

# **The Impact of International Governance Reforms on Domestic and Cross-Listed Firms: A Multi-Country Examination**

by

Larry Fauver,\* Xi Li,\*\* and Alvaro Taboada\*

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\* University of Tennessee  
424 Stokely Management Center  
Department of Finance  
Knoxville, TN 37996  
Phone: (865) 974-1722  
Fax: (865) 974-1716  
*Email:* [lafauver@utk.edu](mailto:lafauver@utk.edu)

*Email:* [ataboada@utk.edu](mailto:ataboada@utk.edu)

\*\* Hong Kong University of Science and Technology  
Clear Water Bay, Hong Kong  
*E-mail:* [acli@ust.hk](mailto:acli@ust.hk)

# **The Impact of International Governance Reforms on Domestic and Cross-Listed Firms: A Multi-Country Examination**

## **Abstract**

We examine the impact of corporate governance reforms in 22 countries by analyzing firms' stock price reactions to announcements of such reforms. Using data on over 12,000 firms from 1990 to 2009, we find that, on average, firms react positively to reform announcements (0.07% cumulative abnormal return). However, cross-listed firms have a more positive reaction than non-cross-listed (i.e., domestic) firms. Among domestic firms, we find that firms in countries with poor disclosure and poor investor protection exhibit a negative price reaction to reform announcements (-0.3% to -0.4%), although the reaction is less negative (and sometimes positive) for firms in countries with better enforcement (0.2% to 0.5%), suggesting that domestic firms in countries with poor governance benefit from the reforms if they are enforced. On the other hand, domestic firms in high-enforcement countries that already have high accounting quality react adversely to reform announcements (-0.28% to -0.51%), suggesting that for these firms the costs of implementing the reforms may exceed the benefits. The results are robust to various measures of enforcement and governance. Our findings underscore the importance of enforcement in the implementation of corporate governance reforms.

**Keywords:** corporate governance; international governance reforms; cross-listing; investor protection; enforcement; buy and hold cumulative abnormal return

**JEL Classification:**

## 1. Introduction

Following corporate scandals such as Enron and WorldCom, the Sarbanes-Oxley Act of 2002 was enacted in an effort to improve the economic health of firms operating in the U.S. In line with this development, many other countries have also passed reforms that aim to improve transparency, disclosure, and accountability of corporate financial reporting. However, while the impact of the Sarbanes-Oxley Act has been widely investigated (Chhaochharia & Grinstein 2007; Hammersley *et al.* 2008; Li *et al.* 2008; Brick & Chidambaran 2010; Doidge *et al.* 2010; Wang 2010), few studies have examined the effect of these international governance reforms.<sup>1</sup> In this paper we take a step towards addressing the gap in this literature by exploring stock price reactions to 204 governance reform announcements in 22 countries between 1990 and 2009.

Consistent with studies that analyze the effect of Sarbanes-Oxley on foreign firms cross-listed in the U.S. (Litvak 2007; Duarte *et al.* 2010), we compare the reactions of a country's firms cross-listed in the U.S. market with the reactions of firms not cross-listed in the U.S. (i.e., domestic firms). According to the bonding hypothesis (Coffee 1999; Stulz 1999), foreign firms that cross-list in the U.S. commit to greater minority shareholder protection by subjecting themselves to stricter U.S. reporting requirements. Domestic and cross-listed firms are thus likely to react differently to exogenous improvements in disclosure and corporate governance (Doidge *et al.* 2004; Bailey *et al.* 2006). To the extent that reforms that improve the governance environment for all firms bring domestic firms' governance up to par with that of cross-listed firms, we would expect to see a positive market reaction for domestic firms, provided that the reforms are enforced. However, implementing new governance reforms may be costly,

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<sup>1</sup>A notable exception is Armstrong *et al.* (2010), who analyze the impact of proposals surrounding the eventual adoption of International Financial Reporting Standards in European Union member countries.

especially for domestic firms that do not already adhere to stricter standards through cross-listing. If the costs of compliance exceed the benefits (e.g., a lower cost of capital), we would expect a negative market reaction to reform announcements (Goergen 2007). We posit that for firms in countries that already have good governance, the benefits associated with implementing governance reforms are likely to be lower, and hence the costs are likely to exceed the benefits, leading to an adverse stock price reaction around governance reform announcements. Such an effect is likely to be particularly pronounced in those countries that also have strong enforcement.

Using a sample of 12,833 firms in 22 countries over the 1990 to 2009 period, we test the above conjectures by examining firms' buy-and-hold cumulative abnormal returns (BHCAR) around a number of corporate governance reform announcements (see Appendix A for a list of the governance reforms considered).<sup>2</sup> The analyses take into account whether a given firm is cross-listed in the U.S. The analyses further account for several firm-level factors previously shown to affect abnormal returns, namely, ownership, asset size, and Tobin's Q. As our primary control for country-level governance we construct a governance index that is computed as the first principal component of Kaufman et al.'s (2006) six governance indicators; in robustness tests we instead use the accounting standards index of La Porta et al. (1998) and the anti-self dealing index of Djankov et al. (2008) to control for governance. Our analyses also take into account whether a given reform is a disclosure reform or a more general governance reform, as compliance with disclosure reforms is likely to be easier to verify, which may affect the market's

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<sup>2</sup> We acknowledge that our method treats each reform equally but this ensures that we are biasing our results against our current findings.

reaction to a given reform.<sup>3</sup> We find that, in general, the market reacts positively to governance reforms; on average firms experience a 0.07% abnormal return (significant at the 1% level) during the five days surrounding a reform announcement. The market tends to react more favorably, however, to reforms aimed at improving transparency and disclosure than to more general governance reforms, consistent with compliance of disclosure reforms being less costly to verify. Further, firms cross-listed in the U.S. have a more positive reaction to governance reforms than domestic firms (cross-listed firms experience a 0.38% abnormal return, while domestic firms experience a 0.05% abnormal return during the five days surrounding the reform announcement). When we limit attention to domestic firms, we generally find a negative reaction for domestic firms in countries with poor accounting standards and poor investor protection (i.e., civil law countries), although the reaction tends to be less negative (and sometimes positive) for domestic firms in countries with better enforcement. These results support the idea that the reaction to governance reforms is positively related to enforcement, especially in countries with poor disclosure (e.g. accounting quality). On the other hand, we find that adverse announcement returns obtain for domestic firms in high-enforcement countries that already have good accounting quality. This result is consistent with the benefits from improvements in the governance environment being lower, and hence the costs of governance reform exceeding the benefits, for firms in countries that already have good governance (Coase 1960; Stigler 1964). Our results are robust to various measures of governance, legal and country development, and enforcement.

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<sup>3</sup>As an example of a disclosure reform, a reform passed in Italy in May 1999 requires the annual disclosure of directors' compensation. Compliance with this reform should entail low cost and effort to verify. In contrast, a general governance reform passed in Norway in October 2009 requires independence of the audit committee. Verifying compliance with this latter reform is likely to be less straightforward.

Our paper is most closely related to Armstrong et al. (2010), who examine firm-level returns associated with 16 events over the 2002-2005 period related to the approval of International Financial Reporting Standards (IFRS). Armstrong et al. (2010) find that firms that are less transparent and that have higher information asymmetry experience positive announcement returns surrounding the proposed adoption of IFRS, although firms in countries associated with enforcement concerns (i.e., civil law countries) observe negative market reactions. Our study builds on Armstrong et al. (2010) by examining in greater detail differences in country-level governance, as well as a broader set of governance reforms across a larger set of countries. Additionally, we consider countries with different levels of economic development and enforcement, which allows us to test how the impact of a country's corporate governance reforms varies with the country's level of development and enforcement. The remainder of the paper is organized as follows. In section 2 we provide a review of the literature on international governance and governance reforms. In section 3 we describe our data and methodology, and in section 4 we present our main results on the impact of international governance reforms and the various factors influencing announcement returns across countries. We provide results of robustness tests in section 5. Finally, we conclude in Section 6.

## **2. Literature Review: International Governance and Governance Reforms**

Enriques and Volpin (2007) compare corporate governance reforms in France, Italy, and Germany to those in the U.S. The authors find that while these three countries have narrowed the gap relative to the U.S., they have not gone far enough with their governance reforms. In more recent work, Aggarwal et al. (2009) compare the governance of foreign firms to that of comparable U.S. firms and find that foreign firms invest less in firm-level governance than U.S. firms (i.e., have a negative governance gap), although firms from countries with better investor

protection are less likely to have a negative governance gap. Their results suggest that firm-level governance and investor protection are complements. They also document that investment in firm-level governance has value implications; firms with lower investment in internal governance than their matching U.S. firms are worth less.

Other literature explores factors influencing a firm's governance rating. Doidge, Karolyi, and Stulz (2007) examine the relation between variation in governance ratings and a country's level of investor protection and economic and financial development. They conclude that it is expensive to improve investor protection in countries that have poor development and that the payoff to increasing governance is marginal. They show, however, that a firm in an emerging country may benefit from improved governance quality when it needs to borrow from international capital markets. Overall, Doidge et al. (2007) present results consistent with country characteristics being the main driver of a firm's governance quality.

In a related paper, Chhaochharia and Laeven (2009) examine the impact of corporate governance on firm value for firms in 22 countries from 2003 through 2005, differentiating between firm- and country-level governance. Chhaochharia and Laeven (2009) show that regardless of the higher costs, some firms adopt stronger governance measures than required. In turn, these firms are rewarded with a higher valuation (i.e., Tobin's Q) relative to firms with weaker firm-level governance. The authors further report that the firms with weaker governance tend to have more concentrated ownership and larger free cash flow. This result is consistent with agency problems being more pronounced in firms with weaker governance.

Finally, as discussed in the introduction, Armstrong et al. (2010) examine announcement events over the 2002-2005 period surrounding the adoption of (IFRS) for European Union

member firms. The authors conclude that firms that are less transparent and that have higher information asymmetry observe more positive announcement returns. However, they find that firms in civil law countries have negative returns around the proposed adoption of IFRS, which they attribute to concerns about the enforcement of IFRS in those countries.

In this paper, we expand the above literature by examining not only IFRS proposals, but rather a broader set of country-level governance reforms in 22 countries. Furthermore, we consider countries with different levels of economic development to evaluate the extent to which development affects variation in the impact of corporate governance reforms. In addition, we explicitly account for differences in enforcement when examining the effects of governance reforms, as prior literature suggests that the impact of a reform may be depend on the likelihood of its enforcement.

### **3. Data & Methodology**

#### Data

To explore the impact of international governance reforms, we examine the reaction to reform announcements for firms from 22 countries that have enacted some type of corporate governance reform since 1990. We first collect information on the announcement and effective dates of corporate governance reforms in each of these countries. For reforms in France, Germany, and Italy, we collect information primarily from Enriques and Volpin (2007), while we collect information on reforms in other countries from various sources including the European Corporate Governance Institute, the Ontario Securities Commission, and Deloitte's IAS Plus website. Appendix A provides a detailed list of reforms by country as well as the

sources used to gather the information on governance reforms. The announcement dates for each reform are verified through news searches via Factiva and Lexis-Nexis.

Our initial sample consists of all firms in each of 22 countries that are covered by DataStream and that trade on a major stock exchange in their home country. We then identify which of these firms are cross-listed in the U.S. (NYSE, NASDAQ, Amex, and OTC) with a depository receipt or ordinary listing. We collect cross-listing information from Citibank and the Bank of New York Mellon's Depository Receipts Directory, and information on Canadian firms that list in the U.S. from the NYSE and NASDAQ websites. Using the data on cross-listings, we create a cross-listed indicator variable that is equal to one if the firm was cross-listed on or before a reform's announcement date and zero otherwise. We obtain daily stock prices and local market indices from January 1<sup>st</sup>, 1990 through December 31<sup>st</sup>, 2009 from Thomson Financial's DataStream. Other firm-level data including total assets and net sales are obtained from WorldScope.

Panel A of Table 1 provides descriptive statistics of our sample of firms by country. In total, our sample comprises 12,833 firms from 22 countries, of which 668 are cross-listed in the U.S. As might be expected, our sample consists of fairly large firms with average total assets of \$2.1 billion. Further, cross-listed firms are larger than their domestic counterparts, with average total assets of \$7.4 billion compared to \$1.7 billion for domestic firms. The number of cross-listed firms varies widely by country, with India (1), Portugal (3), and Italy (3) having the smallest number of cross-listed firms, while Canada (189) and the U.K. (106) have the largest number of cross-listed firms in our sample. The table also shows that many of the countries have multiple corporate governance reforms over the sample period, with Canada having the most (27), while Australia, Japan, and Mexico each have only three reforms. Our sample is fairly

geographically diverse, as it comprises 17 developed markets and 5 emerging markets; however, the relative number of firms is greater in the developed markets.

We use several measures of governance and enforcement, including the first principal component of the six Kaufmann et al. (2006) governance indicators (i.e., rule of law, voice and accountability (VACG), political stability (POLSTAB), control of corruption (CORRUPTION), government effectiveness (GOVEFF), and regulatory quality (REGQ)); the accounting standards index from La Porta et al. (1998); the anti-self dealing index and contract enforcement days from Djankov et al. (2008); and Transparency International's corruption index. We obtain other country-level control variables (e.g., GDP per capita) from the World Bank's World Development Indicators, while we obtain sovereign debt ratings from Bloomberg.

Panel B of Table 1 presents descriptive statistics for the firm- and country-level variables used in the study. The results show that, as before, cross-listed firms are larger than their domestic counterparts. In addition, consistent with prior findings, cross-listed firms have a higher Tobin's Q (median) than their domestic counterparts (Doidge et al. 2004). The table further shows that, in general, cross-listed firms tend to come from countries with better investor protection (higher anti-self dealing index), better accounting standards, a well-established rule of law, and higher long-term sovereign credit ratings. Ownership concentration is lower for firms that cross-list in the U.S. These differences between cross-listed firms and domestic firms suggest that the two types of firms are likely to have different reactions to governance reforms in their home countries.

Table 2 shows pairwise correlations between the various country- and firm-level variables. Many of the governance variables are highly correlated, which can result in

multicollinearity problems when including these measures as controls in our multivariate regressions. In particular, the Kaufmann et al. (2006) measures are highly correlated, with most of them having correlations of 0.90 or higher. To mitigate multicollinearity concerns, we compute our main governance indicator variable, governance index, as the first principal component of the six Kaufmann et al. (2006) governance indicators using data for all available years.

### Event Study Methodology

We measure the market's reaction to governance reforms by calculating buy-and-hold abnormal returns (BHCARs) around each reform's announcement (and effective) date. In particular, we first obtain abnormal returns using the following market model:

$$\mathbf{R}_{ict} = \alpha_i + \beta_i^m \mathbf{R}_{mct} + \beta_i^w \mathbf{R}_{wt} + \varepsilon_{it} \quad t = -260, \dots, -100, \quad (1)$$

where  $R_{ict}$  refers to the daily return for stock  $i$  in country  $c$ ;  $R_{mct}$  refers to the equally-weighted local market return for country  $c$ ,  $R_{wt}$  is the MSCI world market index, and  $\varepsilon_{it}$  is the daily excess return for firm  $i$ . We then calculate abnormal returns over three subperiods, namely,  $(-1, +1)$ ,  $(-2, +2)$ , and  $(0, 10)$ , where the BHCAR is computed as follows:

$$\mathbf{BHCAR}_i^{(t_1, t_2)} = \prod_{t=t_1}^{t=t_2} (1 + \widehat{\varepsilon}_{it}) - 1. \quad (2)$$

Notice that while we calculate the abnormal returns for three different event windows, for brevity we only report results for BHCAR  $(-2, +2)$ , which is in line with Bris and Cabolis (2008). Our results are qualitatively similar, however, across the different event windows. Our BHCARs are calculated to control for overlapping event dates, as the stock returns may be correlated and upward biased (see Jaffe (1974) and Mandelker (1974) for more of a discussion).

Table 3 provides summary statistics for BHCARs. The full-sample results in Panel A show that, on average, during the five days surrounding governance reform announcements, firms in our sample experience cumulative abnormal returns of 0.07 %. In Panel B, which reports results separately for cross-listed firms and domestic firms, the results show that cross-listed firms react more positively to reform announcements than domestic firms. In particular, when we consider the full sample of countries, we see that cross-listed firms experience a mean 0.38% cumulative abnormal return, while firms that are not cross-listed experience a much lower mean 0.05% cumulative abnormal return around governance reform announcements; the difference is not statistically significant, however. A comparison of medians points to similar results: abnormal announcement returns are insignificant for cross-listed firms (-0.05%) but significantly negative for domestic firms (-0.23%); in this case, the difference is significant. When we consider individual countries, we see that cumulative abnormal returns for firms not cross-listed in the U.S. are generally negative, while those for cross-listed firms vary by country. Cross-listed firms in Australia, Canada, Japan, and the U.K. experience positive and significant abnormal returns, while cross-listed firms in countries such as Brazil and Denmark have significantly negative abnormal returns around reform announcements. These preliminary results suggest that the market sometimes perceives the costs associated with governance reforms as outweighing the benefits, particularly for domestic firms (negative median abnormal returns). We explore this finding further in the following sections.

#### **4. Multivariate Analyses**

##### Abnormal Returns around Governance Reform Announcements

In this section we explore how country- and firm-specific characteristics affect stock price reactions to governance reform announcements. Our analysis focuses on the differential impact between cross-listed and domestic firms' stock price reactions to governance reform announcements.

By listing in the U.S., foreign firms become subject to SEC reporting requirements and thus commit to higher disclosure standards and better minority investor protection (Doidge *et al.* 2004; Bailey *et al.* 2006), which signals the firm's quality and value (Cantale 1996; Fuerst 1998). This can lead to benefits such as access to more developed capital markets and in turn a lower cost of capital (Lins *et al.* 2005). However, by choosing to adhere to stricter rules and regulations, cross-listed firms incur costs that are not shared by domestic firms, especially in countries with poor investor protection and disclosure standards.

The passage of stricter governance reforms in firms' home markets can have a positive or negative effect on cross-listed firms relative to their domestic counterparts. Focusing first on cross-listed firms, on the one hand the signaling benefits of cross-listing may be reduced after the passage of reforms that improve the governance environment of all firms in the home country. Cross-listed firms may thus react adversely to announcements of governance reforms. If this view holds, the adverse impact of governance reform announcements on cross-listed firms should be more pronounced in less developed countries and countries with weaker governance mechanisms. On the other hand, cross-listed firms may benefit from improved transparency and investor confidence in the home market owing to new regulatory reforms without incurring a significant increase in compliance costs as they already adhere to strict SEC reporting requirements.

Domestic firms, in contrast, may also reap the benefits of improved transparency and investor confidence, but will likely face new costs in complying with tougher standards. If the cost effect dominates for domestic firms, cross-listed firms may react more favorably than domestic firms to governance-improving reforms in their home countries. The potential benefits of an improved governance regime are likely to be greater for domestic firms in countries with weaker governance. At the same time, the costs are likely to be higher for domestic firms in countries with weak governance, where compliance costs are expected to increase more for domestic firms than cross-listed firms, especially in countries in which the new regulations are more likely to be enforced. Domestic firms' stock price reaction to reform announcements can thus be taken as an indication of whether the resulting compliance costs outweigh the benefits.

We test the above hypotheses on stock price reactions to governance reforms using firms' BHCAR (-2, +2) around reform announcement dates. Specifically, we run different specifications of the following regression:

$$\mathbf{BHCAR}_{ict} = \alpha + \beta \mathbf{DOM}_i + \gamma \mathbf{X}_c + \delta \mathbf{Z}_{it} + \delta_t + \varepsilon_i, \quad (3)$$

where  $\mathbf{DOM}_i$  is an indicator variable equal to one if firm  $i$  does not have shares cross-listed in the U.S. via depository receipts or an ordinary listing as of the reform date, and zero otherwise.  $\mathbf{X}_c$  is a vector of country-level controls that includes an indicator for whether the reform is a disclosure reform; the log of GDP per capita, which controls for a country's level of financial development; market turnover, which proxies for market liquidity and is calculated as the volume of trade in the stock market divided by total stock market capitalization; governance index, which we calculate as the first principal component of Kaufmann et al.'s (2006) six governance indicators (voice and accountability, political stability, control of corruption,

regulatory quality, rule of law, and government effectiveness); and Djankov et al.'s (2007) contract enforcement days, which captures a country's level of enforcement.<sup>4</sup>  $Z_{it}$  is a vector of firm-level controls that includes log (total assets as of year t-1), which proxies for firm size as the compliance costs associated with governance reforms may be lower for large firms;<sup>5</sup> Tobin's Q, which captures firm value and is calculated as the market value of equity plus book value of liabilities divided by book value of assets; an indicator variable equal to one if firm  $i$  is a financial firm (based on two-digit SIC), given that some reforms are geared specifically towards financial firms; an indicator variable equal to one for Canadian firms, to capture differences owing to the fact that Canadian firms can list directly in the U.S. market; and percentage of closely held shares, which captures the degree of insider ownership. We average the insider ownership variable across all years because many firms have missing data or do not have data available for all years in the sample. Finally,  $\delta_t$  represents year fixed effects. All of our regression results control for clustering the standard errors by country.

Table 4 presents the results for our four baseline regressions. Models 1 and 2 show results for the full sample with and without the enforcement index, respectively; in models 3 and 4 we incorporate a control for ownership concentration. Panel A reports results based on the full sample. We find that domestic firms have a more negative stock price reaction to governance reform announcements than their cross-listed counterparts. However, the results are not statistically significant. This finding supports the view that, to some extent, the costs of governance reforms offset the benefits. Further, this finding suggests that the domestic versus

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<sup>4</sup>In robustness tests, we employ several alternative governance measures, including the anti-self dealing index of Djankov et al. (2008), the accounting quality index of (La Porta *et al.* 1998), and Transparency International's corruption perception index, among others.

<sup>5</sup>See, for example, Kamar, Karaca-Mandic, and Talley (2007), who review the literature on the effect of SOX on small firms and document differences in compliance costs between small and large firms.

cross-listing distinction doesn't appear to be an important determinant of whether firms benefit from or are harmed by governance reforms. It is important to note, however, that at this stage we haven't separately analyzed results broken up by level of enforcement or development.

The results in Panel A also show that abnormal returns are higher when the reforms are disclosure related and higher for firms in countries with better governance. The coefficient on disclosure reforms is highly positive and significant at the 5% level. This result indicates that the market views disclosure reforms as relatively more beneficial to firms than other types of governance reforms (BHCARs are roughly 1% higher for disclosure reform announcements). The results further indicate that firm size has no impact on abnormal returns, which implies that the compliance costs associated with governance reforms may not be all that different across small and large firms. In contrast, the stock price reaction to governance reforms is significantly higher for Canadian firms (positive and significant at the 1% level in all four regressions). The level of economic development as measured by log GDP per capita also loads positive and significant in the regressions, which suggests that firms in countries with a higher level of economic development may benefit more from governance reforms than firms in countries with a lower level of economic development. Finally, the financial firm industry dummy, market turnover, and ownership have no significant effect on abnormal returns.

The positive and significant stock price reactions around governance reform announcements for higher levels of economic development suggest that these reforms are perceived to be more beneficial (or less detrimental) for firms in countries with better economic development. To more closely examine this result, in Panel B of Table 4 we split our sample into high versus low economic development (above–median versus below–median GDP per capita, respectively). The results again show that abnormal returns for domestic firms are

negative and insignificant, but when we interact our domestic dummy variable with enforcement we observe positive and significant returns in less developed countries.<sup>6</sup> This finding supports the view that governance reforms are perceived to be beneficial for domestic firms in economically less developed countries when the reforms are enforced. These results are also consistent with a recent paper by Christensen, Hail, and Leuz (2010) who determine that EU firms experience a reduction in the cost of capital and higher liquidity as a result of two important reforms to limit market manipulation. Their findings are even stronger in countries with greater enforcement.

The results in Panel B of Table 4 further indicate that the costs of complying with stricter governance reforms may outweigh the benefits for larger firms in less developed countries, while the reverse is true for larger firms in highly developed countries. This finding may be due to the difference in cost structure of large firms across economically developed versus less developed countries. Alternatively, this finding may be due to large firms in less developed countries, which are typically more politically connected, facing reduced private benefits of control following governance reforms (Faccio (2006); Faccio, Masulis, and McConnell (2006)). Finally, while we continue to find that disclosure reforms and the governance index both have a positive and significant impact on abnormal returns, we now observe that enforcement has a positive effect on abnormal returns.

#### The Effect of Enforcement Quality, Accounting Standards, and Legal Origin on BHCARs around Governance Reform Announcements

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<sup>6</sup>This result supports the findings of Armstrong et al. (2010), who find that IFRS reforms are value enhancing for less transparent firms with higher pre-adoption information asymmetry.

To examine in more detail the sources of cross-listed and domestic firms' different responses to reform announcements, in Table 5 we run subsample regressions on high versus low enforcement countries, high versus low accounting standard quality countries, and common versus civil law countries. If adverse reactions to reform announcements are due to the costs of the reform exceeding the benefits, this effect is likely to be more pronounced for domestic firms in countries with weaker legal enforcement and lower quality disclosure due to managers extracting greater rents in implementing the reforms (Armstrong et al. 2010). Conversely, abnormal returns are likely to be less negative for domestic firms in countries with a stronger legal environment (i.e., common law countries) as these firms already face more stringent transparency and disclosure requirements. These firms are also likely to be less separated from their cross-listed counterparts. Panel A of Table 5 reports results broken down by high versus low enforcement.<sup>7</sup> We now observe a negative and significant (at the 1% level) coefficient on abnormal returns for domestic firms in high enforcement countries (roughly 0.39% less than their cross-listed counterparts). It thus appears that investors view governance reforms in countries with high enforcement as too costly for domestic firms (i.e., the costs outweigh the benefits). However, when we interact our domestic indicator variable with disclosure reform, we observe a positive and significant coefficient of around 0.8%. This result suggests that the market views disclosure reforms as beneficial for domestic firms.<sup>8</sup> We view this result as consistent with the market believing that disclosure reforms will level the playing field between domestic and cross-listed firms in that country. However, the coefficient on the domestic indicator interacted with disclosure reforms in low enforcement countries is not significantly different from zero. This

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<sup>7</sup>As our measure of enforcement, we follow Djankov et al. (2007) and use the number of days to resolve a payment dispute through the courts (contract enforcement days). Countries with above- (below-) median contract enforcement days are classified as low (high) enforcement countries.

<sup>8</sup>In robustness tests (unreported), we replicate our results after excluding all IFRS-related reforms and find qualitatively similar results to those reported in the paper.

indicates that the market realizes that these countries will not enforce governance reforms that are enacted, in which case the reforms are expected to have no impact on the way firms operate. Turning to the coefficients on disclosure reform and the governance index, we find that as reported in earlier results, these coefficients are positive and significant for both high and low enforcement countries. Other control variables are also similar to those already reported.

In Panel B of Table 5, we test for differences in the effect of reform announcements by the level of accounting quality. The results suggest that for domestic firms in poor accounting quality countries, domestic firms tend to react more negatively than cross-listed firms to governance reform announcements. However, when we interact our domestic indicator variable with high enforcement, we obtain a positive and significant coefficient. Consistent with Panel A, this result is in line with the idea that governance reforms are perceived as beneficial for domestic firms in poor accounting quality countries when enforcement is high. When we investigate the impact of reforms in good accounting quality countries, we do not find a significant difference between the reactions of domestic and cross-listed firms, while we report a negative and significant coefficient on the domestic indicator interacted with high enforcement. These results suggest that for firms in countries with good accounting quality, the market perceives the cost of implementing the governance reforms as outweighing the benefits. Notice that in Panel B, we find that Canadian firms react more negatively to the announcement of governance reforms. Our interpretation of this result is that for Canadian firms listed in the U.S., the potential benefits of such listings are reduced following the governance reforms.

Finally, in Panel C of Table 5, we divide the sample by legal origin as identified in La Porta et al. (1998). The results largely support our findings above. In particular, we find that domestic firms react negatively to governance reforms in civil law countries, which tend to

display lower enforcement on average than common law countries. In addition, as we observe in Panel B, when we interact our domestic indicator variable with high enforcement we obtain a positive and significant coefficient. It thus appears that the market believes that governance reforms can benefit domestic firms in civil law countries when enforcement is high. The results on the other control variables are similar to our earlier findings.

Overall, our results in Table 5 suggest that domestic firms react negatively to reform announcements in countries with low economic development (poor disclosure and investor protection), but this negative reaction is less negative (and even positive) for firms located in countries with greater enforcement. This finding suggests that governance reforms can level the playing field for domestic firms if the reforms are enforced. The results also suggest that firms in high-accounting quality countries with better enforcement react negatively to governance reforms, which suggests that for these firms, the costs of implementation may exceed the benefits.

## **5. Robustness Tests**

In this section we explore whether our main results are robust to alternative measures of enforcement and governance. First, in Table 6 Panel A we run similar regressions as in Equation (3) (i.e., Table 5) using two alternate measures of enforcement, namely, the regulatory costs per billion dollars of GDP of Jackson (2007), which is a measure of enforcement inputs, and the public enforcement index of La Porta, Lopez-de Silanes, and Shleifer (2006). The results in Panel A are partitioned by quality of accounting standards. Next, in Panel B of Table 6 we repeat the analysis using as an alternative measure of governance Transparency International's corruption perception index. In this case the results are partitioned by the level of corruption. In

both panels the control variables are the same as described earlier, but are omitted from the table to conserve space.

The results in Panel A of Table 6 confirm those reported in Panel B of Table 5. More specifically, using either alternative measure of enforcement, we find that domestic firms in countries with poor disclosure observe an adverse reaction to reform announcements. In those countries with better enforcement, however, the reaction continues to be less negative. In Panel B of Table 6 we again observe a negative reaction for domestic firms in countries with weak governance as indicated by high levels of corruption, with the reaction less negative in the event of high enforcement. Overall, the results are in line with our prior findings and suggest that domestic firms in countries with poor disclosure and high corruption benefit from governance reforms, but only if the reforms are enforced.

In unreported robustness tests, we repeat the above analysis for additional governance measures. Using the disclosure index of Bushman (2004) or the disclosure requirements index of La Porta et al. (2006) to distinguish high versus low accounting quality countries yields qualitatively similar results. In addition, using a proxy for private benefits of control, namely, the block premium of Dyck and Zingales (2004), shows that domestic firms' negative reaction to reform announcements comes primarily from countries with high control benefits (i.e., high block premiums).

## **6. Conclusion**

Using a sample of over 12,000 firms in 22 countries from 1990 to 2009, in this study we empirically test how a country's governance environment, as well as level of economic development and legal enforcement, affect firms' stock price reaction around corporate

governance reforms. To capture firm reactions to proposed reforms, we use a firm's buy-and-hold cumulative abnormal returns (BHCARs) around governance reform announcement dates.

We find that, on average, firms react positively to reform announcements. The market reacts more favorably, however, to reforms aimed at improving transparency and disclosure than to more general governance reforms. One plausible explanation for this result is that it may be easier for regulatory authorities (or private entities) to verify compliance with disclosure reforms. Further, we find that firms cross-listed in the U.S. have a more positive reaction to governance reforms than domestic firms. When we focus attention on domestic firms, we find a negative reaction for firms in countries with poor accounting standards and poor investor protection (i.e., civil law countries), but a less negative (and sometimes positive) reaction for domestic firms in countries with better enforcement. These results support the idea that governance reforms are expected to have a positive impact on domestic firms, especially in countries with poor disclosure (e.g., accounting quality), if the reforms are enforced. These results also suggest that, when enforced, governance reforms reduce cross-listed firms' advantage over domestic firms. This finding is in line with Armstrong et al. (2010), who find evidence of positive market reactions around events associated with the adoption of IFRS for firms with lower information quality and higher information asymmetry.

While the above results are consistent with the benefits of governance reforms exceeding the costs, we find that for some firms the costs may exceed the benefits. In particular, we find adverse reactions to reform announcements in countries with high enforcement, especially for domestic firms in countries with good accounting quality. This result is consistent with the view that for firms in countries that already have good disclosure, the benefits from improvements in the governance environment are lower and thus the costs may exceed the benefits.

Our results are robust to various measures of disclosure and enforcement. Overall, our findings underscore the importance of enforcement in the implementation of new reforms.

## Appendix A – Governance Reform Dates by Country

Australia		
<i>Date</i>	<i>Reform</i>	<i>Source</i>
7/3/2002	Commitment to adopt IFRS by 2005	IFRS website
7/1/2004	Corporate Law Economic Reform Program becomes law	CPA Australia
1/1/2005	IFRS adopted	IFRS website
Austria		
<i>Date</i>	<i>Reform</i>	<i>Source</i>
1/1/1999	Takeover rule	Austrian Takeover Commission
6/4/2002	IFRS reporting mandated	Deloitte - IAS plus
10/1/2002	Austrian Code of Corporate Governance (governance framework setup; increased transparency for all stakeholders) (published)	European Corporate Governance Institute
11/1/2002	Austrian Code of Corporate Governance (effective)	European Corporate Governance Institute
10/8/2004	One-tier system (administrative council) permitted	European Corporate Governance Institute
1/1/2005	IFRS adopted	IFRS website
2/22/2005	Strengthened insider trading and company disclosure provisions (published)	European Corporate Governance Institute
12/14/2005	revisions to election of board member, disclosure of management board compensation, & tasks of supervisory board (proposed)	European Corporate Governance Institute
1/1/2006	revisions to election of board member, disclosure of management board compensation, & tasks of supervisory board (amended)	European Corporate Governance Institute
6/1/2007	Mandatory/voluntary bid rule; timing of company financial reports	Bank Austria
11/18/2008	Takeover bids decided by shareholders; Share buyback; various others (published)	European Corporate Governance Institute
1/1/2009	Takeover bids decided by shareholders; Share buyback; various others (effective)	European Corporate Governance Institute
Belgium		
<i>Date</i>	<i>Reform</i>	<i>Source</i>
1/1/1998	Corporate Governance - Recommendations; tasks of board directors (published)	European Corporate Governance Institute
12/1/1998	Executive management's compensation; disclosure of information on administration and management	European Corporate Governance Institute
11/18/1999	Guidelines on profit allocation and relationship with controlling shareholders	European Corporate Governance Institute
1/1/2000	Director's Charter - tasks of board directors; insider trading	European Corporate Governance Institute
6/4/2002	IFRS reporting mandated	Deloitte - IAS plus
6/18/2004	Governance framework setup. Comply-or-explain. (Draft)	European Corporate Governance Institute
12/9/2004	Governance framework setup. Comply-or-explain. (Final edition published)	European Corporate Governance Institute
1/1/2005	IFRS adopted	IFRS website
9/21/2005	Governance recommendations for NON-LISTED firms	European Corporate Governance Institute
7/1/2008	Communication with shareholders. Annual financial report. (Draft)	European Corporate Governance Institute
3/12/2009	Communication with shareholders. Annual financial report. (Final edition published)	European Corporate Governance Institute
Brazil		
<i>Date</i>	<i>Reform</i>	<i>Source</i>
5/6/1999	Governance framework setup	Organization for Economic Co-operation and Development
4/1/2001	Independent auditors; Supervisory Board	Organization for Economic Co-operation and Development
10/1/2001	Transparency; communication with financial market and minority investors	European Corporate Governance Institute
6/1/2002	Tasks of directors; transparency; shareholder protection	European Corporate Governance Institute
3/30/2004	Corporate responsibility; continued director education; SOX requirement for audit committee (effective)	European Corporate Governance Institute
4/1/2004	Corporate responsibility; continued director education; SOX requirement for audit committee (published)	European Corporate Governance Institute
9/1/2009	Transfer of control; anti-takeover; audit committee	European Corporate Governance Institute

## Appendix A Cont'd

Canada		
Date	Reform	Source
5/29/2002	Draft Report of minister of Finance 5-year review	Ontario Securities Commission
7/17/2002	New Independent Public Oversight for Auditors of Public Companies	British Columbia Securities Commission
10/30/2002	Proposed amendments to the Securities Act and the Commodity Futures Act	Ontario Securities Commission
11/12/2002	Final version on Bill 198 (governance reforms) is reprinted	Ontario Securities Commission
11/29/2002	amendments to the <i>Securities Act</i> and the <i>Commodity Futures Act</i> received Royal Assent and became effective.	Ontario Securities Commission
12/8/2002	Ontario passed legislation, or Bill 198, which enables the Ontario Securities Commission to issue new rules on governance	H.Garfield Emerson & Geoff A. Clarke, 2003
1/30/2003	CSA release Blueprint for Uniform Securities Law	Legislative Assembly of Ontario
5/29/2003	Five Year Review Committee Final Report	Ontario Securities Commission
6/27/2003	OSC proposes rules for audit committee, continuous disclosure, and CEO/CFO certification of financial statements	Ontario Securities Commission
11/26/2003	OSC adopted MI 52-109 – CEO/CFO certification of financial statements	Ontario Securities Commission
1/6/2004	OSC adopted auditor oversight rules	Audit Committee Institute - Canada
1/16/2004	OSC adopted MI 52-110 rules for audit committee	Ontario Securities Commission
1/16/2004	Uniformed version of Corporate Governance Guidelines (NP 58-201); Increased disclosure	<a href="http://www.tmx.com/en/pdf/Notice-NP58-201_CGGuidelines_NI58-101_CGPractices_">http://www.tmx.com/en/pdf/Notice-NP58-201_CGGuidelines_NI58-101_CGPractices_</a>
3/9/2004	Ministry of Finance approved the first three rules (auditor oversight; CEO/CFO certification, etc.)	Industry Canada Site - <a href="https://ic.gc.ca/eic/site/ic1.nsf/eng/02390.html">https://ic.gc.ca/eic/site/ic1.nsf/eng/02390.html</a>
3/30/2004	Most jurisdictions adopted/approve the final rules for accounting principles (NI 52-107) and auditor oversight	Ontario Securities Commission
4/23/2004	The other three provincial regulators propose another version of <i>Disclosure of Corporate Governance Practices</i>	Ontario Securities Commission
10/29/2004	All provincial regulators propose a uniformed version of Corporate Governance Guidelines and Disclosure of Corporate Governance Practices	<a href="http://www.hg.org/articles/article_717.html">http://www.hg.org/articles/article_717.html</a>
2/22/2005	OSC adopt final rules for disclosure	Ontario Securities Commission
3/22/2005	OSC adopt final rules for audit committee	Ontario Securities Commission
4/15/2005	Corporate Governance Guidelines (NP 58-201) and Disclosure of Corporate Governance Practices (NI 58-101) are approved by OSC	<a href="http://www.tmx.com/en/pdf/Notice-NP58-201_CGGuidelines_NI58-101_CGPractices_">http://www.tmx.com/en/pdf/Notice-NP58-201_CGGuidelines_NI58-101_CGPractices_</a>
6/30/2005	Corporate Governance Guidelines (NP 58-201) and Disclosure of Corporate Governance Practices become effective	<a href="http://www.tmx.com/en/pdf/Notice-NP58-201_CGGuidelines_NI58-101_CGPractices_">http://www.tmx.com/en/pdf/Notice-NP58-201_CGGuidelines_NI58-101_CGPractices_</a>
12/21/2007	Rules for CEO/CFO certification of financial statements (MI 52-109) are published	Deloitte <a href="http://www.deloitte.com/view/en_CA/ca/services/corporategovernance/e0d382">http://www.deloitte.com/view/en_CA/ca/services/corporategovernance/e0d382</a>
12/31/2007	Rules for CEO/CFO certification of financial statements (MI 52-109) become effective	Deloitte <a href="http://www.deloitte.com/view/en_CA/ca/services/corporategovernance/e0d382">http://www.deloitte.com/view/en_CA/ca/services/corporategovernance/e0d382</a>
3/10/2008	Rules for audit committee published	B.C. Regulations Bulletin No. 8 <a href="http://www.qp.gov.bc.ca/statreg/bulletin/bull2008/bull08">http://www.qp.gov.bc.ca/statreg/bulletin/bull2008/bull08</a>
3/17/2008	Rules for audit committee become effective	British Columbia Securities Commission
6/27/2008	Rules for continuous disclosure are published	Ontario Securities Commission
7/4/2008	Rules for continuous disclosure become effective	Ontario Securities Commission
Denmark		
Date	Reform	Source
2/29/2000	Tasks of directors; information disclosure	European Corporate Governance Institute
12/6/2001	Openness, transparency, responsibility and equality of treatment	European Corporate Governance Institute
6/4/2002	IFRS reporting mandated	Deloitte - IAS plus
12/1/2003	Reactions and consequences of the Nørby Committee's report on Corporate Governance in Denmark	European Corporate Governance Institute
1/1/2005	IFRS adopted	IFRS website
8/15/2005	Revised Recommendations for Corporate Governance in Denmark : Supervisory board; Auditor	European Corporate Governance Institute
2/6/2008	Recommendations for corporate governance, section VI revised; Revised remuneration policy	European Corporate Governance Institute
6/26/2008	Active ownership and transparency in private equity funds; Guidelines for responsible ownership and good corporate governance	European Corporate Governance Institute
12/10/2008	Recruitment and election of supervisory board members	European Corporate Governance Institute
Finland		
Date	Reform	Source
6/4/2002	IFRS reporting mandated	Deloitte - IAS plus
12/2/2003	Tasks of boards; management compensation; external audit	European Corporate Governance Institute
1/1/2005	IFRS adopted	IFRS website
1/1/2006	Corporate governance recommendations for unlisted companies	European Corporate Governance Institute
5/6/2008	Proposal for an updated Finnish Corporate Governance Code - shareholder rights; election of auditor	European Corporate Governance Institute
10/20/2008	Information disclosure to shareholders; Duties of audit (proposed)	European Corporate Governance Institute
1/1/2009	Various proposals become effective	European Corporate Governance Institute
France		
Date	Reform	Source
5/15/2001	Separation of chairman/CEO; various others	Enriques and Volpin (2007); Information and Computer Security Architecture
8/1/2003	Various (Audit partner rotation; CEO abstains from proposal of auditors)	Enriques and Volpin (2007); AREVA
10/20/2003	Corporate governance report mandated	Enriques and Volpin (2007); AFEP-MEDEF report
11/24/2003	Mergers of securities and banking authorities	Enriques and Volpin (2007); Baker & McKenzie
6/4/2002	IFRS reporting mandated (announced)	Enriques and Volpin (2007); Deloitte - IAS plus
12/29/2004	IAS/IFRS was endorsed	Enriques and Volpin (2007); EUR-lex
1/1/2005	IFRS adopted	IFRS website
7/20/2005	Disclosure of directors' and officers' trading & compensation	Enriques and Volpin (2007); Banque de France

## Appendix A Cont'd

Germany		
Date	Reform	Source
7/8/1994	Price-sensitive information to be immediately disclosed	Enriques and Volpin (2007)
7/26/1994	Criminal sanctions for insider trading	IUSCOMP
1/1/1995	Securities regulator set up and granted extensive investigative power	BAWe
5/1/1998	Greater role for supervisory board; specific duties on risk management/internal controls	Enriques and Volpin (2007); KonTraG
1/21/2001	Exercise of voting rights made easier	Enriques and Volpin (2007); NasTraG
1/1/2002	Sale of corporate shareholdings tax exempt; mandatory bid rule	Enriques and Volpin (2007)
2/26/2002	Corporate governance code mandated on a comply or explain basis	Enriques and Volpin (2007); German Corporate Governance Code
5/1/2002	Mergers of securities and banking authorities	Wikipedia
6/4/2002	IFRS reporting mandated	Deloitte - IAS plus
7/26/2002	Disclosure of directors' & officers' trading; criminal sanctions for market manipulation;	Shareholder Protection: A Leximetric Approach by Priya Lele, Mathias M. Siems
5/21/2003	Civil actions for securities fraud made easier	Enriques and Volpin (2007); NCCR FINRISK
12/15/2003	Prohibition of nonaudit services to audit clients (proposed)	<a href="http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1015&amp;context=lps_papers">http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1015&amp;context=lps_papers</a>
4/21/2004	Prohibition of nonaudit services to audit clients (amended)	<a href="http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1015&amp;context=lps_papers">http://scholarship.law.cornell.edu/cgi/viewcontent.cgi?article=1015&amp;context=lps_papers</a>
7/1/2004	Act on the improvement of investor protection	Enriques and Volpin (2007)
10/30/2004	New German shareholder protection law (disclosure of director's trading)	Shareholder Protection: A Leximetric Approach by Priya Lele, Mathias M. Siems
12/29/2004	IAS/IFRS endorsed	EUR-lex
1/1/2005	IFRS adopted	IFRS website
9/6/2005	Communication among shareholders made easier	Virtual Shareholder Meetings and the European Shareholder Rights Directive by Dirk Z
11/1/2005	Derivative suits made easier	Enriques and Volpin (2007); Shareholder's derivative claim by Margit Vutt
1/1/2006	Annual disclosure of director's compensation	McDermott, Will, & Emery
India		
Date	Reform	Source
4/1/1998	Board structure; rules of disclosure	European Corporate Governance Institute
9/1/1999	Report of the Kumar Mangalam Birla Committee on Corporate Governance (transparency and information disclosure)	European Corporate Governance Institute
2/1/2000	Report of the Kumar Mangalam Birla Committee on Corporate Governance (final edition)	European Corporate Governance Institute
12/24/2009	Separation of CEO and chairman; compensation structure; tasks of audit committee.	European Corporate Governance Institute
Israel		
Date	Reform	Source
6/9/2005	Agreement reached among the IASB, the Institute of CPAs, and the ISA to adopt IFRS in full, effective in 2008.	Deloitte - IAS plus
12/12/2006	Independence of audit committee; composition of internal audit committee; - final version submitted	Israel Securities Authority
12/17/2006	Final version of above bill adopted by ISA	Israel Securities Authority
Italy		
Date	Reform	Source
1/2/1991	Immediate disclosure of price sensitive information	Enriques and Volpin (2007)
5/17/1991	Criminal sanctions for insider trading	Enriques and Volpin (2007)
2/24/1998	New rules on board's information; minorities represented in board of auditors	Enriques and Volpin (2007)
5/14/1999	Annual disclosure of directors' compensation	CONSOB
6/4/2002	IFRS reporting mandated	Deloitte - IAS plus
4/7/2003	Sale of corporate shareholdings tax-exempt	Enriques and Volpin (2007)
10/31/2003	Exercise of voting rights made easier; direct shareholder suit against parent company for damages introduced	Enriques and Volpin (2007)
1/1/2004	New rules on board's information (effective)	U.S. Securities and Exchange Commission
12/29/2004	IAS/IFRS endorsed	EUR-lex
1/1/2005	IFRS adopted	IFRS website
4/18/2005	Increased regulator's investigative and sanctioning power	Enriques and Volpin (2007)
12/28/2005	Minorities represented in Board; shareholder approval of stock based compensation; various others	Enriques and Volpin (2007)
3/14/2006	Contingency fees allowed (corporate governance code)	Enriques and Volpin (2007)
Japan		
Date	Reform	Source
6/7/2006	Review of substantial shareholding reporting system (enacted)	Morrison & Foerster
9/30/2007	Major revisions to securities and Exchange Act	Bank of Japan
4/1/2008	Internal Control Reports become subject to civil liability	Mondaq

## Appendix A Cont'd

Mexico		
<i>Date</i>	<i>Reform</i>	<i>Source</i>
11/11/2008	Mexican Banking and Securities Commission announced that all companies listed on the Mexican Stock Exchange will be required to use IFRSs starting in 2012.	Deloitte - IAS plus
1/27/2009	Mexican Banking and Securities Commission issued modifications to the securities and exchange laws to adopt IFRSs by listed companies.	Deloitte - IAS plus
7/1/1999	Tasks of directors; auditing; communication between directors and investors	European Corporate Governance Institute
Netherlands		
<i>Date</i>	<i>Reform</i>	<i>Source</i>
11/8/1996	The disclosure of major holdings in listed companies; insider trading	European Corporate Governance Institute
6/25/1997	Effective supervision and accountability established	European Corporate Governance Institute
12/15/1999	Setting up registration date for general meeting	European Corporate Governance Institute
11/2/2000	Monitor and supervise management	European Corporate Governance Institute
8/1/2001	Shareholder rights; anti-takeover provisions; transparency	European Corporate Governance Institute
9/5/2001	The Securities Markets Act - public offers for securities	European Corporate Governance Institute
12/1/2001	Separation of the resolution to adopt or approve annual accounts and the resolution to discharge board member from liability	European Corporate Governance Institute
4/23/2002	Abolition of the statutory age limit for supervisory directors	European Corporate Governance Institute
6/4/2002	IFRS reporting mandated	Deloitte - IAS plus
9/1/2002	Remuneration and shareholding disclosure of board members	European Corporate Governance Institute
7/1/2003	Integrity and transparency of decision-making by management; proper supervision	European Corporate Governance Institute
12/9/2003	Corporate Governance Code (final edition); Shareholder, especially pension funds, rights empower (published)	European Corporate Governance Institute
1/1/2004	Shareholder, especially pension funds, rights empower (effective)	European Corporate Governance Institute
1/1/2005	IFRS adopted	IFRS website
12/10/2008	Firms' social responsibility; tasks of supervisory board	European Corporate Governance Institute
12/9/2009	Banking Code - tasks of bank management board and supervisory board	European Corporate Governance Institute
Norway		
<i>Date</i>	<i>Reform</i>	<i>Source</i>
6/4/2002	IFRS reporting mandated	Deloitte - IAS plus
12/7/2004	Tasks of board of directors; equal treatment of shareholders	European Corporate Governance Institute
1/1/2005	IFRS adopted	IFRS website
12/8/2005	More tailed description of tasks of directors	European Corporate Governance Institute
11/28/2006	Requirement on risk management and internal control	European Corporate Governance Institute
12/4/2007	Improved requirement on corporate governance report and general meetings	European Corporate Governance Institute
10/21/2009	Independence of audit committee	European Corporate Governance Institute
Portugal		
<i>Date</i>	<i>Reform</i>	<i>Source</i>
11/1/1999	Disclosure of information; institutional investors	European Corporate Governance Institute
1/1/2001	Disclosure of information on corporate governance and directors (CMVM Regulation No 07/2001: Corporate Governance Article 1 effective)	European Corporate Governance Institute
2/1/2002	Disclosure of information on corporate governance and directors (CMVM Regulation No 07/2001: Corporate Governance Articles 2&3 effective)	European Corporate Governance Institute
6/4/2002	IFRS reporting mandated	Deloitte - IAS plus
11/1/2003	Establishment of internal organizational regulation; composition of board	European Corporate Governance Institute
1/12/2004	Stronger requirement on the disclosure of information	European Corporate Governance Institute
1/1/2005	IFRS adopted	IFRS website
2/1/2006	Tasks and composition of board; tasks of audit committee	European Corporate Governance Institute
4/3/2007	requirements of shareholder general meeting	European Corporate Governance Institute
9/1/2007	Final edition of Corporate Governance Code	European Corporate Governance Institute
Spain		
<i>Date</i>	<i>Reform</i>	<i>Source</i>
11/12/1996	Set up of corporate governance framework	Reports and Spanish Legislation on Corporate Governance By Mireia Ferre
2/26/1998	Revisions of tasks of board	European Corporate Governance Institute
6/4/2002	IFRS reporting mandated	Deloitte - IAS plus
1/8/2003	Additional transparency and Directors' responsibility	European Corporate Governance Institute
5/1/2004	Revisions of tasks of directors	European Corporate Governance Institute
9/1/2004	IC-A: Principles of Good Corporate Governance - tasks of directors, shareholder rights (effective)	European Corporate Governance Institute
1/1/2005	IFRS adopted	IFRS website
2/16/2006	Shareholders' voting rights; competences of board	European Corporate Governance Institute
4/1/2006	Revision of tasks of stakeholders within a company	European Corporate Governance Institute
5/19/2006	Role of non-executive or supervisory directors	Reports and Spanish Legislation on Corporate Governance By Mireia Ferre

## Appendix A Cont'd

Sweden		
<i>Date</i>	<i>Reform</i>	<i>Source</i>
10/26/2001	Shareholder rights empower; information release	European Corporate Governance Institute
6/4/2002	IFRS reporting mandated	Deloitte - IAS plus
3/1/2003	Takeover recommendations	European Corporate Governance Institute
4/21/2004	Director selection and remuneration	European Corporate Governance Institute
12/16/2004	Swedish Code of Corporate Governance <i>Report of the Code Group</i> (tasks of directors) published	European Corporate Governance Institute
1/1/2005	IFRS adopted	IFRS website
7/1/2005	Swedish Code of Corporate Governance <i>Report of the Code Group</i> (tasks of directors) effective	European Corporate Governance Institute
9/13/2007	Appointment of board and auditor; corporate governance report required	European Corporate Governance Institute
7/1/2008	requirements of board composition	European Corporate Governance Institute
12/22/2009	Regulation on remuneration committee	European Corporate Governance Institute
Switzerland		
<i>Date</i>	<i>Reform</i>	<i>Source</i>
4/17/2002	Information disclosure in annual report (proposed)	European Corporate Governance Institute
7/1/2002	Information disclosure in annual report (effective)	European Corporate Governance Institute
6/25/2002	Revisions to composition and tasks of board	European Corporate Governance Institute
2/21/2008	Separation of CEO and chairman not mandated; independence of audit committee	European Corporate Governance Institute
Thailand		
<i>Date</i>	<i>Reform</i>	<i>Source</i>
1/19/1998	Revisions to function, responsibilities, and tasks of directors	European Corporate Governance Institute
6/23/1999	Regulations on audit committee	European Corporate Governance Institute
9/1/1999	Board composition requirements	European Corporate Governance Institute
10/1/1999	Independence of board and chairman	European Corporate Governance Institute
3/1/2006	Shareholder rights empower	European Corporate Governance Institute
UK		
<i>Date</i>	<i>Reform</i>	<i>Source</i>
6/25/1998	Strengthening of LSE listing rules	The Combined Code 1998 as a Standard for Directors' Duties by Matthias Hornberg
6/4/2002	IFRS reporting mandated	Deloitte - IAS plus
6/7/2002	Public Consultation for review of role and effectiveness of non-executive directors	UK Financial Reporting Council
10/21/2002	Principles on the responsibilities of institutional shareholders issued by several organizations of UK institutional investors	UK Financial Reporting Council
1/20/2003	The Higgs Report: review of the role and effectiveness of non-executive directors	UK Department for Business, Innovation and Skills (BIS)
7/23/2003	Revisions to combined code on corporate governance	UK Financial Reporting Council
10/28/2004	Strength of auditor independence; enforce accounting reporting requirements	UK Office of Public Sector Information (OPSI)
1/1/2005	IFRS adopted	IFRS website
6/27/2006	Proposals: company chairman to sit on remuneration committee; shareholders receive voting proxy with option to withhold their vote	UK Financial Reporting Council
11/1/2006	The above proposals (6/27/2006) become effective	Practical Law Company
11/8/2006	Improvement of shareholder rights; duties of a director, etc.	The Institute of Internal Auditors UK and Ireland

**Table 1 Descriptive Statistics of Sample by Country & by Cross-Listing**

Panel A shows descriptive statistics of the sample of firms by country. Panel B provides summary statistics for all firms in our sample broken down by whether or not they are cross-listed in the US market. Our governance measures include the Anti-Self - Dealing Index and the Public Enforcement Index from Djankov et al. (2008); the accounting standards index from La Porta et al. (1998); a governance index that is the first principal component of the six governance indicators from Kaufmann et al. (2006): voice and accountability (VACG), political stability (POLSTAB), government effectiveness (GOVEFF), regulatory quality (REGQ), rule of law, and control of corruption (CORRUPTION), and Transparency International's corruption perception index. Our measure of liquidity is turnover, defined as the volume of trade in the stock market divided by the total stock market capitalization. All firm level and stock market level data are obtained from Thomson Financial DataStream. Tobin's Q is calculated as the market value of equity plus book value of liabilities divided by the book value of assets. Closely-held shares represent the percentage of shares that are held by insiders. \* indicates that the country is classified as an emerging market country.

<b>Panel A - Sample Description by Country</b>						
<b>Country</b>	<b>Total # of firms</b>	<b># Domestic</b>	<b># Cross-Listed</b>	<b># of reforms</b>	<b>(Average Asset Size- US\$ M)</b>	
					<b>Domestic</b>	<b>Cross-Listed</b>
AUSTRALIA	1,194	1,139	55	3	\$200	\$631
AUSTRIA	140	130	10	12	\$8,699	\$4,305
BELGIUM	198	194	4	11	\$8,485	\$6,584
BRAZIL*	408	355	53	8	\$10,670	\$7,020
CANADA	1,535	1,346	189	27	\$433	\$2,189
DENMARK	253	246	7	9	\$1,010	\$4,036
FINLAND	74	70	4	7	\$1,310	\$4,989
FRANCE	917	887	30	8	\$1,974	\$17,322
GERMANY	935	913	22	20	\$2,796	\$40,547
INDIA*	261	260	1	4	\$679	\$13,805
ISRAEL*	122	116	6	3	\$2,516	\$2,634
ITALY	155	152	3	13	\$7,485	\$23,738
JAPAN	1,720	1,633	87	3	\$2,114	\$11,442
MEXICO*	114	96	18	3	\$2,289	\$2,937
NETHERLANDS	245	220	25	16	\$2,757	\$29,678
NORWAY	249	240	9	7	\$1,108	\$6,728
PORTUGAL	95	92	3	10	\$2,844	\$17,230
SPAIN	186	179	7	10	\$5,003	\$48,179
SWEDEN	505	493	12	10	\$882	\$6,687
SWITZERLAND	276	267	9	4	\$3,672	\$28,201
THAILAND*	492	484	8	5	\$454	\$867
UK	2,759	2,653	106	11	\$672	\$7,955
<b>TOTAL (AVERAGE)</b>	<b>12,833</b>	<b>12,165</b>	<b>668</b>	<b>204</b>	<b>\$1,747</b>	<b>\$7,439</b>

**Table 1 Cont'd**

<b>Panel B - Summary Statistics for Non-US Firms by Cross-Listing : 1996 - 2009</b>			
Firm & Country Level	Domestic Firms	Cross-Listed Firms	Test of Statistical Differences
Characteristics by Cross-Listing	Mean / (Median)	Mean / (Median)	p-values
	(1)	(2)	(1-2)
Cumulative Abnormal Returns (-2,+2)	0.053	0.381	0.000
	-0.227	-0.048	(0.000)
Total Assets (mil \$)	1,747	7,439	0.000
	74	711	(0.000)
Tobin's Q	1.55	1.63	0.026
	1.09	1.23	(0.000)
Closely-Held Shares % (average)	0.438	0.238	0.000
	0.431	0.158	(0.000)
Anti-Self-Dealing Index (ASDI)	0.574	0.611	0.049
	0.650	0.650	(0.093)
Accounting Standards	70.250	71.671	0.057
	74.000	74.000	(0.000)
Market Turnover	7.020	6.880	0.000
	6.898	5.615	(0.000)
Corruption Perception Index	8.005	8.232	0.005
	8.500	8.700	(0.000)
Governance Index	1.295	1.286	0.317
	1.461	1.485	(0.607)
Public Enforcement	0.604	0.711	0.000
	0.750	1.000	(0.000)
Observations	68,755	2,841	

**Table 2 Descriptive Statistics – Correlations**

The numbers in the table represent pairwise correlations between each variable. CARs represent cumulative buy and hold abnormal returns over the period -2 to +2 days around the governance reform dates. Our governance measures include the anti-self dealing index from Djankov et al. (2008); the accounting standards index from La Porta et al. (1998); Kaufmann et al.'s (2006) voice and accountability (VACG), political stability (POLSTAB), government effectiveness (GOVEFF), regulatory quality (REGQ), rule of law, and control of corruption (CORRUPTION), and Transparency International's corruption perception index. Market turnover is the volume of trade in the stock market divided by the total stock market capitalization. All firm level financial data are obtained from Thomson Financial DataStream. Tobin's Q is calculated as the market value of equity plus book value of liabilities divided by the book value of assets. Closely-held shares represent the percentage of shares that are held by insiders. Country level measures of development (GDP per capita) were obtained from World Development Indicators. Finally, sovereign credit ratings were obtained from Bloomberg. \*Indicates significance at the 10% level.

Pairwise Correlations																					
Variables	CAR (-2,+2)	Total Sales	Total Assets	GDP per capita	Tobin's Q	ASDI	Accounting Standards	Closely Held %	Turnover	Corruption Perception	VACG	POLSTAB	GOVEFF	REGQ	Rule of Law	CORRUPTION	Public Enforcement	LCST Rating	LCLT Rating		
CAR (-2,+2)	1																				
Total Sales	-0.0016	1																			
Total Assets	-0.0016	0.6252*	1																		
GDP per capita	0.0367*	-0.001	-0.0536*	1																	
Tobin's Q	0.0043	-0.0021	-0.0186*	0.0773*	1																
ASDI	0.0213*	-0.0117*	-0.1152*	0.0310*	-0.0312*	1															
Accounting Standards	0.0441*	-0.0146*	-0.1295*	0.3237*	0.0695*	0.6652*	1														
Closely Held %	-0.0278*	0.0036	0.0067*	-0.1826*	-0.0049	-0.3083*	-0.3608*	1													
Turnover	0.0003	-0.0047	-0.0368*	0.3376*	0.0541*	0.2836*	0.3347*	-0.1278*	1												
Corruption Perception	0.0532*	-0.0007	-0.0931*	0.5991*	0.0594*	0.2723*	0.6592*	-0.2800*	0.0909*	1											
VACG	0.0399*	-0.002	-0.0634*	0.3794*	0.0304*	0.1045*	0.5081*	-0.1906*	-0.1280*	0.8397*	1										
POLSTAB	0.0476*	0.0003	-0.0411*	0.5230*	0.0804*	-0.0943*	0.3188*	-0.1506*	-0.0514*	0.7003*	0.6700*	1									
GOVEFF	0.0537*	-0.0035	-0.0899*	0.5498*	0.0393*	0.2197*	0.6376*	-0.2462*	-0.0099*	0.9335*	0.8819*	0.7458*	1								
REGQ	0.0335*	-0.001	-0.0777*	0.5350*	0.0232*	0.2937*	0.6127*	-0.2333*	0.0747*	0.9194*	0.8484*	0.6372*	0.9106*	1							
Rule of Law	0.0411*	-0.0006	-0.0961*	0.5840*	0.0499*	0.1997*	0.5907*	-0.2241*	0.0039	0.9254*	0.8797*	0.7393*	0.9443*	0.9040*	1						
CORRUPTION	0.0393*	-0.001	-0.0793*	0.4961*	0.0412*	0.1807*	0.5857*	-0.2078*	-0.0390*	0.9484*	0.8653*	0.7152*	0.9451*	0.9361*	0.9532*	1					
Public Enforcement	0.0293*	0.0027	-0.0124*	-0.1549*	0.0187*	-0.2252*	0.0784*	0.0051	-0.5123*	0.3090*	0.4818*	0.3101*	0.3870*	0.2166*	0.3653*	0.3750*	1				
LCST Rating	-0.0473*	-0.0008	0.0064*	-0.6317*	-0.0215*	0.0282*	-0.3187*	0.0951*	-0.001	-0.7279*	-0.6574*	-0.6278*	-0.7654*	-0.7858*	-0.7235*	-0.7259*	-0.1305*	1			
LCLT Rating	-0.0397*	0.0012	0.0839*	-0.4227*	-0.0169*	-0.1519*	-0.5615*	0.1415*	0.0334*	-0.8445*	-0.8727*	-0.6357*	-0.8977*	-0.8718*	-0.9207*	-0.9025*	-0.3548*	0.7752*	1		

**Table 3 Summary Statistics of Buy and Hold Cumulative Abnormal Returns (BHCARs)**

Table shows summary statistics of buy-and-hold cumulative abnormal returns over the period  $t=-2$  to  $t=+2$  around governance reform dates. Abnormal returns were estimated from the following market model using daily returns over the period  $t=-260$  to  $t=-100$  relative to the announcement day:

$$R_{ijt} = \alpha_i + \beta_i^m R_{mjt} + \beta_i^w R_{wt} + \varepsilon_{it} \quad t = -260, \dots, -100$$

where  $R_{ijt}$  refers to the daily return for stock  $i$  in country  $j$ ;  $R_{mjt}$  refers to the equally-weighted local market return for country  $j$ ,  $R_{wt}$  is the world market index, and  $\varepsilon_{it}$  represents the daily excess return for firm  $i$ . All returns are obtained from DataStream. Panel A shows results for the full sample. Panel B shows results by country and by cross-listing status: domestic (non-cross-listed) and cross-listed. \*\*\*, \*\*, \* denotes significance at the 1%, 5%, and 10% level, respectively.

<b>Average Buy and Hold Abnormal Returns (-2, +2)</b>								
<b>Panel A - Full Sample</b>								
	<b>Mean</b>	<b>Median</b>		<b>Std. Dev.</b>		<b>N</b>		
<b>BHCARs (%)</b>	<b>0.074***</b>	<b>-0.204***</b>		7.193		85,661		
<b>Panel B - BHCARs (%) by Country</b>								
<b>Country</b>	<b>Cross-Listed Firms</b>			<b>Domestic Firms</b>			<b>Test of Differences (p-value)</b>	
	<b>Mean</b>	<b>Median</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>	<b>N</b>	<b>Mean</b>	<b>Median</b>
AUSTRALIA	<b>1.243**</b>	<b>0.655*</b>	148	<b>1.232***</b>	<b>0.873***</b>	3,002	(0.906)	(0.649)
AUSTRIA	0.310	0.246	38	<b>-0.358*</b>	<b>-0.864***</b>	849	(0.064)	(0.505)
BELGIUM	0.295	0.442	22	<b>0.786***</b>	<b>0.852***</b>	1,149	(0.058)	(0.226)
BRAZIL	<b>-0.727**</b>	-0.771	244	<b>-1.152***</b>	<b>-0.877***</b>	1,647	(0.379)	(0.226)
CANADA	<b>0.492***</b>	-0.132	3,140	<b>0.538***</b>	<b>-0.073**</b>	23,264	(0.096)	(0.937)
DENMARK	<b>-3.532*</b>	<b>-3.723***</b>	14	<b>-0.340**</b>	0.002	1,531	(0.091)	(0.013)
FINLAND	0.422	-1.256	9	<b>1.117***</b>	<b>0.447**</b>	348	(0.566)	(0.496)
FRANCE	0.186	-0.010	187	<b>0.801***</b>	<b>0.128*</b>	5,534	(0.102)	(0.201)
GERMANY	0.129	0.089	219	<b>-0.593***</b>	<b>-0.952***</b>	11,152	(0.007)	(0.000)
INDIA	3.450	3.450	1	<b>-2.409***</b>	<b>-3.224***</b>	664	(0.709)	(0.312)
ISRAEL	-0.855	-1.129	17	<b>-0.762***</b>	<b>-0.952***</b>	324	(0.630)	(0.820)
ITALY	-0.032	-0.030	28	<b>0.316***</b>	-0.047	1,147	(0.911)	(0.840)
JAPAN	<b>1.523***</b>	<b>0.762***</b>	233	<b>0.657***</b>	0.080	4,540	(0.000)	(0.001)
MEXICO	-2.408	-3.975	22	<b>-2.668***</b>	<b>-2.605**</b>	148	(0.542)	(0.590)
NETHERLANDS	-0.214	-0.363	205	<b>-0.741***</b>	<b>-0.905***</b>	2,115	(0.062)	(0.224)
NORWAY	-0.545	-0.920	39	0.010	-0.080	951	(0.603)	(0.650)
PORTUGAL	0.058	0.516	25	<b>0.507***</b>	<b>0.574***</b>	565	(0.492)	(0.739)
SPAIN	-0.383	-0.364	48	<b>-0.719***</b>	<b>-1.250***</b>	1,177	(0.585)	(0.281)
SWEDEN	0.503	0.714	71	0.103	<b>-0.184**</b>	2,768	(0.398)	(0.350)
SWITZERLAND	-1.053	-0.870	32	<b>-1.634***</b>	<b>-1.533***</b>	882	(0.408)	(0.188)
THAILAND	-0.038	0.537	36	<b>-2.581***</b>	<b>-2.972***</b>	1,387	(0.273)	(0.160)
UK	<b>0.413***</b>	0.200	739	<b>-0.174***</b>	-0.088	15,000	(0.001)	(0.000)
<b>All Countries</b>	<b>0.381***</b>	-0.048	<b>5,517</b>	<b>0.053**</b>	<b>-0.227***</b>	<b>80,144</b>	(0.476)	(0.024)

**Table 4 – Baseline Regressions**

The following table shows results from OLS regressions. The dependent variable is the buy and hold cumulative abnormal returns over the period  $t=-2$  to  $t=+2$  around governance reform dates. Abnormal returns were estimated from the following market model using daily returns over the period  $t=-260$  to  $t=-100$  relative to the announcement day:

$$R_{ict} = \alpha_i + \beta_i^m R_{mct} + \beta_i^w R_{wt} + \varepsilon_{it} \quad t = -260, \dots, -100$$

where  $R_{ijt}$  refers to the daily return for stock  $i$  in country  $c$ ;  $R_{mct}$  refers to the equally-weighted local market return for country  $c$ ,  $R_{wt}$  is the world market index, and  $\varepsilon_{it}$  represents the daily excess return for firm  $i$ . All returns are obtained from DataStream. The independent variables include the log of GDP per capita; a governance index that is the first principal component of the six Kaufmann et al. (2006) governance indicators: voice and accountability; political stability; control of corruption; regulatory quality; rule of law, and government effectiveness; market turnover, which is the volume of trade in the stock market divided by the total stock market capitalization, and the number of days to resolve a dispute through courts (contract enforcement days) from Djankov et al. (2007). The firm-level controls include an indicator variable, Domestic, that equals one if the firm does not have shares cross-listed in the U.S., and zero otherwise; the log of total assets; the percentage of shares that are closely held, and indicator variables for Canadian firms and for firms in the finance industry (based on two-digit SIC code). Panel A shows results for the full sample, while Panel B shows results by level of development. Standard errors are clustered by country. \*, \*\*, \*\*\* indicates significance at the 10%, 5%, and 1% level.

<b>Panel A -Full Sample</b>				
Dependent Variable: BHCAR (-2,+2)				
	(1)	(2)	(3)	(4)
Domestic	-0.098 (-1.07)	-0.094 (-1.06)	-0.021 (-0.19)	-0.019 (-0.17)
Disclosure Reform	<b>1.026**</b> (2.38)	<b>1.021**</b> (2.38)	<b>1.037**</b> (2.45)	<b>1.035**</b> (2.45)
Governance Index	<b>0.126*</b> (1.79)	<b>0.127*</b> (1.79)	0.104 (1.67)	0.104 (1.67)
Enforcement		-0.000 (-0.57)		-0.000 (-0.40)
Tobin's Q	0.001 (0.47)	0.001 (0.47)	0.003 (0.99)	0.003 (0.99)
Log of Total Assets	0.007 (0.14)	0.008 (0.17)	0.022 (0.43)	0.023 (0.45)
Log of GDP per capita	0.508** (2.20)	0.468* (2.05)	0.541** (2.21)	0.523** (2.17)
Finance Industry	0.171 (1.53)	0.178 (1.52)	0.175 (1.39)	0.179 (1.37)
Turnover (market)	0.045* (1.95)	0.048* (1.99)	0.040 (1.72)	0.041 (1.72)
Canadian firms	0.879*** (4.95)	0.927*** (5.45)	0.770*** (4.56)	0.793*** (5.20)
Concentrated Ownership (average)			-0.127 (-0.73)	-0.128 (-0.75)
Constant	-5.873** (-2.36)	-5.519** (-2.28)	-6.298** (-2.41)	-6.142** (-2.41)
Observations	85661	85661	65029	65029
R-squared	0.01970	0.01974	0.02403	0.02404
Year Fixed Effects	Yes	Yes	Yes	Yes

Table 4 Cont'd

<b>Panel B - By Level of Development (GDP per capita above/below median)</b>				
Dependent Variable: BHCAR (-2,+2)				
	Developed		Less Developed	
	(1)	(2)	(3)	(4)
Domestic	-0.046 (-0.19)	-0.296 (-1.18)	-0.087 (-0.63)	-0.171 (-1.18)
Domestic × High Enforcement	-0.199 (-0.97)	0.063 (0.28)	<b>0.540***</b> (4.65)	<b>1.187***</b> (5.28)
Discloure Reform	<b>1.245***</b> (14.49)	<b>1.244***</b> (14.47)	<b>0.595***</b> (5.59)	<b>0.595***</b> (5.59)
Governance Index	<b>0.162***</b> (6.65)	<b>0.163***</b> (6.66)	<b>0.109***</b> (4.95)	<b>0.108***</b> (4.90)
Enforcement		<b>0.001***</b> (2.66)		<b>0.001***</b> (3.82)
Tobin's Q	0.003** (2.19)	0.003** (2.29)	-0.004* (-1.68)	-0.005* (-1.76)
Log of Total Assets	0.085*** (6.44)	0.091*** (6.76)	-0.063*** (-3.69)	-0.067*** (-3.88)
Log of GDP per capita	3.001*** (11.44)	3.400*** (10.94)	0.542*** (6.74)	0.421*** (4.89)
Finance Industry	-0.012 (-0.15)	-0.007 (-0.09)	0.367*** (3.52)	0.355*** (3.39)
Turnover (market)	0.019*** (2.67)	0.008 (0.93)	-0.001 (-0.03)	-0.030 (-1.46)
Canadian firms			0.571*** (4.07)	1.000*** (5.21)
Constant	-33.357*** (-13.02)	-37.387*** (-12.19)	-4.843 (0.13)	-4.020 (0.16)
Observations	41378	41378	44283	44283
R-squared	0.0376	0.0377	0.0205	0.0206
Year Fixed Effects	Yes	Yes	Yes	Yes

**Table 5: Cumulative Abnormal Returns around Governance Reforms**

The following table shows results from the following OLS regressions where the dependent variable is the buy and hold cumulative abnormal returns over the period  $t=-2$  to  $t=+2$  around governance reform dates.

$$BHCAR_{ict} = \alpha + \beta DOM_i + \gamma X_c + \delta Z_{it} + \delta_t + \varepsilon_i$$

where  $DOM_i$  is an indicator variable equal to one if firm  $i$  does not have shares cross-listed in the U.S., and zero otherwise;  $X_c$  is a vector of country level controls that includes: the log of GDP per capita; a governance index that is the first principal component of the six Kaufmann et al. (2006) governance indicators: voice and accountability; political stability; control of corruption; regulatory quality; rule of law, and government effectiveness; the number of days to resolve a dispute through courts (contract enforcement days) from Djankov et al. (2007), and the market turnover, which is the volume of trade in the stock market divided by the total stock market capitalization.  $Z_{it}$  is a vector of firm-level controls including the log of total assets and indicator variables for Canadian firms and for firms in the finance industry (based on two-digit SIC code). Panel A splits the sample into high and low enforcement countries using Djankov et al.'s (2007) contract enforcement days. The high enforcement indicator variable in Panel A is equal to one for countries with contract enforcement days below the median, and zero otherwise. In Panel B, we split the sample by the quality of accounting standards, using the accounting standards index of the quality of accounting disclosure from La Porta et al. (1998). Countries with good (poor) accounting quality are those with an accounting standards index above (below) the median. Finally, in Panel C, we present results by legal origin of the commercial code of each country. \*, \*\*, \*\*\* indicates significance at the 10%, 5%, and 1% level.

<b>Panel A - By Enforcement</b>				
Dependent Variable: BHCAR (-2,+2)				
	High Enforcement		Low Enforcement	
	(1)	(2)	(3)	(4)
Domestic	<b>-0.385***</b> (-2.96)	<b>-0.396***</b> (-3.04)	-0.027 (-0.17)	-0.028 (-0.17)
Domestic × Disclosure Reform	<b>0.777***</b> (3.20)	<b>0.776***</b> (3.20)	-0.581 (-1.31)	-0.589 (-1.33)
Disclosure Reform	<b>0.921***</b> (3.80)	<b>0.860***</b> (3.55)	<b>0.754*</b> (1.75)	<b>0.750*</b> (1.75)
Governance Index	<b>0.063***</b> (3.92)	<b>0.057***</b> (3.49)	<b>0.168***</b> (4.13)	<b>0.165***</b> (4.07)
Enforcement		<b>-0.001***</b> (-3.82)		-0.001 (-1.34)
Tobin's Q	0.003* (1.96)	0.003* (1.80)	0.004 (1.19)	0.003 (1.01)
Log of Total Assets	0.043*** (3.83)	0.038*** (3.29)	-0.068*** (-3.00)	-0.068*** (-2.96)
Log of GDP per capita	1.109*** (8.72)	0.998*** (7.54)	-0.229*** (-2.29)	-0.174* (-1.69)
Finance Industry	0.076 (1.10)	0.071 (1.03)	0.412*** (2.84)	0.411*** (2.82)
Turnover (market)	0.028*** (4.27)	0.035*** (5.04)	0.231*** (9.28)	0.303*** (4.74)
Canadian firms			1.168*** (7.93)	0.789** (2.55)
Constant	-12.529*** (-7.32)	-11.146*** (-6.30)	-6.629*** (-7.11)	-7.628*** (-6.38)
Observations	52705	52705	32956	32956
R-squared	0.03050	0.03074	0.02268	0.02271
Year Fixed Effects	Yes	Yes	Yes	Yes

Table 5 Cont'd

<b>Panel B - By Quality of Accounting Standards</b>				
Dependent Variable: BHCAR (-2,+2)				
	Good Accounting Quality		Poor Accounting Quality	
	(1)	(2)	(3)	(4)
Domestic	0.094 (0.59)	0.069 (0.43)	<b>-0.416**</b> (-2.45)	<b>-0.509**</b> (-2.44)
Domestic × High Enforcement	<b>-0.463**</b> (-2.10)	<b>-0.432*</b> (-1.96)	<b>0.244**</b> (2.22)	<b>0.365**</b> (2.02)
Discloure Reform	<b>0.192*</b> (1.70)	0.166 (1.46)	<b>1.757***</b> (21.40)	<b>1.758***</b> (21.43)
Governance Index	<b>0.137***</b> (4.66)	<b>0.137***</b> (4.65)	<b>0.092***</b> (4.86)	<b>0.092***</b> (4.87)
Enforcement		0.006*** (3.76)		0.000 (1.09)
Tobin's Q	-0.003* (-1.95)	-0.002 (-1.54)	0.004 (1.60)	0.004* (1.65)
Log of Total Assets	-0.018 (-1.13)	-0.020 (-1.27)	0.068*** (4.37)	0.067*** (4.33)
Log of GDP per capita	-1.417*** (-3.46)	0.804 (1.10)	0.596*** (8.65)	0.581*** (8.25)
Finance Industry	0.105 (1.10)	0.112 (1.17)	0.186** (2.11)	0.185** (2.11)
Turnover (market)	-0.073** (-2.13)	-0.307*** (-4.19)	0.004 (0.47)	0.004 (0.42)
Canadian firms	-0.636** (-2.34)	-2.153*** (-4.32)		
Constant	12.047 (0.10)	-11.027 (0.13)	-10.800*** (-2.91)	-10.666*** (-2.88)
Observations	49479	49479	36182	36182
R-squared	0.0194	0.0196	0.0318	0.0319
Year Fixed Effects	Yes	Yes	Yes	Yes

Table 5 Cont'd

<b>Panel C - By Legal Origin</b>				
Dependent Variable: BHCAR (-2,+2)				
	Common Law		Civil Law	
	(1)	(2)	(3)	(4)
Domestic	-0.125 (-0.82)	0.026 (0.17)	<b>-0.278**</b> (-2.04)	<b>-0.309**</b> (-2.26)
Domestic × High Enforcement	<b>0.400*</b> (1.95)	-0.153 (-0.64)	<b>0.382***</b> (4.01)	<b>0.465***</b> (4.64)
Discloure Reform	<b>0.406***</b> (3.28)	<b>0.320**</b> (2.54)	<b>1.582***</b> (19.85)	<b>1.576***</b> (19.77)
Governance Index	<b>0.218***</b> (6.05)	<b>0.206***</b> (5.72)	-0.011 (-0.62)	-0.011 (-0.60)
Enforcement		<b>-0.004***</b> (-5.73)		<b>0.000***</b> (3.68)
Tobin's Q	0.000 (0.03)	-0.001 (-0.42)	0.003* (1.93)	0.003* (1.91)
Log of Total Assets	-0.013 (-0.77)	-0.006 (-0.33)	0.039*** (2.73)	0.036*** (2.55)
Log of GDP per capita	-0.024 (-0.18)	-0.040 (-0.30)	0.580*** (7.64)	0.672*** (8.17)
Finance Industry	0.205* (1.85)	0.211* (1.90)	0.102 (1.31)	0.091 (1.17)
Turnover (market)	0.058** (2.18)	0.098*** (3.78)	0.005 (0.61)	-0.000 (-0.03)
Canadian firms	0.915*** (4.57)	0.935*** (4.70)		
Constant	-0.451 (0.21)	0.676 (0.28)	-6.036*** (-7.12)	-6.864*** (-7.71)
Observations	47722	47722	37939	37939
R-squared	0.0262	0.0265	0.0290	0.0291
Year Fixed Effects	Yes	Yes	Yes	Yes

**Table 6 – Robustness Tests**

The following table shows results from the following OLS regressions where the dependent variable is the buy and hold cumulative abnormal returns over the period t=-2 to t=+2 around governance reform dates:

$$BHCAR_{ict} = \alpha + \beta DOM_{ic} + \theta DOM_{ic} \times HIENF_c + \gamma X_c + \delta Z_{it} + \delta_t + \varepsilon_i$$

where  $DOM_i$  is an indicator variable equal to one if firm  $i$  does not have shares cross-listed in the U.S., and zero otherwise;  $HIENF_c$  is an indicator variable for countries with high enforcement; we use two measures of enforcement: the regulatory cost per billion dollars of GDP from Jackson (2007) and the public enforcement index from La Porta et al. (2006). The governance index is the first principal component of the six Kaufmann et al. (2006) governance indicators: voice and accountability; political stability; control of corruption. In Panel A we split the sample by the quality of accounting standards using the accounting standards index of the quality of accounting disclosure (La Porta et al. 1998); in Panel B we split the sample into high and low corruption countries using Transparency International's corruption perception index. Countries with an accounting standards index (corruption perceptions index) above the median are classified as good accounting quality (high corruption) countries. All other control variables are the same ones used in Table 5, but they are excluded from the results to conserve space. \*, \*\*, \*\*\* indicates significance at the 10%, 5%, and 1% level.

<b>Panel A - By Quality of Accounting Standards</b>				
Enforcement Index:	Dependent Variable: BHCAR (-2,+2)			
	Regulatory Cost per GDP		Public Enforcement Index	
	Good	Poor	Good	Poor
	(1)	(2)	(3)	(4)
Domestic	-0.002 (-0.00)	<b>-0.271*</b> (-1.81)	-1.181 (-1.15)	<b>-0.809***</b> (-3.40)
Domestic × High Enforcement	-0.024 (-0.05)	<b>0.398**</b> (2.30)	1.498 (1.12)	<b>1.403*</b> (1.94)
Discloure Reform	0.180 (1.59)	<b>2.001***</b> (23.77)	0.190 (0.62)	<b>1.831***</b> (4.57)
Governance Index	<b>0.131***</b> (4.45)	0.009 (0.42)	0.139 (1.25)	0.076 (0.72)
Enforcement	0.335 (0.69)	<b>-0.000***</b> (-5.13)	-2.446 (-1.76)	<b>-1.993**</b> (-2.94)
Observations	49479	32033	49479	36182
R-squared	0.01936	0.02935	0.01936	0.03211
Other Country Controls	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
<b>Panel B - By Corruption</b>				
Enforcement Index:	Dependent Variable: BHCAR (-2,+2)			
	Regulatory Cost per GDP		Public Enforcement Index	
	High	Low	High	Low
	(1)	(2)	(3)	(4)
Domestic	<b>-2.948***</b> (-3.92)	-0.217 (-0.61)	<b>-0.591***</b> (-3.94)	-0.023 (-0.15)
Domestic × High Enforcement	<b>2.877***</b> (3.77)	0.218 (0.36)	<b>0.730***</b> (4.06)	-0.148 (-1.03)
Discloure Reform	-0.070 (-0.20)	<b>1.848***</b> (4.99)	0.028 (0.27)	<b>1.856***</b> (19.84)
Governance Index	0.113 (1.09)	0.056 (0.45)	<b>0.117***</b> (4.93)	<b>0.043**</b> (1.97)
Enforcement	<b>0.006***</b> (3.41)	<b>-0.000</b> (-0.28)	<b>-0.662***</b> (-2.84)	<b>-0.976***</b> (-4.11)
Observations	50315	35346	50315	35346
R-squared	0.02008	0.04016	0.01911	0.04142
Other Country Controls	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes

## References

- Aggarwal, R., Erel, I., Stulz, R., Williamson, R., 2009. Differences in Governance Practices between U.S. and Foreign Firms: Measurement, Causes, and Consequences. *Review of Financial Studies* 23, 3131-3169
- Armstrong, C.S., Barth, M.E., Jagolinzer, A.D., Riedl, E., J., 2010. Market reaction to the adoption of IFRS in Europe. *The Accounting Review* 85, 31-61
- Bailey, W., Andrew Karolyi, G., Salva, C., 2006. The economic consequences of increased disclosure: Evidence from international cross-listings. *Journal of Financial Economics* 81, 175-213
- Brick, I.E., Chidambaran, N.K., 2010. Board meetings, committee structure, and firm value. *Journal of Corporate Finance* 16, 533-553
- Bushman, R.M., Piotroski, J.D., Smith, A.J., 2004. What Determines Corporate Transparency? *Journal of Accounting Research* 42, 207-252
- Cantale, S., 1996. The Choice of a Foreign Market as a Signal. Tulane University, New Orleans, LA
- Chhaochharia, V., Grinstein, Y., 2007. Corporate Governance and Firm Value: The Impact of the 2002 Governance Rules. *Journal of Finance* 62, 1789-1825
- Chhaochharia, V., Laeven, L., 2009. Corporate governance norms and practices. *Journal of Financial Intermediation* 18, 405-431
- Christensen, H.B., Hail, L., Leuz, C., 2010. Capital-market effects of securities regulation: The role of implementation and enforcement. Working Paper
- Coase, R., 1960. The problem of social cost. *Journal of Law and Economics* 3, 1-44
- Coffee, J.C., Jr., 1999. The Future as History: The Prospects for Global Convergence in Corporate Governance and Its Implications. *Northwestern University Law Review* 93, 641-708
- Djankov, S., La Porta, R., Lopez-de-Silanes, F., Shleifer, A., 2008. The law and economics of self-dealing. In: *Journal of Financial Economics*, pp. 430-465
- Djankov, S., McLiesh, C., Shleifer, A., 2007. Private credit in 129 countries. *Journal of Financial Economics* 84, 299-329
- Doidge, C., Andrew Karolyi, G., Stulz, R.M., 2007. Why do countries matter so much for corporate governance? *Journal of Financial Economics* 86, 1-39
- Doidge, C., Karolyi, G.A., Stulz, R., 2010. Why Do Foreign Firms Leave U.S. Equity Markets? *Journal of Finance* 65, 1507-1553
- Doidge, C., Karolyi, G.A., Stulz, R.M., 2004. Why are foreign firms listed in the U.S. worth more? *Journal of Financial Economics* 71, 205
- Duarte, J., Kong, K., Siegel, S., Young, L.A., 2010. The Impact of the Sarbanes-Oxley Act on Shareholders and Managers of Foreign Firms. In: SSRN eLibrary. University of Washington
- Dyck, A., Zingales, L., 2004. Private Benefits of Control: An International Comparison. *Journal of Finance* 59, 537-600
- Enriques, L., Volpin, P., 2007. Corporate Governance Reforms in Continental Europe. *Journal of Economic Perspectives* 21, 117-140
- Faccio, M., 2006. Politically connected firms. *American Economic Review* 96, 369-386
- Faccio, M., Masulis, R.W., McConnell, J.J., 2006. Political Connections and Corporate Bailouts. *Journal of Finance* 61, 2597-2635
- Fuerst, O., 1998. A Theoretical Analysis of the Investor Protection Regulations Argument for Global Listing of Stocks. In: SSRN eLibrary. Yale University, New Haven, CN
- Goergen, M., 2007. What Do We Know About Different Systems of Corporate Governance?
- Hammersley, J.S., Myers, L.A., Shakespeare, C., 2008. Market Reactions to the Disclosure of Internal Control Weaknesses and to the Characteristics of those Weaknesses under Section 302 of the Sarbanes Oxley Act of 2002. *Review of Accounting Studies* 13, 141-165
- Jackson, H.E., 2007. Variation in the intensity of financial regulation: Preliminary evidence and potential implications. *Yale Journal on Regulation* 24, 253-291
- Jaffe, J.P., 1974. Special Information and Insider Trading. *Journal of Business* 47, 410-428

- Kamar, E., Karaca-Mandic, P., Talley, E.L., 2007. Sarbanes-Oxley's Effects on Small Firms: What is the Evidence?
- Kaufmann, D., Kraay, A., Mastruzzi, M., 2006. Governance matters V: Governance indicators for 1996-2005. World Bank Policy Research
- La Porta, R., Lopez De Silanes, F., Shleifer, A., 2006. What works in securities laws. *Journal of Finance* 61, 1-33
- La Porta, R., Lopez De Silanes, F., Shleifer, A., Vishny, R., 1998. Law and finance. *Journal of Political Economy* 106, 1113-1155
- Li, H., Pincus, M., Rego, S.O., 2008. Market Reaction to Events Surrounding the Sarbanes-Oxley Act of 2002 and Earnings Management. *Journal of Law & Economics* 51, 111-134
- Lins, K.V., Strickland, D., Zenner, M., 2005. Do Non-U.S. Firms Issue Equity on U.S. Stock Exchanges to Relax Capital Constraints? *Journal of Financial & Quantitative Analysis* 40, 109-133
- Litvak, K., 2007. The effect of the Sarbanes-Oxley act on non-US companies cross-listed in the US. *Journal of Corporate Finance* 13, 195-228
- Mandelker, G., 1974. Risk and return: The case of merging firms *Journal of Financial Economics* 1, 303-335
- Stigler, G., 1964. Public regulation of the securities market. *Journal of Business* 37, 117-142
- Stulz, R.M., 1999. Globalization, Corporate Finance, and the Cost of Capital. *Journal of Applied Corporate Finance* 12, 8-25
- Wang, X., 2010. Increased Disclosure Requirements and Corporate Governance Decisions: Evidence from Chief Financial Officers in the Pre- and Post Sarbanes-Oxley Periods. *Journal of Accounting Research* 48, 885-920