5337
% Δ in ICRGE	4.2267	10.4958
% Δ in ICRGF	2.2927	10.0024
% Δ in ICRGP	2.1253	5.1455
Δ in Tobin's Q	-0.2005	1.1811
Δ in ROA	-0.0057	0.0841
Δ in natural log of sales	0.6970	0.6124
Δ in debt to equity ratio	0.1272	1.0824
Δ in sales growth	-0.0951	0.4325
Δ in standard deviation of returns	0.0024	0.0330
Δ in CAPEX to sales ratio	-0.0042	0.1411
# of firms that introduced an ADR during the period between latest and earliest rating observations	24	NA
<i>Panel B: Value in levels at time of the earliest rating observation</i>		
AllianceBernstein rating (considering + and -)	5.8270	1.6600
AllianceBernstein rating (without considering + and -)	2.2044	0.5495
ICRGE	38.4953	4.3610
ICRGF	40.1478	5.5475
ICRGP	70.1053	7.5980
Tobin's Q	1.9936	1.4039
ROA	0.1138	0.0836
Natural log of sales	7.3254	1.3202
Debt to equity ratio	0.6023	0.6791
Sales growth	0.2676	0.4717
Standard deviation of returns	0.0610	0.0221
CAPEX to sales ratio	0.1399	0.1622
# of firms with an ADR as of the time of the earliest rating observation	92	NA

Note that we also examined the correlations of all the variables (in terms of changes and levels) and found that none of the correlations were high levels. In order to conserve space (since we already have 11 tables) we do not report these results. They are available upon request.

4.1. Predicting changes in governance using changes/levels in independent variables

Our first results from estimating what predicts changes in firm governance are presented in Tables 4 and 5. In both tables the dependent variable is the change in AllianceBernstein rating between the latest and earliest rating observations where the rating is defined from 9 (A+) to 1 (C-). Specifically, in Table 4 we examine how changes in the independent variables predict changes in firm governance. In Table 5, we examine how the levels of these independent variables, measured at the time of the earliest rating observation, predict changes in firm governance.

We find in Table 4 that $\Delta \ln(\text{Sales})$, which is a proxy for firm growth, is consistently positive and significant (at the five percent level). Hence, faster growing firms improve their governance. In Table 5, we find that the level of political risk, ICRGP, is negatively and significantly related (at the 6 percent level) to changes in governance. Since ICRGP goes up as political risk goes down, this means that firms located in countries with higher political risk (and thus lower ICRGP levels) improve their governance. This change in

Table 3

Number of firms by country and industry. The AllianceBernstein Capital Emerging Markets Universe consists of approximately 500 firms and is determined by firms' inclusion in indexes generated by index providers, particularly the Morgan Stanley Capital International Emerging Markets Index. Our sample consists of 318 firms from this universe for which we are able to calculate the variables that we use in this study. This table presents the distribution of these firms by country and industry.

<i>Country</i>	<i># of firms</i>
Argentina	2
Brazil	36
Chile	7
China	16
Czech Republic	1
Egypt	2
Hong Kong	23
Hungary	3
India	29
Indonesia	4
Israel	5
Malaysia	12
Mexico	13
Peru	1
Philippines	3
Poland	3
Russia	13
Singapore	3
South Africa	36
South Korea	29
Taiwan	60
Thailand	7
Turkey	9
Venezuela	1
<i>Industry</i>	<i># of firms</i>
Consumer discretionary	46
Consumer staples	25
Energy	27
Financials	4
Health care	9
Industrials	38
Information Technology	62
Materials	47
Telecommunications Services	44
Utilities	16

governance is not due to improvements in the country political risk as we find that changes in ICRP are not related to changes in governance in Table 4. No other variables are significant at traditional levels in Table 5.

Before moving on, one notable result in Tables 4 and 5 is that neither changes in valuations (Δ Tobin's Q) nor levels of valuations (Tobin's Q) predict changes in governance. This is an interesting finding because other authors have found that while better governance seems to cause higher firm valuations, they have not been able to eliminate the possibility that there is a reverse causation (better valuations causing better governance). With our time-series approach, however, we can at least suggest that the causation is not reversed as we find no evidence of this relationship. Apart from Black and Kim (2012), who find some relatively modest evidence that better valuations lead to better governance (through better board structure), no other work exists that we know of that has directly examined this question of reverse causality.¹³

¹³ We thank the anonymous referee for this suggestion.

Table 4

Predicting *changes* in firm governance using *changes* in independent variables (using OLS). We define the highest rating, an A+, as a 9, and then for each rating that is one-quarter grade lower we subtract 1. As a result, the second highest rating, an A, is equal to 8, an A– rating receives a 7, while the lowest rating in our sample, a C–, receives a 1. The dependent variable is the Change in Governance Rating between latest and earliest observations. For example, a firm whose earliest rating observation was B (5) and whose latest observation was an A– (7) would receive a positive 2. The regressions use OLS with dummies to control for industry and country effects. $\Delta ICRGE$, $\Delta ICRGF$, and $\Delta ICRGP$ are the changes in international country risk guide indices for the economic, financial and political risks, respectively, of country where firm *i* is incorporated. Δ Tobin's Q, Δ ROA, Δ ln (Sales), Δ Debt/Equity, Δ Sales Growth, Δ Standard Deviation and Δ Capex/Sales are the changes in the firm's Tobin's Q, return on assets, natural log of sales, debt to equity ratio, annual sales growth, standard deviation of returns and CAPEX to sales ratio over the period between the latest and earliest observations for the AllianceBernstein corporate governance ratings. ADR dummy is a variable that receives a 1 if the firm introduced an American Depositary Receipt (ADR) during the period between the latest and earliest AllianceBernstein corporate governance ratings and 0 otherwise. Tobin's Q is the level of the firm's Tobin's Q at the time of the earliest rating observation. We report coefficient values, estimate robust standard errors and present *t*-statistics in the parenthesis.

The Dependent variable is the Change in Governance Rating between latest and earliest observations where the rating is defined from 9 to 1													
$\Delta ICRGE$	$\Delta ICRGF$	$\Delta ICRGP$	Δ Tobin's Q	Δ ROA	Δ ln (Sales)	Δ Debt / Equity	Δ Sales Growth	Δ Std Deviation	Δ Capex/ Sales	ADR dummy	Tobin's Q	Obs	R-squared
0.0085 (0.14)	0.0166 (0.41)	-0.0141 (-0.36)	0.1406 (1.29)	-1.1930 (-0.79)	0.3975** (2.11)	0.0186 (0.32)	-0.0068 (-0.03)	2.2002 (0.62)	-0.2555 (-0.38)	0.6148* (1.79)	0.0891 (1.04)	318	0.1842

** and * indicate significance at the five and ten percent levels respectively.

Table 5

Predicting *changes* in firm governance using *levels* of independent variables (using OLS). We define the highest rating, an A+, as a 9, and then for each rating that is one-quarter grade lower we subtract 1. As a result, the second highest rating, an A, is equal to 8, an A– rating receives a 7, while the lowest rating in our sample, a C–, receives a 1. The dependent variable is the Change in Governance Rating between latest and earliest observations. For example a firm whose earliest rating observation was B (5) and whose latest observation was an A– (7) would receive a positive 2. The regressions use OLS with dummies to control for industry and country effects. *ICRGE*, *ICRGF*, and *ICRGP* are the international country risk guide indices in levels at the time of the earliest rating observation for each firm. Tobin's Q, ROA, ln (Sales), Debt/Equity, Sales Growth, Standard Deviation of returns and Capex/Sales are also levels measured at the time of the earliest rating observation for each firm. ADR dummy is a variable that receives a 1 if the firm has an American Depository Receipt (ADR) outstanding at the time of the earliest rating observation for the firm and 0 otherwise. We report coefficient values, estimate robust standard errors and present *t*-statistics in the parenthesis.

The Dependent variable is the Change in Governance Rating between latest and earliest observations where the rating is defined from 9 to 1												
<i>ICRGE</i>	<i>ICRGF</i>	<i>ICRGP</i>	Tobin's Q	ROA	ln (Sales)	Debt / Equity	Sales Growth	Std Deviation	Capex / Sales	ADR Dummy	Obs.	R-squared
–0.0665	0.0410	–0.0879*	0.0754	0.1386	0.1317	–0.0278	–0.0770	–1.1205	0.9885	–0.3067	318	0.1771
(–0.96)	(0.69)	(–1.94)	(0.75)	(0.09)	(1.41)	(–0.21)	(–0.46)	(–0.23)	(1.41)	(–1.15)		

* indicates significance at the ten percent level.

4.2. Robustness tests of predicting changes in governance using changes/levels in independent variables

As a robustness test for our results in Tables 4 and 5 we also examine the direction of change in the rating rather than the magnitude of change. We do this in the event that the magnitude of the rating change may be inaccurate due to the subjectivity of the rating system. To do this we still use the + and – indicators, i.e., 9–1 rating designations, however we place firms into one of three categories: 1) firms that improved their governance rating between the earliest and latest observations; 2) firms that did not change their rating between the earliest and latest observations; and 3) firms that had their governance rating reduced between the earliest and latest observations. These three categories are then used to create a trichotomous dependent variable where category 1 receives a 1, category 2 receives a 0, and category 3 receives a –1 respectively. We then use ordered logit regressions to examine what predicts these changes in governance. The results of this analysis are located in Tables 6 and 7, where Table 6 provides the results using *changes* in independent variables to predict *changes* in governance and Table 7 presents the results using *levels* in the independent variables (at the time of the earliest observation) to predict *changes* in governance.

The results of Tables 6 and 7 are very similar to those in Tables 4 and 5. Specifically, as in Table 4, we find in Table 6 that $\Delta \ln(\text{Sales})$ is positively and significantly related to changes in governance (at the 5 percent level). In Table 7, similar to Table 5, we find that *lower* levels of ICRGP (higher political risk) are related to improvements in governance. The only real difference between the results in Tables 4 and 5 and those in Tables 6 and 7 is that in Table 6 we now find that the $\Delta \text{Tobin's } Q$ is positive and significant (at the five percent level) whereas it was not significant in Table 4. This result suggests that firms with increases in Tobin's Q are likely to improve their governance. This finding is similar to results reported in the aforementioned Black and Kim (2012), who also find evidence that higher valuations cause better governance. Our results should be interpreted with some caution as we do not find this relationship between changes in Tobin's Q and changes in governance in Tables 4 and the upcoming Table 8.

Since the + and – values are not based on the questionnaire survey but rather the analyst's own opinion of whether the firm's governance is improving or deteriorating, we attempt another robustness check of Tables 4 and 5 in which we do not use the + and – indicators in our analysis of governance change. Instead we only use the A, B and C ratings themselves to determine the governance of the firm (note that there were no firms with a D rating in our sample). Then, similar to the method used with the results presented in Tables 6 and 7, we define firms into three categories: 1) firms that improved their governance rating between the earliest and latest observations; 2) firms that did not change their rating between the earliest and latest observations; and 3) firms that had their governance rating reduced between the earliest and latest observations. We do this as there were only a few types of values that the dependent variable could take.¹⁴ These three categories are then used to create a trichotomous dependent variable where category 1 receives a 1, category 2 receives a 0, and category 3 receives a –1 respectively. We then use ordered logit regressions to examine what predicts these changes in governance.

The results of this analysis are located in Tables 8 and 9, where Table 8 shows the results of using *changes* in variables to predict *changes* in governance and Table 9 presents the results of using *levels* in the variables (at the time of the earliest observation) to predict *changes* in governance.

As with the results of Tables 6 and 7, the results of Tables 8 and 9 show very much the same results as Tables 4 and 5, namely that the variable $\Delta \ln(\text{Sales})$ is positively and significantly related to changes in governance (in Table 8) and that lower levels of ICRGP (higher political risk) are related to improvements in governance (in Table 9). Finally, we also find that changes or levels in valuations (in both Tables 8 and 9) do not significantly predict changes in governance. Hence, only in Table 6 we find evidence that changes/levels of Tobin's Q significantly predicts governance.

¹⁴ Note that there were only two cases where firms changed from a C to A and only three cases where firms changed from A to C between the earliest and latest observations. Since there were so few of these cases we use the methodology described above that divides the firms into only three categories.

Table 6

Predicting *changes* in firm governance using *changes* in independent variables (using ordered logistic regression). We define the highest rating, an A+, as a 9, and then for each rating that is one-quarter grade lower we subtract 1. As a result, the second highest rating, an A, is equal to 8, an A– rating receives a 7, while the lowest rating in our sample, a C–, receives a 1. The dependent variable is the Change in Governance Rating between latest and earliest observations. This change equals –1 if the rating has declined, 0 if the rating did not change, and 1 if the rate improved. The regressions are ordered logit regressions with industry and country dummies to control for industry and country effects. $\Delta ICRGE$, $\Delta ICRGF$, and $\Delta ICRGP$ are the changes in international country risk guide indices for the economic, financial and political risks, respectively, of country where firm *i* is incorporated. Δ Tobin's Q, Δ ROA, Δ ln (Sales), Δ Debt/Equity, Δ Sales Growth, Δ Standard Deviation and Δ Capex/Sales are the changes in the firm's Tobin's Q, return on assets, natural log of sales, debt to equity ratio, annual sales growth, standard deviation of returns and CAPEX to sales ratio over the period between the latest and earliest observations for the AllianceBernstein corporate governance ratings. ADR dummy is a variable that receives a 1 if the firm introduced an American Depository Receipt (ADR) during the period between the latest and earliest AllianceBernstein corporate governance ratings and 0 otherwise. Tobin's Q is the level of the firm's Tobin'sQ at the time of the earliest rating observation. We report coefficient values, estimate robust standard errors and present z-statistics in the parenthesis.

Dependent variable is the Change in Governance between latest and earliest rating observations using 1 (improve), 0 (no change) and –1 (decline)												
$\Delta ICRGE$	$\Delta ICRGF$	$\Delta ICRGP$	Δ Tobin's Q	Δ ROA	Δ ln (Sales)	Δ Debt / Equity	Δ Sales Growth	Δ Std Deviation	Δ Capex/ Sales	ADR dummy	Tobin's Q	Obs. Pseudo R ²
–0.0209 (–0.29)	0.0235 (0.46)	–0.0033 (–0.07)	0.3288** (2.22)	–2.0492 (–1.11)	0.4914** (2.17)	0.0016 (0.02)	–0.0858 (–0.30)	6.0913 (1.41)	–0.6140 (–0.74)	0.7777* (1.85)	0.1779* (1.66)	318 0.0948

** and * indicate significance at the five and ten percent levels respectively.

Table 7

Predicting *changes* in firm governance using *levels* of independent variables (using ordered logistic regression). We define the highest rating, an A+, as a 9, and then for each rating that is one-quarter grade lower we subtract 1. As a result, the second highest rating, an A, is equal to 8, an A– rating receives a 7, while the lowest rating in our sample, a C–, receives a 1. The dependent variable is the Change in Governance Rating between latest and earliest observations. This change equals –1 if the rating has declined, 0 if the rating did not change, and 1 if the rate improved. The regressions are ordered logit regressions with industry and country dummies to control for industry and country effects. *ICRGE*, *ICRGF*, and *ICRGP* are the international country risk guide indices in levels at the time of the earliest rating observation for each firm. Tobin's Q, ROA, ln (Sales), Debt/Equity, Sales Growth, Standard Deviation of returns and Capex/Sales are also levels measured at the time of the earliest rating observation for each firm. ADR dummy is a variable that receives a 1 if the firm has an American Depository Receipt (ADR) outstanding at the time of the earliest rating observation for the firm and 0 otherwise. We report coefficient values, estimate robust standard errors and present z-statistics in the parenthesis.

Dependent variable is the Change in Governance between latest and earliest rating observations using 1 (improve), 0 (no change) and –1 (decline)												
<i>ICRGE</i>	<i>ICRGF</i>	<i>ICRGP</i>	Tobin's Q	ROA	ln (Sales)	Debt / Equity	Sales Growth	Std Deviation	Capex/ Sales	ADR dummy	Obs.	Pseudo R ²
–0.0453 (–0.48)	0.0090 (0.12)	–0.1152** (–2.05)	0.0660 (0.52)	1.1163 (0.63)	0.1369 (1.24)	0.0943 (0.61)	–0.0797 (–0.39)	–7.4210 (–1.19)	1.3070 (1.57)	–0.3530 (–1.04)	318	0.0881

** indicates significance at the five percent level.

Table 8

Predicting *changes* in firm governance using *changes* in independent variables (using ordered logistic regression). In this table we do not use (+ and –) indicators to determine the governance grade. Hence the highest rating possible is an A, the intermediate rating is a B, and the lowest rating is a C. We quantify these ratings by assigning a 3 to A rated firms, a 2 to B rated firms, and 1 to C rated firms. The dependent variable is the Change in the AllianceBernstein Governance Rating between the latest and earliest rating observations. This change equals –1 if the rating has declined, 0 if the rating did not change, and 1 if the rate improved. The regressions are ordered logit regressions with industry and country dummies to control for industry and country effects. $\Delta ICRGE$, $\Delta ICRGF$, and $\Delta ICRGP$ are the changes in international country risk guide indices for the economic, financial and political risks, respectively, of country where firm *i* is incorporated. Δ Tobin's Q, Δ ROA, Δ ln (Sales), Δ Debt/Equity, Δ Sales Growth, Δ Standard Deviation and Δ Capex/Sales are the changes in the firm's Tobin's Q, return on assets, natural log of sales, debt to equity ratio, annual sales growth, standard deviation of returns and CAPEX to sales ratio over the period between the latest and earliest observations for the AllianceBernstein corporate governance ratings. ADR dummy is a variable that receives a 1 if the firm introduced an American Depositary Receipt (ADR) during the period between the latest and earliest AllianceBernstein corporate governance ratings and 0 otherwise. Tobin's Q is the level of the firm's Tobin's Q at the time of the earliest rating observation. We report coefficient values, estimate robust standard errors and present z-statistics in the parenthesis.

Dependent variable is the Change in Governance between latest and earliest rating observations using 1 (improve), 0 (no change) and –1 (decline)													
$\Delta ICRGE$	$\Delta ICRGF$	$\Delta ICRGP$	Δ Tobin's Q	Δ ROA	Δ ln (Sales)	Δ Debt / Equity	Δ Sales Growth	Δ Std. deviation	Δ Capex/ Sales	ADR dummy	Tobin's Q	Obs.	Pseudo R^2
–0.0219 (–0.27)	0.0623 (1.14)	–0.0105 (–0.19)	0.2016 (1.31)	–1.7907 (–0.89)	0.8373*** (2.97)	0.0435 (0.49)	0.0599 (0.20)	3.4548 (0.73)	–0.2954 (–0.32)	0.9511** (2.04)	0.1750 (1.47)	318	0.1397

*** and ** indicate significance at the one and five percent levels respectively.

Table 9

Predicting *changes* in firm governance using *levels* of independent variables (using ordered logistic regression). In this table we do not use (+ and –) indicators to determine the governance grade. Hence the highest rating possible is an A, the intermediate rating is a B, and the lowest rating is a C. We quantify these ratings by assigning a 3 to A rated firms, a 2 to B rated firms, and 1 to C rated firms. The dependent variable is the Change in Governance Rating between latest and earliest observations. This change equals –1 if the rating has declined, 0 if the rating did not change, and 1 if the rate improved. The regressions are ordered logit regressions with industry and country dummies to control for industry and country effects. *ICRGE*, *ICRGF*, and *ICRGP* are the international country risk guide indices in levels at the time of the earliest rating observation for each firm. Tobin's Q, ROA, ln (Sales), Debt/Equity, Sales Growth, Standard Deviation of returns and Capex/Sales are also levels measured at the time of the earliest rating observation for each firm. ADR dummy is a variable that receives a 1 if the firm has an American Depository Receipt (ADR) outstanding at the time of the earliest rating observation for the firm and 0 otherwise. We report coefficient values, estimate robust standard errors and present z-statistics in the parenthesis.

Dependent variable is the Change in Governance between latest and earliest rating observations using 1 (improve), 0 (no change) and –1 (decline)												
<i>ICRGE</i>	<i>ICRGF</i>	<i>ICRGP</i>	Tobin's Q	ROA	ln (Sales)	Debt/ Equity	Sales Growth	Std Deviation	Capex/ Sales	ADR dummy	Obs.	Pseudo R ²
–0.1320 (–1.15)	0.0351 (0.43)	–0.1492** (–2.23)	0.1858 (1.41)	–0.7365 (–0.34)	0.1727 (1.27)	–0.0290 (–0.15)	–0.1200 (–0.47)	–4.5258 (–0.69)	1.1989 (1.06)	–0.3291 (–0.85)	318	0.1218

** indicates significance at the five percent level.

4.3. Predicting levels in governance using levels of independent variables (fixed effects)

While the previous tests examine the ability of changes/levels in the independent variables to predict *changes* in governance, the next test examines the ability of *levels* in independent variables to predict *levels* in governance. Here we use our original specification for the ratings in which we use + and – as indicators, i.e. ratings range from 9 (A+) to 1 (C–).¹⁵ We then estimate the ability of the *level* of the independent variables to predict the *level* of governance for each year and pool the annual data together using fixed effects regression.¹⁶ Specifically, for each firm we take their governance rating and the levels of ICRGE, ICRGF, ICRGP, Tobin's Q, ROA, ln (Sales), Debt/Equity, Sales Growth, Standard Deviation of returns and CAPEX/Sales at the end of each fiscal year. We also include an ADR dummy that receives a 1 if the firm had an American Depository Receipt (ADR) and 0 otherwise. Dummies are included to control for year effects (which are not reported).

Our results from using the fixed effect regressions are presented in Table 10. We present two panels of results. In Panel A we use sales (in U.S. dollars) to measure the size of the firm, while in Panel B we use firm assets (in U.S. dollars) to measure size. In both panels, we find that the *level* of ICRGP significantly predicts higher *levels* of governance. This result implies that firms located in countries with lower political risk (higher ICRGP) have better *levels* of firm governance. Hence, while we find in Tables 5, 7 and 9 that the *level* of ICRGP is negatively and significantly related to *changes* in governance, i.e. firms that reside in countries with high political risk (lower ICRGP) are more likely to improve their governance, we now find that firms located in countries with low political risk are likely to have higher *levels* of firm governance. Consequently, firm governance is higher in countries with lower political risk but firms are more likely to improve their governance in countries with higher political risk. This result is generally consistent with Klapper and Love (2004) who report that firm governance is generally better in countries with stronger legal environments, which is likely related to political risk as the ICRGP measure includes the strength of the legal system (see Appendix A).

Our results in Table 10 also show that the *level* of annual sales growth is positively but not significantly related to *levels* of firm governance at either the one or five percent levels. These results are similar to the results in Tables 5, 7 and 9 which show that the level of annual sales growth is not a significant factor in predicting changes in firm-level governance. Hence, in sum, we find *changes* in annual sales growth predict *changes* in governance (Tables 4, 6 and 8), however, *levels* of annual sales growth do not predict *changes* in governance (Tables 5, 7 and 9) nor *levels* of firm governance (Table 10).

4.4. Predicting future changes in governance using changes in independent variables

We also examine if country and firm changes can predict *future* changes (as opposed to contemporaneous changes) in corporate governance ratings. We do this as our reported results above may not capture a significant lag between the country/firm changes and the time when corporate governance changes.

To conduct this test we use in-sample and out-of-sample periods and then test if the data from the in-sample period predict the data from the out-of-sample period. For the in-sample data we use the changes *over the in-sample period* in the independent variables. For the out-of-sample data we identify those firms in our sample where the AllianceBernstein governance rating improved, remained the same or declined during the out-of-sample period. We then use an ordered logit regression where the dependent variable is the change in the rating during the out-of-sample period. To measure the change in the rating we use the trichotomous specification (used in Tables 8 and 9) that does not use the + and – indicators. We use this approach as there are not many large changes in governance in the out-of-sample period, given its shorter length than the periods used in other tests. The independent

¹⁵ We use this specification because it is preferable to have a larger number of categories when we treat an ordinal dependent variable as quantitative and linear.

¹⁶ Note that we performed a Hausman test and find a significant difference between random and fixed effects, indicating that a random effect model produces biased estimators and fixed effects should be the model of choice.

Table 10

Predicting the level of governance using levels of independent variables (with fixed effects regression). In this table, we again define the highest rating, an A+, as a 9, and then for each rating that is one-quarter grade lower we subtract 1. As a result, the second highest rating, an A, is equal to 8, an A– rating receives a 7, while the lowest rating in our sample, a C–, receives a 1. Using this designation, we then estimate the ability of the level of the independent variables to predict the level of governance for each year pooling the annual data together and estimating the results with a fixed effects regression. More specifically, we examine each firm at the end of each fiscal year of the data and take their governance rating (using the 1 to 9 measure that accounts for + and –). We then take the levels of *ICRGE*, *ICRGF*, *ICRGP*, Tobin's Q, ROA, ln (Sales) or ln(Assets), Debt/Equity, Sales Growth, Standard Deviation and Capex/Sales, which are the firm's Tobin's Q, return on assets, natural log of sales or of assets, debt to equity ratio, annual sales growth, standard deviation of returns and CAPEX to sales ratio at the end of each fiscal year. ADR dummy is a dummy variable that receives a 1 if the firm has an American Depository Receipt (ADR) outstanding during the year and 0 otherwise. Dummies are included to control for year effects. We report coefficient values, estimate robust standard errors and present *t*-statistics in the parenthesis. Note that two panels are provided. Panel A uses sales to measure firm size. Panel B uses assets to measure size.

The Dependent variable is the Level of the Governance Rating at end of each fiscal year where the rating is defined from 9 to 1											
<i>ICRGE</i>	<i>ICRGF</i>	<i>ICRGP</i>	Tobin's Q	ROA	ln (Sales)	Debt / Equity	Sales Growth	Std Deviation	Capex/ Sales	ADR dummy	Obs.
Panel A: Uses sales (in U.S. dollars)											
0.0222 (0.62)	0.0248 (1.02)	0.0605*** (2.69)	0.1212 (1.20)	0.3143 (0.22)	–0.3955 (–1.38)	–0.1263 (–0.92)	0.3985* (1.89)	7.5351 (1.35)	–0.0321 (–0.05)	0.6552 (1.57)	924
Panel B: Uses assets (in U.S. dollars)											
0.0202 (0.57)	0.0206 (0.84)	0.0603*** (2.69)	0.1233 (1.21)	–0.0527 (–0.04)	–0.0243 (–0.09)	–0.1416 (–0.98)	0.2835 (1.36)	7.9112 (1.43)	0.0067 (0.01)	0.6485 (1.55)	924

*** and * indicate significance at the one and ten percent levels respectively.

Table 11

Predicting *future changes* in governance using *changes* in independent variables (using ordered logistic regression). In this table, we do not use (+ and –) indicators to determine the governance grade. Hence the highest rating possible is an A, the intermediate rating is a B, and the lowest rating is a C. We quantify these ratings by assigning a 3 to A rated firms, a 2 to B rated firms, and 1 to C rated firms. The dependent variable is the Change in Governance Rating between latest and earliest observations over the out-of-sample period January 2005–September 2008. This change equals –1 if the rating has declined, 0 if the rating did not change, and 1 if the rate improved. The independent variables are for the period January 2001–December 2004 (in-sample). The regression is an ordered logit regression with industry and country dummies to control for industry and country effects. $\Delta ICRGE$, $\Delta ICRGF$, $\Delta ICRGP$ are the changes in international country risk guide indices for the economic, financial and political risks, respectively, of the country where firm *i* is incorporated. Δ Tobin's Q, Δ ROA, Δ ln (Sales), Δ Debt/Equity, Δ Sales Growth, Δ Standard Deviation and Δ Capex/Sales are the changes in the firm's Tobin's Q, return on assets, natural log of sales, debt to equity ratio, annual sales growth, standard deviation of returns and CAPEX to sales ratio for the period January 2001–December 2004 (in-sample). ADR dummy is a dummy variable that receives a 1 if the firm introduced an American Depositary Receipt (ADR) during the in-sample period and 0 otherwise. Tobin's Q is the level of the firm's Tobin's Q at the time of the earliest rating observation. We report coefficient values, estimate robust standard errors and present z-statistics in the parenthesis.

The Dependent variable is the Change in Governance Rating between latest and earliest observations over the out-of-sample period 2005.01–2008.09													
$\Delta ICRGE$	$\Delta ICRGF$	$\Delta ICRGP$	Δ Tobin's Q	Δ ROA	Δ ln (Sales)	Δ Debt / Equity	Δ Sales Growth	Δ Std Deviation	Δ Capex/ Sales	ADR Dummy	Tobin's Q	Obs.	Pseudo R ²
–0.1433 (–0.72)	–0.0727 (–0.57)	0.0691 (0.78)	0.3119 (0.59)	–1.1820 (–0.36)	–0.2435 (–0.44)	–0.0222 (–0.24)	0.7589* (1.75)	–3.2199 (–0.27)	–1.5761 (–1.35)	–1.8620 (–1.50)	0.0186 (0.05)	186	0.2537

* indicates significance at the ten percent level.

variables, or predictors, are the changes in the firm's natural log of sales, return on assets, debt to equity ratio, Tobin's Q, annual sales growth, CAPEX to sales ratio, and standard deviation of the returns over the period between the latest and earliest AllianceBernstein corporate governance rating observations during the in-sample period. The ADR dummy is a 0, 1 dummy variable receiving a 1 if firm i introduced an American Depository Receipt during the *in-sample period*. Hence, the regression is testing if the in-sample changes can predict whether or not a firm will alter its governance in the future.

Table 11 presents the results. We estimate the ordered logit regression where the independent variables (country risk and firm characteristic changes and ADR dummy) are for the period January 2001–December 2004 (in-sample) and changes in AllianceBernstein ratings are for the period January 2005–September 2008 (out-of-sample). We use these time periods as they basically split the sample into two equal periods (around four years for both the in-sample and out-of-sample periods). Note also that the number of observations with these regressions is much smaller than in the previous tables which may also influence our results.

Table 11 shows that none of the variables are significant at either the one or five percent levels. Again, this is likely because the time periods for measuring change are not long, and because we do not have nearly as many observations as in the other tests (only 186 observations as compared to 318 in most tests). We do find that the change in sales growth (Δ Sales Growth) is significant only at the 10 percent level. Thus, while the *change* in size ($\Delta \ln(\text{Sales})$) is not significant in predicting governance change as it was in Tables 4, 6 and 8, we find that the *rate of change* in size is weakly significant in Table 11. This result, albeit weak, suggests again that there is something about firm growth that causes improvements in firm governance.

5. Conclusions

While a number of papers have examined which firm and country factors are related to firm governance, this paper is the first, to our knowledge, to examine whether *changes* and/or *levels* in specific variables, such as country risk and firm characteristics, predict *changes* in firm-level governance (Tables 4–9). This is a worthy supplement to the cross-sectional approach as it allows readers to see the effects of changes in country/firm conditions on corporate governance and thus assess if such changes are worth pursuing to improve governance.

In addition to seeing what predicts *changes* in firm-level governance we also examine what predicts the *level* and *future changes* in firm-level governance. Specifically we examine if the *level* of independent variables can predict the *level* of firm governance (Table 10) and we examine if *changes* in the independent variables during an earlier period can predict *changes* in governance during a later period (Table 11).

To conduct this study we utilize a unique dataset from AllianceBernstein that consists of monthly firm-level corporate governance ratings for 24 emerging market countries that spans almost seven years. Since the AllianceBernstein ratings are time-series data, they allow us to determine when there are changes, and the magnitude of those changes, in a firm's corporate governance.

We find two main results that seem relatively robust to different specifications. First, *changes* in firm size are positively and significantly related to *changes* in firm governance. This implies that high firm growth predicts improvements in firm governance. Why this happens is still an open question. It may be that as firms grow they receive more attention from outside (and possibly foreign) investors who demand better governance to invest. It may also be that larger firms are more complicated firms and thus need better governance to run well. This is a subject for future research.

Second, the *level* of political risk of the country where the firm resides is negatively and significantly related to the *level* of firm governance but positively and significantly related to *changes* in firm governance. Hence, firm governance is better in countries with lower political risk but firms are more likely to improve their governance in countries with higher political risk. This latter result suggests that firms try to compensate for the high political risk by improving their governance.

Lastly, our paper is not without caveats. It is possible that the AllianceBernstein measures are not the most accurate measures of firm-level governance. Indeed, as with all ratings systems, the AllianceBernstein ratings are quite subjective. Moreover, because they are based on the MSCI EM index

they are largely based on relatively large firms so small firms are not included much in our sample. But again the advantage of the ICRG indices and the AllianceBernstein corporate governance ratings is that they provide a time-series while other cross-country studies of corporate governance use cross-sectional data.

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Appendix A. International Country Risk Guide (ICRG) indices

The following provides more information on the ICRG country ratings that we use in the paper. These include the economic risk index (*ICRGE*), the financial risk index (*ICRGF*), the political risk index (*ICRGP*). For complete information please see www.prsgroup.com.

1. The Economic Risk Index (*ICRGE*)

The overall aim of the Economic Risk index is to provide a means of assessing a country's current economic strengths and weaknesses. These strengths and weaknesses are assessed by assigning risk points to a pre-set group of factors, termed economic risk components. These include:

- 1.1. GDP per capita
- 1.2. Real GDP growth
- 1.3. Annual inflation rate
- 1.4. Budget balance as percentage of GDP
- 1.5. Current account balance as a percentage of GDP

2. The Financial Risk Index (*ICRGF*)

The overall aim of the Financial Risk Index is to provide a means of assessing a country's ability to pay its way. In essence, this requires to measure a country's ability to finance its official, commercial, and trade debt obligations. This is done by assigning risk points to a pre-set group of factors, termed financial risk components, which include:

- 2.1. Foreign debt as a percentage of GDP
- 2.2. Foreign debt as a percentage of exports of goods and services
- 2.3. Current account as a percentage of exports of goods and services
- 2.4. Net international liquidity as months of import cover (basically provides how many months of imports can be financed with exchange reserves)
- 2.5. Exchange rate stability (the appreciation or depreciation of the currency against the U.S. Dollar over a calendar year or the most recent 12-month period)

3. The Political Risk Index (*ICRGP*)

The aim of the political risk index is to provide a means of assessing the political stability of the countries covered by ICRG on a comparable basis. This is done by assigning risk points to a pre-set group of factors, termed political risk components. They include:

- 3.1. Government stability
- 3.2. Socioeconomic conditions

- 3.3. Investment profile (an assessment of factors affecting the risk to investment that are not covered by other political, economic and financial risk components. This includes contract viability, profit repatriation and payment delays, for example)
- 3.4. Internal conflict
- 3.5. External conflict
- 3.6. Corruption
- 3.7. Military in politics
- 3.8. Religious tensions
- 3.9. Law and order (where Law is an assessment of the strength and impartiality of the legal system, and the Order sub-component is an assessment of popular observance of the law)
- 3.10. Ethnic tensions
- 3.11. Democratic accountability
- 3.12. Bureaucracy quality

Appendix B. Some of the standards for company practices and policies from the International Finance's Code of Corporate Governance in emerging markets (from Policies for Corporate Governance in Emerging Markets: Revised Guidelines (2003))¹⁷

1. Minority Shareholder Protection

- 1.1. Firms should have a formal statement that defines actions that require shareholder approval or board approval.
- 1.2. Firms are encouraged to allow proxy voting where the best practice is that proxy systems should be universally available to all shareholders – foreign and domestic.
- 1.3. Firms should permit cumulative voting.

2. Firm/Capital Structure

- 2.1. Firms should require shareholder approval of takeover/buyout/merger.
- 2.2. If a significant subsidiary is being spun off, shareholder approval should be required.
- 2.3. There should be constraints on sales to the majority shareholder group.

3. Shareholder Meeting/Other Rights

- 3.1. Meeting notice and agenda should be sent to shareholders within a reasonable amount of time prior to meetings to prepare the proxy system and to be released publicly.
- 3.2. Meetings should be conducted in a timely and efficient manner. Reasonable efforts to prevent vote fraud should be implemented, as well as mechanisms allowing for the right to recount contested votes.
- 3.3. Foreign shareholders should be treated equally with domestic shareholders.
- 3.4. Firms should have a mechanism whereby a majority of minority shareholders can trigger an arbitration procedure to resolve conflicts between minority and controlling shareholders.
- 3.5. Firms should have quorum that is not set too high or too low. Suggested level would be around 30 percent and should include some independent non-majority-owning shareholders. All key corporate decisions require a qualified quorum.

4. Board Structure

- 4.1. Firms should have a definition of independence of directors, disclose biographies of directors, and make statement on independence.
- 4.2. At least one-third of the board should be non-executive, a majority of whom should be independent.
- 4.3. For large companies, board meetings should occur every quarter, audit committee meetings every 6 months. Non-management directors should hold regularly scheduled meetings without management directors. Minutes of meetings should become part of public record.
- 4.4. A quorum for the board should consist of executive, non-executive, and independent non-executive members.

¹⁷ Available through the following website: <http://www.iif.com/gcm/corpgovern/corpgov-code.php>.

- 4.5. Nomination and election of directors should be conducted by a committee, chaired by an independent non-executive, that nominates new board members. Minority shareholders should have mechanism for putting forward directors at Annual General Meeting (AGM)/ Extraordinary General Meeting (EGM).
- 4.6. The term limits for independent directors should be re-election every three years with specified term limits.
- 4.7. The compensation committee must be chaired by an independent non-executive director with majority of the compensation committee being non-executives and preferably independent.
- 4.8. The nomination committee must be chaired by an independent non-executive director.
5. *Disclosure of Board Decisions*
 - 5.1. The procedures for information releases should be done through local exchanges.
 - 5.2. The responsibilities of directors and management should be stated in the articles of association or company bylaws and be accessible to all shareholders.
 - 5.3. Corporate strategy should be part of the CEO statement in reports.
6. *Other Issues Regarding the Board*
 - 6.1. Any potential or actual conflicts of interest on the part of directors or senior executives should be disclosed. Head of audit committee should not have any such conflicts of interest. Board members should abstain from voting if they have a conflict of interest pertaining to that matter. Audit or ethics committee is required to review conflict of interest situations.
 - 6.2. The integrity of the internal control and risk management system should be a function of the audit committee.
 - 6.3. The firm should have an investor relations program.
 - 6.4. The firm should make a statement of policy concerning environmental issues and social responsibility.

References

- Aggarwal, R., Erel, I., Stultz, R., Williamson, R., 2009. Differences in governance practices between U.S. and foreign firms: measurement, causes and consequences. *Review of Financial Studies* 22 (8), 3131–3169.
- Atanasov, V., Black, B.S., Ciccotello, C.S., Gyoshev, S.B., 2010. How does law affect finance? An examination of equity tunneling in Bulgaria. *Journal of Financial Economics* 96 (1), 155–173.
- Bai, C., Liu, Q., Lu, J., Song, F., Zhang, J., 2004. Corporate governance and firm valuation in China. *Journal of Comparative Economics* 32 (4), 599–616.
- Balasubramanian, N., Black, B.S., Khanna, V.S., 2010. The relation between firm-level corporate governance and market value: a study of India. *Emerging Markets Review* 11 (4), 319–340.
- Bebchuk, L., Cohen, A., Ferrell, A., 2009. What matters in corporate governance? *Review of Financial Studies* 22 (2), 783–827.
- Bekaert, G., Harvey, C.R., Lundblad, C.T., 2005. Does financial liberalization spur growth? *Journal of Financial Economics* 77 (1), 3–55.
- Bekaert, G., Harvey, C.R., Lundblad, C.T., 2006. Growth volatility and equity market liberalization. *Journal of International Money and Finance* 25 (3), 370–403.
- Beltratti, A., Bortolotti, B., 2007. The nontradable share reform in the Chinese stock market: the role of fundamentals. Working paper, Bocconi University.
- Black, B.S., 2001. The corporate governance behavior and market value of Russian firms. *Emerging Markets Review* 2 (2), 89–108.
- Black, B.S., Jang, H., Kim, W., 2006a. Does corporate governance affect firms' market values? Evidence from Korea. *Journal of Law, Economics and Organization* 22 (2), 366–413.
- Black, B.S., Jang, H., Kim, W., 2006b. Predicting firms' corporate governance choices: evidence from Korea. *Journal of Corporate Finance* 12 (3), 660–691.
- Black, B.S., Khanna, V.S., 2007. Can corporate governance reforms increase firms' market values? Evidence from India. *Journal of Empirical Legal Studies* 48 (4), 749–796.
- Black, B.S., Kim, W., 2012. The effect of board structure on firm value: a multiple identification strategies approach using Korean data. *Journal of Financial Economics* 104 (1), 203–226.
- Black, B.S., Kim, W., Jang, H., Park, K., 2008. How corporate governance affects firm value: evidence on channels from Korea. Working paper, Northwestern University.
- Black, B.S., Love, I., Rachinsky, A., 2006. Corporate governance indices and firms' market values: time series evidence from Russia. *Emerging Markets Review* 7 (4), 361–379.
- Braga-Alves, M.V., Shastri, K., 2011. Corporate governance, valuation and performance: evidence from a voluntary market reform in Brazil. *Financial Management* 40 (1), 139–157.
- Brown, L., Caylor, M., 2009. Corporate governance and firm operating performance. *Review of Quantitative Finance and Accounting* 32 (2), 129–144.
- Chhaochharia, V., Laeven, L.A., 2009. Corporate governance, norms and practices. *Journal of Financial Intermediation* 18 (3), 405–431.
- Cremers, M., Ferrell, A., 2010. Thirty years of shareholder rights and firm valuation. Working paper, Yale University.

- De Nicolò, G., Laeven, L.A., Ueda, K., 2008. Corporate governance quality: trends and real effects. *Journal of Financial Intermediation* 17 (2), 198–228.
- Doidge, C., Karolyi, G.A., Stulz, R., 2004. Why are foreign firms that list in the U.S. worth more? *Journal of Financial Economics* 71 (2), 205–238.
- Doidge, C., Karolyi, G.A., Stulz, R., 2007. Why do countries matter so much for corporate governance? *Journal of Financial Economics* 86 (1), 1–39.
- Durnev, A., Fauver, L., 2010. Stealing from thieves: firm governance and performance when states are predatory. Working paper, McGill University.
- Durnev, A., Kim, E., 2005. To steal or not to steal: firm attributes, legal environment, and valuation. *Journal of Finance* 60 (3), 1461–1493.
- Gillan, S., Hartzell, J., Starks, L., 2004. Explaining corporate governance: boards, bylaws, and charter provisions. Working paper, University of Georgia.
- Gompers, P.A., Ishii, J.L., Metrick, A., 2003. Corporate governance and equity prices. *Quarterly Journal of Economics* 118 (1), 107–155.
- Klapper, L.F., Laeven, L.A., Love, I., 2006. Corporate governance provisions and firm ownership: firm-level evidence from Eastern Europe. *Journal of International Money and Finance* 25 (3), 429–444.
- Klapper, L.F., Love, I., 2004. Corporate governance, investor protection and performance in emerging markets. *Journal of Corporate Finance* 10 (5), 703–728.
- Lang, M.H., Lins, K.V., Miller, D.P., 2003. ADRs, analysts and accuracy: does cross listing in the U.S. improve a firm's information environment and increase market value? *Journal of Accounting Research* 41 (2), 317–345.
- Larcker, D.F., Richardson, S.A., Tuna, A.I., 2007. Corporate governance, accounting outcomes, and organizational performance. *Accounting Review* 82 (4), 963–1008.
- Leal, R.P., Carvalhal-da-Silva, A.L., 2005. Corporate governance and value in Brazil (and in Chile). Working paper, Inter-American Development Bank.
- Love, I., 2010. Corporate governance around the world: what we know and what we don't. *World Bank Research Observer* 18 (1), 25–59.
- Morey, M., Gottesman, A., Baker, E., Godridge, B., 2009. Does better corporate governance result in higher valuations in emerging markets? Another examination using a new data set. *Journal of Banking and Finance* 33 (2), 254–262.