

Legal protection of investors, corporate governance, and investable premia in emerging markets

Stephen Kinsella*

Department of Economics,
Kemmy Business School
University of Limerick,
Limerick,
Ireland.

Thomas O'Connor

Department of Economics,
Finance and Accounting
National University of Ireland
Maynooth,
Maynooth,
Co. Kildare,
Ireland.

Vincent O'Sullivan

Department of Economics,
Kemmy Business School
University of Limerick,
Limerick,
Ireland.

Abstract

We examine the interaction between the legal protection of investors, corporate governance within firms, institutional development between countries, and investable premia in emerging markets. In a multi country setting and using a novel dataset we find that better-governed firms experience significantly greater stock price increases upon equity market liberalization. We look to see whether well-governed firms in poorly governed countries enjoy an investability premium as measured by Tobin's q . We find they do. Investors look beyond the seemingly weak country-level governance structures, and focus on corporate governance.

JEL Classification: G15; G30, G34.

Key Words: Investability, Corporate Governance, Tobin's q , Emerging Markets.

* Contact author, e-mail: Stephen.Kinsella@ul.ie.

1. Introduction

Over the course of the last two decades, a large literature has examined how the advent of stock market liberalizations have, on the one hand, benefited individual firms, and on the other, the overall economy (see for example Mitton, 2006 for a firm-level analysis, and Bekeart et al., 2001, 2005 who examine the gains from stock market liberalizations at the macro level). In general, this literature suggests that stock market liberalizations confer positive benefits on both firms and the economy. For example, at the firm-level and consistent with international asset pricing models, stock market liberalizations tend to reduce the cost of equity capital as a result of greater risk sharing between domestic and foreign investors. In turn, this lower cost of equity capital manifests in reduced financing constraints (Kim and Signal, 2000)), increased investment (Henry, 2000; Mitton, 2006 using firm-level data), and improved operating performance (Mitton, 2006). In turn, Mitton and O'Connor (2011) show that these realized gains impact positively on the value of these firms. Using Tobin's q to proxy for firm value, they uncover an "investable premium" in the region of 9% for investable firms. At the country (aggregate) level, such reforms have resulted in greater investment and ultimately economic growth (Bekaert et al., 2001, 2005).

However, notwithstanding the positive gains documented in the literature to date, these gains are nonetheless, less than the gains theoretically predicted, since capital flows to these countries have been less than expected.¹ One plausible explanation which attempts to explain the apparent reluctance of foreign investors to invest relates to the threat of expropriation given the nature of corporate governance in emerging markets.² The intuition which underpins this argument is simple and is as follows; the greater the likelihood of expropriation, the smaller the flow of equity capital to these countries since foreign investors incur sizable monitoring costs should they invest in firms with poor corporate governance. This line of reasoning leads to a simple testable hypothesis; better-governed firms should reap the largest value gains from stock market liberalizations since foreign investors are much more likely to invest in these firms. Bae and Goyal (2010) test this prediction using a sample of firms in the period immediately

¹ Furthermore, the value gains from stock market liberalizations are also much less than the value gains that accrues to firms that cross-list on international exchanges. The "investable premia" documented by Mitton and O'Connor (2011) is smaller than the "cross-listing premia" documented by, amongst others, Doidge et al. (2004, 2009).

² While corporate governance standards tend to be higher in developed countries, Klapper and Love (2004) and Durnev and Kim (2005, 2007) show that there exists sizable variation in governance standards within emerging market countries. In turn, they show that the extent of this variation is inversely related to the quality of country governance.

surrounding the liberalization of the Korean equity market in 1992. They hypothesize that if expropriation risk in part explains the smaller than expected gains from liberalizations, then holding country governance constant (as their analysis focuses on a single country), and accounting for cross-sectional differences in corporate governance practices across Korean firms, then the largest post-liberalization value gains should accrue to better-governed firms. Using a variety of measures to capture the governance practices of Korean firms, this is in fact what they find. In this paper, we account for cross-sectional differences in corporate and country governance, and examine how their interaction can explain the value gains from stock market liberalizations.

Specifically, in this paper we examine the interaction between the legal protection of investors, corporate governance within firms, institutional development between countries, and “investable premia” in emerging markets. The aim of the paper is to extend the approach of Bae and Goyal (2010) to examine the effect of differences in corporate governance within firms on their valuation in emerging markets. We generalise the findings of Bae and Goyal (2010), who looked only at South Korea, to a multi-country setting using a novel dataset, and largely confirm their insight that better-governed firms experience significantly greater stock price increases upon equity market liberalization.

We go a step further than Bae and Goyal (2010), and deepen that insight by looking to see whether well-governed firms in poorly governed countries enjoy an “investability premium” as measured by Tobin’s q , following Mitton and O’Connor (2011). The intuition behind our paper is simple: firms with good corporate governance structures, but in countries with lower levels of foreign investment or weak institutions should have premia attached to them, as they will flourish in their respective markets, especially with the help of outside capital injections and foreign expertise. In turn, this premium should be larger for these firms than for comparable firms from countries with high-quality institutions. Recent evidence suggests that this is in fact the case (Durnev and Kim, 2005; and Kim et al., 2009). Thus, *a priori*, we would expect that if foreign investors place a large premium on good governance and place an even larger premium when country governance is weak, then better-governed firms from countries with poor governance should enjoy the largest “investable premia”. We find that they do. Our findings suggest that investors look beyond the seemingly weak country-level governance structures, and focus on firm-level corporate governance. As such, our findings are consistent with some recent empirical and survey

evidence which suggests that firm-level and country –level governance can substitute for one another in emerging markets and that good corporate governance is more highly valued when country governance is poor (Durnev and Kim, 2005; Chen et al., 2009; and McCahery et al., 2010). Finally, our findings are robust to alternative measures of institutional development and corporate governance within countries and between investable firms, which lends some confidence to the analysis. Irrespective of the measure of corporate and country governance employed, we always find that “investable premia” are higher for better-governed firms from countries with poor governance.

The paper begins by carefully describing our data in section 2, moving on to a discussion of our regression models and results in section 3, and concludes with a discussion and suggestions for further work in section 4.

2. Data Description

We begin by sourcing an initial sample of all 2,784 firms from the major markets of the IFC Emerging Market Database that were deemed investable at any time between 1980 and 2000. Like Mitton (2006) and Mitton and O’Connor (2011), we measure the openness of a firm’s stock to foreign investors using the “investable” measure provided by the EMDB. The IFC designates a firm as investable if its stock is free from both country-level and firm-level restrictions on foreign investment. It also requires that the stocks have sufficient size and liquidity to be realistically available to foreign investors. We define a firm as investable in a given year if the firm’s stock appears in the IFC investable index by December of that year. As a secondary measure of openness we use the “degree open” investable measure, a continuous variable ranging from zero (not open to foreign investors) to one (fully open to foreign investors).

To be included in the final sample, firms must have financial data available in the Worldscope database and satisfy a number of minimum-data requirements, consistent with Mitton (2006) and Mitton and O’Connor (2011). First, firms that become investable in the sample period are required to have financial data available at least one year before and one year after the year in which they are first deemed investable.³ Second, firms that never become investable are required to have financial data available one year either side of the median year in which firms are first investable in their respective countries. From

³ There are firms in the final sample that become investable, subsequently become de-investable and investable once again. We require data to be available prior to their initial investable date.

our initial sample, we lose all firms from the Czech Republic, Egypt, Hungary, Jordan, Morocco, Poland, Russia, Sri Lanka, Slovakia, Venezuela and Zimbabwe due to insufficient financial data.

Our final sample, outlined in Table 1 consists of 251 investable firms from twenty countries.⁴ The total number of non-investable firms is 1,259, which coupled with the investable firms results in a final sample of 1,510 firms. In Table 1, we outline by country, the number of investable (# Inv) and non-investable (# NI) firms, the number of firm-year observations (# Obs), and the total number of firms (# Total). The number of sample firms per country varies significantly, ranging from a minimum of 8 in Colombia (Corresponding to 63 firm-year observations) to a high of 223 in Malaysia (Corresponding to 1,671 firm year observations). Korea provides the greatest number of investable firms (56), while Indonesia provides just one. The total number of firm-year observations is 9,992. The final sample covers the period from 1980 to 2000. Our original sample is reduced when we employ the closely-held shares (%) variable (from Worldscope) to account for differences in corporate governance across firms in our analysis. When we do so, our final sample is now comprised of 5,500 firm-year observations in total, and 201 investable firms. In this reduced sample, Colombia no longer contributes any investable firms.

Table 1 also presents three key dates for each country: the first year in which sample firms in each country are designated investable (First Inv); the first year in which a closed-end country fund is available for the country (Country Fund); and the first year in which a sample firm in the country cross-lists in the United States as an American Depositary Receipt (First ADR). The latter two refer to our desire to control for the potential confounding effects of “indirect investability” as Mitton (2006) and Mitton and O’Connor (2011) do, by accounting for the possibility that investable firms become investable, not through stock market liberalizations, but through international cross-listings in the U.S., or through the availability of country-funds. Country fund data is sourced from Bekaert et al. (2005) and Patro (2005). All information on cross-listed firms is sourced from the Bank of New York, and cross-referenced with information from Deutsche Bank, JP Morgan, the New York Stock Exchange, and NASDAQ. We take great care in order to identify a firm’s initial listing. To do so, we consult the historical records from the Bank of New York (since the currently available on-line records refer to a firm’s current - not previous/initial - cross-listing). We cross-reference this data with the cross-listing database provided by

⁴ They are Argentina, Brazil, Chile, China, Colombia, Greece, India, Indonesia, Israel, Korea (Republic), Malaysia, Mexico, Pakistan, Peru, Philippines, Portugal, South Africa, Taiwan, Thailand, and Turkey.

Citibank. They flag firms that have changed their cross-listing status by including a “successor depositary receipt” data type for all firms. South Africa (18) and Mexico (14) provide the greatest number of cross-listing firms.

We employ Tobin’s q to measure firm value. Tobin’s q is defined here as the book value of debt plus market capitalization divided by the book value of assets. Market value of debt is proxied using its book value counterpart, and the replacement cost of assets as the book value of assets. Book value of debt is calculated as the book value of total assets less the book value of equity. Doidge et al., (2004, 2009), Gozzi et al. (2008), and Mitton and O’Connor (2011) also use Tobin’s q to proxy for firm value in their studies on the valuation effects of international cross-listings, internationalizations, and investability, respectively.

All firm-level financial information is sourced from Worldscope for each year from 1980 to 2000. We control for firm and industry related factors commonly employed in other studies using Tobin’s q . We use the average (geometric) sales growth (inflation-adjusted) over the last two years and global industry q to account for firm and industry growth, respectively. Based upon the general industry classification codes provided by Worldscope, the (yearly) mean global industry q is calculated as the average q of all global firms within each classification. The general industry classification codes are; 1 (Industrial), 2 (Utility), 3 (Transportation), 4 (Bank/Savings & Loan), 5 (Insurance), 6 (Other Financial). We use the log of sales (inflation-adjusted and in \$U.S.), rather than total assets (given the definition of Tobin’s q) to control for firm size. Tobin’s q , sales growth, and firm size are winsorized at the 1 and 99% tails of the distribution to remove the confounding effects of outliers. Finally, we exclude financial firms since these firms are more likely to be valued differently from non-financial firms.

To measure the strength of corporate governance, we use two measures. The first measure of corporate governance is an indicator variable that takes the value of one if the firm is a dual-class share firm (DC), and zero for a single-class share firm (SC).⁵ To classify firms as either SC or DC, we employ

⁵ Durnev and Kim (2005, 2007) show using CLSA and S&P corporate governance data that in firms where control rights exceed cashflow rights (e.g. dual-class share firms), corporate governance standards tend to be lower in these firms, relative to firms where no such differences (or much smaller differences) exist between control and cashflow rights (e.g. single-class share firms). Consistent with the view, the consumption of private benefits tends to be greater in firms with dual-class shares compared to firms with single-class share structures (DeAngelo and DeAngelo, 1985; Grossman and Hart, 1988, and more recently, Masulis et al., 2009). As a result, dual-class share firms tend to trade at a discount relative to single-class share companies (Lins, 2003; Durnev and Kim, 2005).

the ‘Currently a Multiple Share Company’ from Worldscope. It identifies multiple share companies as “...companies which currently have more than one type of common/ordinary share.”⁶ Our final sample is comprised of 196 single-class and 55 dual-class share investable firms.⁷ Korea (56) and Malaysia (45) provide the greatest number of single-class share investable firms. China, Indonesia, Peru and Thailand provide none. Both Greece and Mexico (11) contribute the greatest amount of dual-class share investable firms to our final sample.

Our second measure of corporate governance, also sourced from Worldscope, is the number of shares held by insiders as a percentage of the total number of shares outstanding. Firms with a larger percentage of closely held shares (as a percentage of total common shares outstanding) are likely to suffer less from agency conflicts since the incentives of the controlling insiders are likely to better aligned with those of non-controlling minority outsiders. Consistent with this view, Mitton (2002) and Claessens et al. (2002) show how firm profitability and value is greater the larger the ownership (cash-flow) stake held by controlling insiders. In Table 1, we outline the pre-investable level of closely held shares held by the median investable firm. Inside ownership tends to be highest in Pakistan (70.43%) and Turkey (75.72%) and much lower in Mexico (27.36%) and Korea (27.13%).

Finally, we employ a number of different measures to try and capture the level of institutional development in each of our sample of twenty countries. First, we use Kaufmann et al. (2007) institutional development measure. This measure, available on a semi-annual basis from 1996 to 2000, and an annual basis from 2000, is comprised of six components, namely, voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption. We calculate institutional development as the sum of each of these six variables in each year, averaged over the years 1996, 1998, and 2000, in order to coincide with our sample period. We also use Spamann’s (2010) “corrected” anti-director rights index (using 1997 values), the judicial efficiency measure from La Porta et al. (1998), investor protection from La Porta et al. (2006), and a measure of accounting standards from CIFAR (Center for International Financial Analysis & Research). Anti-director rights is an index that aggregates six different shareholder rights and ranges in value from 0 to 6 with 6 as the highest level of

⁶ Durnev and Kim (2005) classify DC firms as those whose control/voting rights exceed cash flow rights by at least 10%. Since we do not have access to ownership data, we rely on the Worldscope classification.

⁷ Claessens et al. (2002) and Lins (2003) show that governance problems, arising from dual-class share structures are common in emerging markets.

protection for minority shareholders. Efficiency of the judicial system is an assessment of the efficiency and integrity of the legal environment as it affects business and ranges in value from 1 to 10, with 10 as the highest level of efficiency. Investor Protection is calculated as the weighted average of disclosure, liability standards, and (original) anti-director rights using principal component analysis. Investor Protection ranges from a low of zero to a high of ten, where higher values correspond to better levels of investor protection. The index of accounting disclosure level is measured in 1995 and is created by examining and rating companies' annual reports for their inclusion and exclusion of 85 items and ranges from 0 to 100 with 100 as the highest accounting standard. The value of each of these institutional development measures are outlined for each country in Table 2. The bottom row presents the country sample median for each variable. All figures in bold refer to values of each measure above the sample median. Institutions tend to be of high-quality in Chile, Portugal, and Taiwan, and much less so in Pakistan and Indonesia. Based on Spamann's (2010) anti-director rights index, shareholders enjoy considerable legal protection in Brazil, Chile, Pakistan, South Africa, and Taiwan (All 5), and much less so in Mexico (2). The judiciary tends to be most efficient in Israel and Taiwan (Both 10), and least efficient in Indonesia (2.50). Investor protection is greatest in the Philippines and India. Finally, accounting standards tend to be greatest in Malaysia and South Africa (Both 79).

3. Regression Analysis

This section econometrically explores the relationship between investability, corporate governance, institutional development (country governance), and firm value. We begin by replicating Mitton and O'Connor (2011), by first establishing the existence of "investable premia". Then, we examine how these "investable premia" vary by level of institutional development, and corporate governance. Finally, we examine how the interaction of country and corporate governance explain the "investable premia".

First, and in line with Mitton and O'Connor (2011), we first try to establish a causal link between investability and firm value. The results are outlined in Table 3. To do so, we estimate a series of firm-fixed effects regressions of the following form:

$$\text{Tobin's } q_{it} = \alpha + \beta X_{it} + \text{Investable}_{it} + \text{Year}_t + \text{Firm}_i + \varepsilon_{it} \quad (1)$$

Where Tobin's q_{it} is Tobin's q for firm i in year t , X_{it} is a set of firm and industry controls (sales growth, size, global industry q), and Investable are 0/1 dummies. Year $_t$ and Firm $_i$ represent a full set of year and firm fixed-effects. The coefficient estimates are outlined in Table 3, with t-statistics calculated using standard errors adjusted for firm-level clustering reported in parentheses underneath (Petersen, 2009).⁸

In column 1 of Table 3, we regress Tobin's q on the investable dummies alone (time and fixed effects are included). In subsequent columns, we sequentially add firm and industry level control variables. Column 4 presents the coefficient estimates with all firm and industry-level control variables included (and time and firm fixed-effects). In the remaining columns of Table 3, we control for the potentially confounding effects of indirect investability. Since some of our firms are indirectly investable through ADR issuance or through inclusion in a country-fund, we need to separate the value gains from direct investability (equity market liberalizations) from indirect investability (ADR issuance/Country fund inclusion). To do so, we include the investable dummies with either ADR dummies or country fund dummies in the remaining columns of Table 3. In column 5, we add cross-listing dummy variables to column 4. In column 6, country fund data is added to the specification in column 4.

The coefficient estimates on the investable dummies are positive and statistically significant in *all* regressions, ranging from 0.111 to 0.150, with an average coefficient estimate of 0.128. These findings suggest that in as much as we can control for observable and unobservable differences between investable and non-investable firms, investable firms are worth more than non-investable firms. These findings are in line with Mitton and O'Connor (2011). Furthermore, since the median investable firm has a Tobin's q of 1.20, this suggests that the act of becoming fully investable causes an average change in value of 10.67% (i.e., $(0.128/1.20)*100$) for these firms.

When we control for 'indirect investability', we find that the coefficient estimates on the investable remain high, and retain their statistical significance. The value gains from becoming investable via equity market liberalizations are distinct from the gains from ADR or country fund issuance.

We document a "cross-listing premium" for Level 2 firm only. For our sample of Rule 144a/Reg S firms, cross-listing only serves to destroy value. Country fund availability enhances firm value. Finally,

⁸ We don't cluster by firm and years (time) since we find no evidence to suggest otherwise i.e. that our residuals are correlated across firms and time. Thompson (2011) demonstrates how to compute standard errors if clustering on both dimensions is required.

the control variables tend to be of the correct sign, and statistically significant. Firm value increases with firm and industry growth, while smaller firms tend to be worth more. In the bottom rows of Table 3, we estimate Eq. (1), but now, we measure openness to foreign investment using degree-open factors, a continuous variable ranging from zero (not open to foreign investors) to one (fully open to foreign investors). The coefficient estimates using the degree-open factors only serve to reinforce the findings just presented. Again, in all specifications, the coefficient estimates on the degree-open factors are positive and always statistically significant. These findings confirm the findings of Mitton and O'Connor (2011).⁹

3.1 Investability and Institutional Development

To expand on Mitton and O'Connor (2011), in Table 4 we estimate the impact of investability on firm value by level of institutional development.

Separate regressions are estimated for firms domiciled in countries with high (above-median) and low (below-median) institutional development, based on median figures outlined in Table 2. Mitton and O'Connor (2011) perform a similar analysis in a working paper version of their paper. In their paper, they estimate separate regressions for investable firms by level of financial development. Here, in this paper, we employ a set of variables designed to capture other, and much broader aspects of institutional development. Panel A includes all non-investable firms and investable firms domiciled in countries with either high or low levels of institutional development, as indicated. In Panel B, we only include investable and noninvestable firms of the specified type (e.g. investable and noninvestable firms from high institutional development countries). As a result, the number of firm-year observations is much larger in Panel A.

In columns 1 through 4 of Panel A, we estimate Equation (1) separately for firms in countries with high- and low-quality institutions. The coefficient estimates suggest that investable firms enjoy much larger value gains in countries with low-quality institutions. On average, firm value is much more sensitive to investability (i.e. coefficient estimates of 0.4 versus 0.077, 0.434 versus 0.100, and 0.485 versus 0.027) for these firms relative to their counterparts in countries with high-quality institutions. Since the median

⁹ In the remainder of the paper, we only present coefficient estimates using the investable dummies. Our findings remain unchanged when we also use degree-open factors.

investable firm has a Tobin's q of 1.22 in low institutional quality regimes, then investability causes an average increase in value of 36.07% (i.e. $(0.44/1.22)*100$), or over three and a half times larger for these firms than that for the average firm (i.e. 10.67% (From Table 3) versus 36.07%). For investable firms from high-quality regimes, "investable premia" are much lower. For the median firm, the average "investable premium" is just 5.71% ($0.068/1.19*100$), or just over half of the premium experienced by the average investable firm. The results are again robust to the inclusion of measures of indirect investability. Here again, we create separate dummy variables for each different ADR level (Level 1, Level 2, Level 3, and Rule 144a/RegS) and a dummy variable called "Country Fund" to control for indirect investable effects. Consistent with the findings presented in Table 3, the inclusion of ADR and country fund dummies does not significantly change the magnitude, or the significance on the investable dummies. Again, we document a "cross-listing premium" for Level 2 ADRs only, while for Rule 144a/Reg S firms, cross-listing reduces value for firms in both high and low institutional quality regimes. Here also, we find that country-fund availability enhances firm value, echoing and in some sense confirming the insights of Stulz (2007).¹⁰

Panel B of Table 4 includes only investable and noninvestable firms both from countries with either high- or low-quality institutions. For brevity sake, we only report the coefficient estimates on the investable dummies (but all firm and industry controls are included).¹¹ Consistent with the findings presented in Panel A, the coefficient estimates from Panel B suggests that investable firms from countries with low-quality institutions experience much larger increases in value (the coefficient estimates range from 0.731 to 0.759). In fact, when we use degree-open factors to measure openness to foreign investment, we now find that investability has no effect on firm value for investable firms from countries with high-quality institutions; the coefficient estimates are positive, but statistically indifferent to zero. What Panel B does show is that investability greatly enhances the value of firms domiciled in countries with low-quality institutions, and relative to their peers, these firms experience even large "investable premia", than when compared to noninvestable firms in countries with high and low levels of institutional development (Panel A). These findings contrast notably with Bekaert et al. (2005). They show that the

¹⁰ Stulz felt that country attributes were still critical to financial decision-making amongst investors in the presence of agency problems. Our work shows this is the case, but finds a more pronounced firm-level effect than Stulz would suggest.

¹¹ The coefficient estimates are also robust to ADR and country-fund inclusion.

largest (economic) growth effects from stock market liberalizations dated using county-specific measures occur in countries with high-quality institutions.¹² In the next section, we examine whether these “investable premia” accrue to all investable firms from countries with low-quality institution, or whether better-governed firms enjoy the majority of these value gains.¹³ To do so, we must first examine how the “investable premia” vary by the strength of corporate governance.

3.2 Investability and Corporate Governance

Next we examine how the “investable premia” documented earlier differ by the strength of corporate governance. The intuition is that if better-governed firms reap the largest value gains from becoming investable, then, *a priori*, we would expect that single-class share firms, and firms with concentrated inside ownership (as measured using closely-held shares as a % of common shares outstanding) would enjoy the largest “investable premia”.

Recent work by Bae and Goyal (2010) and O’Connor (2011) suggest that this is the case. Using the liberalization of the Korean equity market in 1992, the former show that better-governed Korean firms enjoy the largest value gains.¹⁴ O’Connor (2011) finds likewise using firm-specific measures of equity market liberalizations (i.e. investable dummies), and using firms from 20 emerging market countries.¹⁵ Thus, *a priori*, we would expect to find the same.

In Tables 5 and 6, we explore the relationship between “investable premia” and corporate governance. In Table 5, we estimate Equation (1), but now separately for single- and dual-class investable firms. Panel A only includes investable firms of the specified type (Single- or dual-class) and all noninvestable firms. Panel B only includes investable and noninvestable firms of the specified type. Hence

¹² Our results may not be inconsistent with Bekaert et al. (2005) if the greater investment expected for investable firms from countries with low-quality institutions (caused by stock liberalizations increasing Tobin’s q) does not translate into higher growth rates for these firms. Mitton (2006) does show that investability is associated with higher growth rates, but does not distinguish between firms from different countries.

¹³ In Appendix 1, we estimate the effect of investability on firm value using the different components of institutional development, namely, the level of voice and accountability, political stability, government effectiveness, regulatory quality, rule of law and control of corruption. In Panel A, we include investable firms of the specified type (e.g. all investable firms in high voice and accountability regimes) and all noninvestable firms. In Panel B, again we include investable firms of the specified type but now only include noninvestable firms from either high or low institutional regimes. Invariably we reach the same conclusions using the components of institutional development.

¹⁴ They use three measures to capture the different corporate governance practices of Korean firms. They use Chaebol affiliation, the ownership stake of the largest shareholder, and a dividend paying dummy.

¹⁵ O’Connor (2011) also uses three measures to measure differences in corporate governance practices in emerging market firms. They are a dual-class/single-class share indicator, and two agency costs measures, namely the ratio of sales-to-assets, and operating expenses-to-sales.

in Panel B, single-class share investable firms are compared to single-class share noninvestable firms, and dual-class investable to dual-class noninvestable firms. As a result, the number of firm-year observations is greatest in Panel A. The coefficient estimates for single-class investable firms are presented in columns 1 through 4. The corresponding estimates for dual-class firms are presented in the remaining columns of Table 4 (5 through 8). The coefficient estimates from Panel A suggest that only single-class share firms enjoy an “investable premium”. For these firms, the coefficient estimates on the investable dummies are positive and statistically significant, ranging from 0.111 to 0.169 with an average coefficient estimate of 0.144. In turn, the coefficient estimates are robust to the inclusion of firm and industry-wide control variables, cross-listing, and country-fund inclusion. For single-class share firms, the coefficient estimates imply an average change in value from investability of 12.31% (i.e., $((0.152 + 0.169 + 0.111)/3/1.17)*100$). In contrast, there are no significant value gains for dual-class share investable firms. While the coefficient estimates are large, and similar in magnitude to those for single-class share firms, they are, in all specifications, statistically indifferent to zero.

Panel B compares single-class (dual-class) share investable firms to single-class (dual-class) noninvestable firms. The notable difference between Panels A and B of Table 5 is that dual-class share firms do enjoy significant value gains from becoming investable, at least when compared to other dual-class noninvestable firms. In turn, when both single- and dual-class investable firms are compared to their peers, dual-class share investable firms do better than single-class share firms (for example compare 0.131 to 0.275). Together, the findings from Panels A and B suggest that dual-class investable firms do enjoy an “investable premium”, but in turn, it is less than that experienced by single-class share firms. These findings are consistent with Bae and Goyal (2010) and O’Connor (2011).

In Table 6, we further exam the relationship between investability, corporate governance, and firm value using our second measure of corporate governance, namely the percentage of common shares closely-held. Since the incentives of controlling insiders and minority outsiders are likely to be better-aligned (but not always) the greater the ownership (cashflow) stake of the controlling insider, then, all else being equal, foreign institutional investors are likely to invest disproportionately more in these firms once these firms become investable. As a result, we would expect that investable firms, with high pre-investable levels of closely-held shares (as a % of total common shares outstanding) reap the largest value

gains from becoming investable. For firms with much lower levels of insider ownership, the level of foreign investment is likely to be much lower, since expropriation risk is much higher, hence resulting in much lower, if any, value gains. The coefficient estimates from estimating Equation (1) for investable firms with high and low pre-investable levels of closely-held shares (as a % of total shares outstanding) are presented in Table 6. Panel A compares high (low) closely-held share investable firms to all noninvestable firms. Panel B compares high (low) closely held share investable firms only to other high (low) closely held share noninvestable firms. The coefficient estimates are in line with our prior expectations, and with the findings from Table 5. Investable firms with high pre-investable levels of closely-held shares enjoy a large and statistically significant “investable premium”. The coefficient estimates range from 0.142 to 0.153, which suggest that the value gains from becoming investable for these firms range from 9.53% (i.e. $(0.142/1.49)*100$) to 10.27% (i.e. $(0.153/1.49)*100$) for the median firm.

In contrast, for investable firms with less concentrated inside ownership, there is no “investable premium”. For these firms, the coefficient estimates on the investable dummies are small, negative, and always statistically indifferent to zero. These findings are, in particular, consistent with Bae and Goyal (2010). Using cross-sectional regressions of abnormal returns on governance-related variables calculated around the month of the liberalization of the Korean equity market, they show that the abnormal returns are positively related to the equity ownership of the largest shareholder. We show that “investable premia” increase in the level of pre-investable closely-held shares (as a % of total shares outstanding). Overall, our findings suggest that better-governed firms reap the largest value gains from becoming investable. Both single-class share firms (Table 6), and firms with concentrated inside ownership (Table 7) enjoy the largest “investable premia”. Dual-class share firms also gain, but their “investable premia” are much smaller.

3.3 Investability, Institutional Development and Corporate Governance

In addition to the tests undertaken in Bae and Goyal (2010) and O’Connor (2011), we are, given our inclusion of country-level variables able to perform a number of additional tests, not possible in the Bae and Goyal (2010) paper (because it is a single-country study), and not undertaken by O’Connor (2011). These tests centre around analysing whether corporate and country governance *complement* or *substitute* for each other. On one hand, if country and corporate governance complement each other, then

the “investable premia” should be greatest for firms when both country and corporate governance is strong. If not, and they substitute for one another, better-governed firms in countries where country-governance is weak, should, all else equal, experience the largest value gains. If this is the case, it would suggest that foreign investors value good corporate governance more highly in countries where country governance is weak. In addition, this substitution effect would also imply that poorly-governed firms could substitute poor corporate governance for superior country governance. If this is the case, which would in turn suggest that foreign investors invest primarily based on country and not corporate governance attributes, then poorly-governed firms from countries with high-quality institutions would reap larger value gains than their counterpart from countries low-quality institutions. Hence, if country and corporate governance substitute for one another, this then suggests that both better-governed firms from countries with low-quality institutions, and poorly-governed firms from countries with high-quality institutions would reap large “investable premia”.

In Table 7, we take a first look at how corporate and country governance together can explain differences in the value gains from becoming investable. To do so, we undertake the same analysis as that performed in Tables 5 and 6, but now by level of institutional development (country governance). We follow the same convention as laid out earlier by presented two sets of estimates. Panel A includes investable firms of the specified type, and all noninvestable firms. Panel B only includes investable and noninvestable firms of the specified type (e.g. single-class investable and noninvestable firms in high institutional development countries).

The coefficient estimates are presented in Table 7 and suggest the following. First, in countries with high-quality institutions, better-governed firms either no longer enjoy (firms with high pre-investable closely-held shares (as a % of total shares outstanding)), or experience much lower “investable premia” (single-class share firms), relative to better-governed firms from countries with low-quality institutions. In these countries, single-class share firms, and firms with high pre-investable levels of inside ownership enjoy large “investable premia”. In the case of the former, investability is associated with a change in value in the region of 45.58% for the median firm $((0.588/1.29)*100)=45.58\%$, and 82.89% $((1.177/1.42)*100=82.89\%)$ in the case of the former. In contrast, there are smaller gains for single-class

share firms (SCS High $((0.091/1.15)*100 = 7.91\%)$, and no significant gains for firms with high pre-investable levels of inside ownership from countries, both from countries with high-quality institutions.

These findings suggest that corporate and country governance substitute for one another; single-class share firms substitute poor country governance for high-quality corporate governance. In turn, while we don't directly observe the portfolio allocation decisions of foreign investors in each firm, these findings suggest that corporate and not country governance attributes matter more for foreign investors. These findings also confirm the *substitute* nature of the relationship that exists between corporate and country governance in emerging markets (Durnev and Kim, 2005; Klapper and Love, 2004; Chen et al. 2009). Durnev and Kim (2005) document a positive relationship between corporate governance and firm value in emerging markets, and in turn, show that this positive relationship is more pronounced in countries with weak legal regimes. Klapper and Love (2004) show likewise, this time using measures of firm performance (Return on Assets). Finally, Chen et al. (2009) show that in emerging markets, firm-level governance and country governance substitute for one another in determining the cost of equity capital. Hence, foreign investors appear to value good (corporate) governance more highly, when it is most required i.e. when country governance is weak.¹⁶ Our findings also suggest that this is the case. Foreign investors value better-governed firms highly (see Table 5 and 6), but value better-governed firms from countries with low-quality institutions, the highest (see Table 7). Finally, our findings also contrast notably with the value gains from another aspect of (corporate internationalization), namely international cross-listings. Hope et al. (2007) and Fresard and Salva (2010) show that the value gains from international cross-listing in the U.S. are greater for exchange-traded firms (Level 2 and 3 ADRs) from countries with high-quality institutions. The former show that "cross-listing premia" increase in the quality of home-country (as opposed to host-country) institutions. The latter find that "foreign firm discounts" increase in the quality of home-country institutions. In contrast, we find that provided firms are well-governed, investability confers the largest "investable premia" on firms from low-quality regimes.

As a result, and thus non-surprisingly, we find no evidence to suggest that investable firms can substitute poor corporate governance for superior country governance. For example, using closely-held

¹⁶ Using a sample of developed market firms, Andersen and Gupta (2009) show that corporate governance and country attributes (i.e. financial structure and legal system) complement one another. Better-governed firms are more highly valued in market-based/common law country combinations (as opposed to bank-based and civil law countries).

shares (as a % of total shares outstanding) to measure corporate governance, we find no evidence to suggest that firms with low pre-investable levels of inside ownership (presumably poor governance) from countries with high-quality institutions gain from becoming investable. Irrespective of the quality of home country institutions, there are no “investable premia” for these firms. These findings, and the findings presented for better-governed firms, suggest that corporate, and not country governance, matters most to foreign investors. If this was not the case, then poorly-governed firms from countries with high-quality institutions would reap large “investable premia”. They don’t, although with one exception, the case of dual-class share investable firms.

For dual-class firms, the coefficient estimates run contrary to our prior expectations. Dual-class firms from countries with low-quality institutions, and not their counterparts from countries with high-quality regimes, enjoy large “investable premia”. When compared to their dual-class noninvestable counterparts, the former enjoy an “investable premium”. These findings extend our analysis from earlier (see Table 5). They suggest that the “investable premium” that we documented earlier for dual-class firms are the sole preserve of dual-class firms in countries with low-quality institutions. While we don’t try and uncover the sources of these value gains for dual-class firms in this paper, our findings are consistent with recent evidence presented by Flavin and O’Connor (2011). They show that investability is associated with a shift towards the greater use of long-term debt for these firms. Their results imply that the cost of (long-term) debt capital is lower for these firms, once they become investable. This effect, likely coupled with others, may well explain the “investable premia” that we observe for these firms. Along these same lines, Lin et al. (2011) show that borrowing costs are much higher for firms with excess control rights (dual-class share firms), and as a result, dual-class firms predominantly use more short-term debt financing (see Flavin and O’Connor, 2011). Consequently, Lin et al. (2010) find that firms with excess control rights are more financially constrained. In turn, financing constraints serve to partially explain the lower valuations of these firms. Our findings, together with those of Flavin and O’Connor (2011) suggest that investability relaxes the financing constraints of dual-class firms (in countries with low-quality institutions), which in turn, enhances their value. In contrast, dual-class share firms domiciled in countries with superior

institutions do not enjoy any value gains.¹⁷ Finally, when both single- and dual-class firms enjoy “investable premia” (both in low institutional quality regimes), single-class share firms still enjoy the larger premia. Thus, when both gain from becoming investable, the hierarchy established in Table 5 remains.

3.4 Robustness

In Tables 8 and 9, we use alternative measures of institutional development to examine the relationship between investability, institutional development and firm value. In Table 8, we use measures of shareholder rights (using Spamann’s (2010) ‘corrected’ anti-director rights measure (using 1997 values)), judicial efficiency, investor protection, and accounting standards, and estimate Equation (1) for above- and below-median values of each. In Table 9, we undertake the same analysis as that employed in Table 7, but with these alternative measures of institutional development. Together the findings from Tables 8 and 9 are consistent with the findings from Tables 4 and 7. “Investable premia” are greatest for investable firms from countries with high-quality institutions. On closer inspection, these “investable premia” are greatest for single-class share firms, and firms with high pre-investable inside ownership domiciled in countries with high-quality institutions. We again find that dual-class firms from countries with low-quality countries enjoy “investable premia”. Finally, and with just one exception, when both single- and dual-class share firms experience positive gains from becoming investable, the gains are greatest for single-class share firms.

4. Conclusion and Further Work

This paper investigates the relationship between a firm’s corporate governance, the institutional developmental setting in which it finds itself, and the firms’ value. Using a carefully constructed and novel dataset, we extended the approach of Bae and Goyal (2010) to a multi-country setting, and find that their insights on the effect of differences in corporate governance within firms on their valuation in emerging markets do indeed carry over to other countries.

We go a step further and apply the methodology of Mitton and O’Connor (2011) to see whether investors care more about the firm’s corporate governance, or the country’s level of institutional

¹⁷ In Appendix 2 we undertake the same analysis, but now using the components of the institutional development measure. Almost without exception, we reach the same conclusions.

development. Using a series of firm fixed-effects regressions, we find a firm's corporate governance matters more—there is a premium to investing in firms with good governance structures in countries with weak institutions. Our findings are robust to alternative measures of corporate governance and institutional development.

Further work will concentrate on extending the methodology of the paper towards developing nations, and regions within emerging nations.

References

1. Anderson, A., and P. Gupta (2009), 'A cross-country comparison of corporate governance and firm performance: do financial structure and legal system matter?' *Journal of Contemporary Accounting & Economics*, Vol. 5, pp. 61-79.
2. Bae, K., and V. Goyal (2010), 'Equity market liberalization and corporate governance', *Journal of Corporate Finance*, Vol. 16, pp. 609-621.
3. Bekaert, G., Harvey, C., and C. Lundblad (2001), 'Emerging equity markets and economic development', *Journal of Development Economics*, Vol. 66, pp. 465-504.
4. Bekaert, G., Harvey, C., and C. Lundblad (2005), 'Does financial liberalization spur economic growth?' *Journal of Financial Economics*, Vol. 77, pp. 3-55.
5. Chen, K., Chen, Z., and K. Wei (2009), 'Legal protection of investors, corporate governance, and the cost of equity capital', *Journal of Corporate Finance*, Vol. 15, pp. 273-289.
6. Claessens, S., Djankov, S., Fan, J., and L. Lang (2002), 'Disentangling the incentives and entrenchment effects of large shareholders', *Journal of Finance*, Vol. 57, pp. 2741-2771.
7. DeAngelo, H., and L. DeAngelo (1985), 'Managerial ownership of voting rights: a study of public corporations with dual classes of common stock', *Journal of Financial Economics*, Vol. 14, pp. 33-39.
8. Djankov, S., La Porta, R., Lopez-de-Silanes, F., and A. Shleifer (2008), 'The law and economics of self-dealing', *Journal of Financial Economics*, Vol. 88, pp. 430-465.
9. Doidge, C., Karolyi, G., and R. Stulz (2004), 'Why are foreign firms listed in the U.S. worth more?' *Journal of Financial Economics*, Vol. 71, pp. 205-238.
10. Doidge, C., Karolyi, G., and R. Stulz (2009), 'Has New York become less competitive in global markets? Evaluating foreign listing choices over time', *Journal of Financial Economics*, Vol. 91, pp. 253-287.
11. Durnev, A., and E. Kim (2005), 'To steal or not to steal: firm attributes, legal environment, and valuation', *Journal of Finance*, Vol. 60, pp. 1461-1493.
12. Durnev, A., and E. Kim (2007), 'Explaining differences in the quality of governance among companies: evidence from emerging markets', *Journal of Applied Corporate Finance*, Vol. 19, pp. 16-24.
13. Flavin, T., and T. O'Connor (2011), 'The effects of ownership structure and corporate governance on corporate financing decisions', Unpublished Working Paper (Department of Economics, Finance, and Accounting, NUI Maynooth).
14. Fresard, L., and C. Salva (2010), 'The foreign firm discount', Unpublished Working Paper (World Bank, HEC School of Management, Paris).
15. Gozzi, J.C., Levine, R., and S. Schmukler (2008), 'Internationalization and the evolution of corporate valuation', *Journal of Financial Economics*, Vol. 88, pp. 607-632.
16. Grossman, S., and O. Hart (1988), 'One share-one vote and the market for corporate control', *Journal of Financial Economics*, Vol. 20, pp. 175-202.

17. Henry, P.B. (2000), 'Do stock market liberalizations cause investment booms?' *Journal of Financial Economics*, Vol. 58, pp. 301-334.
18. Hope, O., Kang, T., and Y. Zang (2007), 'Bonding to the improved disclosure environment in the U.S: firms' listing choices and their capital market consequences', *Journal of Contemporary Accounting & Economics*, Vol. 3, pp. 1-33.
19. Kaufmann, D., Kraay, A., and M. Mastruzzi (2007), 'Governance matters VI: aggregate and individual governance indicators 1996-2006', Unpublished Working Paper (World Bank).
20. Kim, E., and V. Signal (2000), 'Does financial liberalization reduce financing constraints?' *Financial Management*, Vol. 32, pp. 5-34.
21. Klapper, L., and I. Love (2004), 'Corporate governance, investor protection, and performance in emerging markets', *Journal of Corporate Finance*, Vol. 10, pp. 703-728.
22. La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and R. Vishny (1998), 'Law and finance', *Journal of Political Economy*, Vol. 106, pp. 1113-1155.
23. La Porta, R., Lopez-de-Silanes, F., and A. Shleifer (2006), 'What works in securities laws?' *Journal of Finance*, pp. 1-32.
24. Lin, C., Ma, Y., and Y. Xuan (2010), 'Ownership structure and financing constraints: evidence from structural estimation', Unpublished Working Paper (Harvard Business School).
25. Lin, C., Ma, Y., Malatesta, P., and Y. Xuan (2011), 'Ownership structure and the cost of corporate borrowing', *Journal of Finance*, Vol. 100, pp. 1-23.
26. Lins, K. (2003), 'Equity ownership and firm value in emerging markets', *Journal of Financial and Quantitative Analysis*, Vol. 38, pp. 159-184.
27. Masulis, R., Wang, C., and F. Xie (2009), 'Agency costs at dual-class companies', *Journal of Finance*, Vol. 64, pp. 1697-1727.
28. McCahery, J., Sautner, Z., and L. Starks (2010), 'Behind the scenes: The corporate governance preferences of institutional investors', Unpublished Working Paper No: 235/2009 (European Corporate Governance Institute).
29. Mitton, T. (2002), 'A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis', *Journal of Financial Economics*, Vol. 64, pp. 215-241.
30. Mitton, T. (2006), 'Stock market liberalization and operating performance at the firm level', *Journal of Financial Economics*, Vol. 81, pp. 625-647.
31. Mitton, T., and T. O'Connor (2011), 'Investability and firm value', *European Financial Management* (In Press).
32. O'Connor, T. (2011), 'Investability, corporate governance and firm value', Unpublished Working Paper (Department of Economics, Finance, and Accounting, NUI Maynooth).
33. Patro, D. (2005), 'Stock market liberalization and emerging market country fund premiums', *Journal of Business*, Vol. 78, pp. 135-168.

34. Spamann, H. (2010), 'The "anti-director rights index" revisited', *Review of Financial Studies*, Vol. 23, pp. 467-486.
35. Stulz, R. (2007), 'The Limits of Financial Globalization', *Journal of Applied Corporate Finance*, Vol. 19, pp. 8-15.
36. Thompson, S. (2011), 'Simple formulas for standard errors that cluster by both firm and time', *Journal of Financial Economics*, Vol. 99, pp. 1-10.

Table 1
Sample statistics by country

| | Full Sample | | | Reduced Sample | | Corporate Governance Measures | | | ADR | Key Dates | | |
|--------------|-------------|----------|-------|----------------|-------|-------------------------------|-------------|-------------------------|-----|--------------|-----------|--------------|
| | # Obs | # Invest | Total | # Invest | # Obs | Invest & SC | Invest & DC | Closely Held Shares (%) | ADR | First Invest | First ADR | Country Fund |
| Argentina | 75 | 3 | 12 | 1 | 17 | 2 | 1 | 60.00 | 0 | 1992 | - | 1991 |
| Brazil | 363 | 9 | 53 | 8 | 157 | 1 | 8 | 42.33 | 7 | 1991 | 1994 | 1992 |
| Chile | 265 | 11 | 41 | 11 | 235 | 9 | 2 | 66.71 | 5 | 1992 | 1993 | 1992 |
| China | 313 | 2 | 70 | 2 | 235 | 0 | 2 | 37.29 | 1 | 1992 | 1995 | 1992 |
| Colombia | 63 | 2 | 8 | - | 1 | 1 | 1 | - | 1 | 1991 | 1994 | 1992 |
| Greece | 660 | 20 | 106 | 14 | 147 | 9 | 11 | 61.89 | 1 | 1988 | 1990 | 1998 |
| India | 1,123 | 12 | 197 | 3 | 106 | 12 | 0 | 50.83 | 10 | 1991 | 1993 | 1991 |
| Indonesia | 496 | 1 | 79 | 1 | 476 | 0 | 1 | 60.39 | 1 | 1993 | 1996 | 1991 |
| Israel | 91 | 6 | 17 | 6 | 38 | 6 | 0 | 56.00 | 0 | 1994 | - | 1994 |
| Korea | 1,317 | 56 | 176 | 55 | 1,004 | 56 | 0 | 27.13 | 10 | 1988 | 1991 | 1984 |
| Malaysia | 1,671 | 45 | 223 | 45 | 1,476 | 45 | 0 | 52.31 | 4 | 1988 | 1992 | 1987 |
| Mexico | 329 | 15 | 36 | 4 | 20 | 4 | 11 | 27.36 | 14 | 1988 | 1991 | 1982 |
| Pakistan | 303 | 3 | 54 | 2 | 66 | 3 | 0 | 70.43 | 0 | 1994 | - | 1994 |
| Peru | 61 | 2 | 14 | 1 | 12 | 0 | 2 | 24.88 | 0 | 1993 | - | NA |
| Philippines | 216 | 5 | 38 | 4 | 80 | 2 | 3 | 58.50 | 3 | 1993 | 1995 | 1990 |
| Portugal | 280 | 9 | 39 | 8 | 156 | 7 | 2 | 56.31 | 2 | 1988 | 1990 | 1987 |
| South Africa | 750 | 23 | 66 | 22 | 599 | 20 | 3 | 55.50 | 18 | 1982 | 1994 | 1994 |
| Taiwan | 538 | 14 | 112 | 4 | 65 | 13 | 1 | 43.69 | 10 | 1990 | 1992 | 1990 |
| Thailand | 874 | 7 | 136 | 5 | 444 | 0 | 7 | 41.56 | 0 | 1989 | 1999 | 1989 |
| Turkey | 204 | 6 | 33 | 5 | 166 | 6 | 0 | 75.72 | 1 | 1991 | 1994 | 1990 |
| | 9,992 | 251 | 1,510 | 201 | 5,500 | 196 | 55 | 47.19 | 88 | | | |

The table reports summary statistics of the sample by country. Investable dates are taken from the Emerging Markets Database (EMDB). # Obs is the number of firm-year observations; # Inv is the number of investable firms; # NI is the number of non-investable firms, and # Total is the total number of firms. "Reduced Sample" refers to the number of investable (# Invest) and the number of firm-year observations (# Obs) when we use closely-held shares (%). "Invest & SC" and "Invest & DC" refers to the number of single- and dual-class investable firms. Closely Held Shares (%) is the median pre-investable % of shares held by insiders in investable firms as a percentage of total common shares outstanding. All information on ADRs is sourced from the Bank of New York, Citibank, NYSE, and NASDAQ. Inv & SC and Inv & DC are the number of single and dual-class investable firms, respectively. The number of ADRs refers to the number of firms with ADRs that also have post-listing financial data. First country fund dates are taken from Bekaert, Harvey, and Lundblad (2005) and Patro (2005).

Table 2

Institutional Development/Country Governance Measures

| | VA | PS | GE | RQ | RL | CC | ID | ADRI | JE | IP | ADI |
|------------------------|--------------|----------------|--------------|--------------|--------------|----------------|--------------|----------|--------------|--------------|-------------|
| Argentina | 0.273 | 0.097 | 0.197 | 0.582 | 0.063 | (0.176) | 1.036 | 3 | 6.00 | 0.479 | 68 |
| Brazil | 0.182 | (0.267) | (0.108) | 0.319 | (0.237) | 0.020 | (0.091) | 5 | 5.75 | 0.442 | 56 |
| Chile | 0.678 | 0.444 | 1.136 | 1.339 | 1.230 | 1.354 | 6.181 | 5 | 7.25 | 0.610 | 78 |
| China | (1.440) | (0.151) | (0.080) | (0.130) | (0.335) | (0.207) | (2.343) | Low | Low | Low | Low |
| Colombia | (0.524) | (1.587) | (0.167) | 0.242 | (0.785) | (0.581) | (3.403) | 4 | 7.25 | 0.355 | 58 |
| Greece | 0.921 | 0.431 | 0.771 | 0.779 | 0.864 | 0.576 | 4.342 | 3 | 7.00 | Low | 61 |
| India | 0.236 | (0.848) | (0.162) | (0.171) | 0.266 | (0.364) | (1.042) | 4 | 8.00 | 0.769 | 61 |
| Indonesia | (0.868) | (1.311) | (0.431) | (0.077) | (0.615) | (0.884) | (4.186) | 4 | 2.50 | 0.507 | Low |
| Israel | 0.705 | (0.856) | 1.059 | 1.057 | 1.114 | 1.241 | 4.319 | 3 | 10.00 | 0.594 | 74 |
| Korea | 0.576 | 0.190 | 0.692 | 0.457 | 0.772 | 0.306 | 2.992 | 4 | 6.00 | 0.358 | 68 |
| Malaysia | (0.271) | 0.362 | 0.762 | 0.548 | 0.543 | 0.516 | 2.460 | 4 | 9.00 | 0.729 | 79 |
| Mexico | (0.022) | (0.480) | 0.201 | 0.458 | (0.445) | (0.390) | (0.676) | 2 | 6.00 | Low | 71 |
| Pakistan | (0.935) | (1.267) | (0.614) | (0.517) | (0.695) | (0.861) | (4.889) | 5 | 5.00 | 0.625 | 73 |
| Peru | (0.332) | (0.994) | (0.143) | 0.530 | (0.613) | (0.189) | (1.740) | 4 | 6.75 | 0.656 | High |
| Philippines | 0.247 | (0.454) | (0.197) | 0.328 | (0.177) | (0.409) | (0.662) | 4 | 4.75 | 0.812 | 64 |
| Portugal | 1.352 | 1.212 | 1.178 | 1.059 | 1.206 | 1.350 | 7.359 | 3 | 5.50 | 0.574 | 56 |
| South Africa | 0.830 | (0.795) | 0.753 | 0.236 | 0.127 | 0.569 | 1.721 | 5 | 6.00 | 0.599 | 79 |
| Taiwan | 0.729 | 0.789 | 1.055 | 1.007 | 0.888 | 0.824 | 5.291 | 5 | 10.00 | 0.547 | 58 |
| Thailand | 0.400 | 0.285 | 0.218 | 0.356 | 0.535 | (0.172) | 1.622 | 4 | 6.75 | High | 66 |
| Turkey | (0.532) | (1.137) | (0.064) | 0.417 | (0.049) | (0.153) | (1.518) | 4 | 4.00 | 0.338 | 58 |
| Country Sample Medians | | | | | | | | | | | |
| | 0.241 | (0.361) | 0.199 | 0.437 | 0.095 | (0.163) | 0.473 | 4 | 6.00 | 0.584 | 66 |

The table reports institutional development measures by country. Figure in **Bold** refer to measures above the country sample median. Institutional development (ID) is averaged over 1996, 1998, and 2000, and is the sum of Voice & Accountability (VA), Political Stability (PS), Government Effectiveness (GE), Regulatory Quality (RQ), Rule of Law (RL), and Control of Corruption (CC). ADRI is Spamann's (2010) "corrected" anti-director rights index, JD is judicial efficiency, IP is investor protection, and ADI is accounting disclosure index. The Spamann (2010) "corrected" anti-director rights index is not available for China nor Indonesia. We assume China is below the sample median, and use the revised anti-director rights index from Djankov et al. (2008) for Indonesia. We also assume that China has below-median values of Judicial Efficiency, Investor Protection, and Accounting Disclosure. We assume Greece and Mexico have below-median values (Low) of Investor Protection, and Thailand above-median (High). For the Accounting Disclosure Index, we assume below-median values for Indonesia and above-median for Peru.

Table 3
Regression estimates of the effect of investability on firm value

| | Investable Dummies | | | | | |
|---------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Investable | 0.117** (2.27) | 0.120** (2.38) | 0.132*** (2.68) | 0.136*** (2.79) | 0.150*** (3.12) | 0.111** (2.34) |
| Firm Size | | -0.011 (0.33) | -0.073* (1.84) | -0.073* (1.86) | -0.072* (1.83) | -0.091** (2.45) |
| Firm Growth | | | 0.825*** (6.11) | 0.830*** (6.15) | 0.821*** (6.14) | 0.755*** (5.77) |
| Global Industry Q | | | | 1.065*** (5.55) | 1.016*** (5.33) | 1.015*** (4.96) |
| Level 1 ADR | | | | | -0.045 (0.22) | |
| Level 2 ADR | | | | | 0.289*** (2.89) | |
| Level 3 ADR | | | | | -0.062 (0.42) | |
| Rule 144a/Reg S ADR | | | | | -0.373** (2.30) | |
| Country Fund | | | | | | 0.923*** (9.55) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 9,992 | 9,992 | 9,992 | 9,992 | 9,992 | 9,992 |
| R-Squared | 0.039 | 0.031 | 0.010 | 0.010 | 0.010 | 0.010 |
| | Degree Open Factors | | | | | |
| | (1) | (2) | (3) | (4) | (7) | (8) |
| Degree Open | 0.162*** (3.98) | 0.165*** (4.03) | 0.177*** (4.37) | 0.184*** (4.57) | 0.190*** (3.31) | 0.150*** (2.67) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 9,992 | 9,992 | 9,992 | 9,992 | 9,992 | 9,992 |
| R-Squared | 0.041 | 0.033 | 0.001 | 0.010 | 0.010 | 0.010 |

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses underneath the coefficient estimates. The dependent variable is Tobin's q . Openness to foreign investors is measured using either investable dummies or degree-open factors, respectively. Investable is a dummy variable that is set equal to one in years in which the firm is designated as investable. The degree open factor ranges from zero (not open to foreign investors) to one (fully open to foreign investors). Firms are deemed investable if its stock is free from both country-level and firm-level restrictions on foreign investment. Firm size is measured as the log of annual sales in real \$U.S. Firm growth is measured as the (geometric) average real growth in sales over the prior two years. Global industry q is calculated as the average q of all global firms within each industry classification. ADR variables are dummy variables that are set equal to one in years in which the firm has an ADR. Country fund is a dummy variable indicating the existence of a closed-end country fund in the firm's country. Also estimated but not reported are a constant, and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5, and 10% levels, respectively.

Table 4

Regression estimates of the effect of investability on firm value by level of institutional development

| | Panel A | | | | | |
|---------------------|--------------------------------|--------------------|--------------------|-------------------------------|--------------------|---------------------|
| | High Institutional Development | | | Low Institutional Development | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Investable | 0.077 (1.61) | 0.100* (1.94) | 0.027 (0.59) | 0.400*** (2.78) | 0.434*** (3.02) | 0.488*** (3.35) |
| Firm Size | -0.052 (1.21) | -0.051 (1.18) | -0.054 (1.37) | -0.074* (1.71) | -0.072* (1.67) | -0.108*** (2.75) |
| Firm Growth | 0.735*** (5.17) | 0.726*** (5.15) | 0.606*** (4.48) | 0.702*** (4.80) | 0.697*** (4.77) | 0.672*** (4.77) |
| Global Industry Q | 1.003*** (4.48) | 0.998*** (4.46) | 0.906*** (4.24) | 1.276*** (5.71) | 1.221*** (5.23) | 1.138*** (5.17) |
| Level 1 ADR | | -0.139 (0.72) | | | 0.010 (0.36) | |
| Level 2 ADR | | 0.285** (1.98) | | | 0.306* (1.89) | |
| Level 3 ADR | | -0.028 (0.19) | | | | |
| Rule 144a/Reg S ADR | | -0.337* (1.87) | | | -0.507** (1.99) | |
| Country Fund | | | 0.985*** (9.94) | | | 1.047*** (8.53) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 9,553 | 9,553 | 9,553 | 8,070 | 8,070 | 8,070 |
| R-Squared | 0.015 | 0.015 | 0.010 | 0.010 | 0.011 | 0.010 |
| | Panel B | | | | | |
| | High Institutional Development | | | Low Institutional Development | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Investable | 0.040 (0.88) | 0.052 (1.17) | -0.010 (0.15) | 0.731*** (3.86) | 0.759*** (4.00) | 0.735*** (3.87) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 6,521 | 6,521 | 6,521 | 3,471 | 3,471 | 3,471 |
| R-Squared | 0.010 | 0.011 | 0.012 | 0.010 | 0.010 | 0.010 |

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses underneath the coefficient estimates. Separate regressions are estimated for firms domiciled in countries with high (above-median) and low (below-median) institutional development. Panel A includes all non-investable firms and investable firms domiciled in countries with either high or low levels of institutional development, as indicated. Panel B includes only investable and non-investable firms domiciled in countries with either high or low levels of institutional development, as indicated. The dependent variable is Tobin's q . Openness to foreign investors is measured using investable dummies. Investable is a dummy variable that is set equal to one in years in which the firm is designated as investable. Firms are deemed investable if its stock is free from both country-level and firm-level restrictions on foreign investment. Firm size is measured as the log of annual sales in real \$U.S. Firm growth is measured as the (geometric) average real growth in sales over the prior two years. Global industry q is calculated as the average q of all global firms within each industry classification. ADR variables are dummy variables that are set equal to one in years in which the firm has an ADR. Country fund is a dummy variable indicating the existence of a closed-end country fund in the firm's country. Also estimated but not reported are a constant, and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5, and 10% levels, respectively.

Table 5

Regression estimates of the effect of investability on firm value for single- and dual-class share firms

| | Panel A | | | | | |
|---------------------|--------------------------|--------------------|--------------------|------------------------|--------------------|---------------------|
| | Single-Class Share Firms | | | Dual-Class Share Firms | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Investable | 0.152*** (2.82) | 0.169*** (3.16) | 0.111** (2.12) | 0.131 (1.16) | 0.141 (1.31) | 0.155 (1.39) |
| Firm Size | -0.070 (1.63) | -0.069 (1.61) | -0.073* (1.86) | -0.062 (1.44) | -0.061 (1.41) | -0.103*** (2.57) |
| Firm Growth | 0.780*** (5.50) | 0.771*** (5.49) | 0.674*** (4.95) | 0.682*** (4.59) | 0.678*** (4.56) | 0.651*** (4.53) |
| Global Industry Q | 1.018*** (4.63) | 1.010*** (4.60) | 0.910*** (4.34) | 1.276*** (5.66) | 1.230*** (5.31) | 1.167*** (4.96) |
| Level 1 ADR | | -0.147 (0.68) | | | 0.091 (0.37) | |
| Level 2 ADR | | 0.321*** (2.59) | | | 0.296* (1.68) | |
| Level 3 ADR | | -0.068 (0.45) | | | | |
| Rule 144a/Reg S ADR | | -0.367** (2.27) | | | -0.405 (1.33) | |
| Country Fund | | | 0.943*** (8.87) | | | 1.066*** (9.45) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 9,523 | 9,523 | 9,523 | 8,100 | 8,100 | 8,100 |
| R-Squared | 0.010 | 0.008 | 0.006 | 0.012 | 0.013 | 0.002 |
| | Panel B | | | | | |
| | Single-Class Share Firms | | | Dual-Class Share Firms | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Investable | 0.131*** (2.61) | 0.148*** (2.96) | 0.099** (1.98) | 0.275* (1.93) | 0.295** (2.09) | 0.250* (1.84) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 7,091 | 7,091 | 7,091 | 2,901 | 2,901 | 2,901 |
| R-Squared | 0.001 | 0.001 | 0.001 | 0.109 | 0.108 | 0.007 |

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses underneath the coefficient estimates. Separate regressions are performed for single- and dual-class investable firms. The dependent variable is Tobin's q . Openness to foreign investors is measured using investable dummies. Investable is a dummy variable that is set equal to one in years in which the firm is designated as investable, zero otherwise. Panel A includes all non-investable firms and either single- and dual-class investable firms, as indicated. Panel B includes only single- or dual-class investable and non-investable firms, as indicated. Firm size is measured as the log of annual sales in real \$U.S. Firm growth is measured as the (geometric) average real growth in sales over the prior two years. Global Industry Q is calculated as the average Q of all global firms within each industry classification. ADR variables are dummy variables that are set equal to one in years in which the firm has an ADR of the specified type. Country fund is a dummy variable indicating the existence of a closed-end country fund in the firm's country. Also estimated but not reported is a constant and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5, and 10% levels, respectively.

Table 6

Regression estimates of the effect of investability on firm value by level of closely held shares

| | Panel A | | | | | |
|---------------------|------------------------------|---------------------|---------------------|-----------------------------|---------------------|---------------------|
| | High Closely Held Shares (%) | | | Low Closely Held Shares (%) | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Investable | 0.153** (1.96) | 0.148* (1.86) | 0.142* (1.81) | -0.035 (0.53) | -0.043 (0.68) | -0.041 (0.64) |
| Firm Size | -0.200*** (4.65) | -0.199*** (4.59) | -0.183*** (4.06) | -0.148*** (3.74) | -0.149*** (3.79) | -0.135*** (3.31) |
| Firm Growth | 0.715*** (4.19) | 0.709*** (4.14) | 0.648*** (3.75) | 0.536*** (3.32) | 0.513*** (3.19) | 0.488*** (3.02) |
| Global Industry Q | 0.391** (2.56) | 0.404*** (2.64) | 0.417*** (2.69) | 0.356* (1.88) | 0.362* (1.90) | 0.366* (1.89) |
| Level 1 ADR | | 0.107 (1.30) | | | -0.119 (0.46) | |
| Level 2 ADR | | 0.447 (1.30) | | | 0.655*** (4.77) | |
| Level 3 ADR | | -0.082 (0.85) | | | 0.275*** (6.59) | |
| Rule 144a/Reg S ADR | | 0.163 (0.72) | | | 0.054 (0.43) | |
| Country Fund | | | 0.403*** (4.67) | | | 0.256** (2.51) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 4,752 | 4,752 | 4,752 | 4,807 | 4,807 | 4,807 |
| R-Squared | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| | Panel B | | | | | |
| | High Closely Held Shares (%) | | | Low Closely Held Shares (%) | | |
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Investable | 0.159* (1.95) | 0.155* (1.86) | 0.153* (1.86) | -0.092 (1.20) | -0.093 (1.24) | -0.096 (1.29) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 3,240 | 3,240 | 3,240 | 2,260 | 2,260 | 2,260 |
| R-Squared | 0.001 | 0.001 | 0.001 | 0.005 | 0.006 | 0.004 |

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses underneath the coefficient estimates. Separate regressions are performed by level of closely-held shares. The dependent variable is Tobin's q . Openness to foreign investors is measured using investable dummies. Investable is a dummy variable that is set equal to one in years in which the firm is designated as investable, zero otherwise. Panel A includes all non-investable firms and investable firms with above- or below-median levels of closely held shares (%), as indicated. Panel B includes investable and non-investable firms with above- or below-median levels of closely held shares (%), as indicated. Firm size is measured as the log of annual sales in real \$U.S. Firm growth is measured as the (geometric) average real growth in sales over the prior two years. Global Industry Q is calculated as the average Q of all global firms within each industry classification. ADR variables are dummy variables that are set equal to one in years in which the firm has an ADR of the specified type. Country fund is a dummy variable indicating the existence of a closed-end country fund in the firm's country. Also estimated but not reported is a constant and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5, and 10% levels, respectively.

Table 7

Regression estimates of the effect of investability on firm value by level of corporate governance and institutional development

| Panel A | | | | | | | | |
|-------------------------------|----------|-------------------|----------|------------------------------|-----------|-----------------------------|-----------|-----------|
| Corporate Governance Measures | | | | | | | | |
| Ownership Structure | | | | Closely Held Shares (%) | | | | |
| Single-Class Shares | | Dual-Class Shares | | High Closely Held Shares (%) | | Low Closely Held Shares (%) | | |
| High ID | Low ID | High ID | Low ID | High ID | Low ID | High ID | Low ID | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Investable | 0.091* | 0.588*** | 0.042 | 0.244 | 0.035 | 1.177*** | -0.048 | 0.118 |
| | (1.77) | (2.87) | (0.33) | (1.29) | (0.53) | (3.83) | (0.69) | (1.15) |
| Firm Size | -0.054 | -0.064 | -0.049 | -0.062 | -0.174*** | -0.185*** | -0.148*** | -0.175*** |
| | (1.23) | (1.35) | (1.02) | (1.42) | (4.19) | (4.16) | (3.65) | (4.02) |
| Firm Growth | 0.696*** | 0.669*** | 0.645*** | 0.626*** | 0.618*** | 0.553*** | 0.530*** | 0.525*** |
| | (4.86) | (4.30) | (4.09) | (4.21) | (3.60) | (3.13) | (3.20) | (2.96) |
| Global Industry Q | 1.010*** | 1.265*** | 1.251*** | 1.293*** | 0.365** | 0.438** | 0.422** | 0.400** |
| | (4.46) | (4.91) | (4.78) | (5.57) | (2.34) | (2.41) | (2.39) | (2.02) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 9,337 | 7,817 | 7,847 | 7,884 | 4,685 | 4,126 | 4,745 | 4,121 |
| R-Squared | 0.014 | 0.013 | 0.017 | 0.012 | 0.001 | 0.001 | 0.001 | 0.001 |
| Panel B | | | | | | | | |
| Corporate Governance Measures | | | | | | | | |
| Ownership Structure | | | | Closely Held Shares (%) | | | | |
| Single-Class Shares | | Dual-Class Shares | | High Closely Held Shares (%) | | Low Closely Held Shares (%) | | |
| High ID | Low ID | High ID | Low ID | High ID | Low ID | High ID | Low ID | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | |
| Investable | 0.050 | 0.937*** | 0.004 | 0.739*** | 0.034 | 1.233*** | -0.058 | 0.116 |
| | (1.05) | (3.43) | (0.03) | (2.80) | (0.52) | (3.85) | (0.83) | (0.90) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 6,305 | 3,218 | 4,815 | 3,285 | 3,495 | 1,257 | 3,555 | 1,252 |
| R-Squared | 0.010 | 0.012 | 0.015 | 0.008 | 0.005 | 0.005 | 0.002 | 0.001 |

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses underneath the coefficient estimates. Separate regressions are performed for single- and dual-class investable firms, and high and low closely held share (%) firms, by level of institutional development. Panel A includes all non-investable firms, and investable firms of the type indicated. In Panel B, only investable and non-investable firms of the indicated type are included. The dependent variable is Tobin's q . Openness to foreign investors is measured using investable dummies. Investable is a dummy variable that is set equal to one in years in which the firm is designated as investable, zero otherwise. Firm size is measured as the log of annual sales in real \$U.S. Firm growth is measured as the (geometric) average real growth in sales over the prior two years. Global Industry Q is calculated as the average Q of all global firms within each industry classification. Also estimated but not reported is a constant and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5, and 10% levels, respectively.

Table 8

Regression estimates of the effect of investability on firm value using alternative measures of institutional development

| | Panel A | | | | | | | |
|---------------------|------------------------------------|--------------------|---------------------|--------------------|---------------------|--------------------|---------------------------|--------------------|
| | Spamann ADR Index (1997 Values) | | Judicial Efficiency | | Investor Protection | | Accounting Disclosures | |
| | High ADRI | Low ADRI | High JE | Low JE | High IP | Low IP | High ACC | Low ACC |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Investable | 0.122** (2.20) | 0.271*** (2.61) | 0.099* (1.92) | 0.318** (2.43) | 0.091 (1.18) | 0.167*** (2.98) | 0.048 (0.85) | 0.335*** (3.87) |
| Firm Size | -0.088** (2.00) | -0.041 (1.00) | -0.060 (1.50) | -0.066 (1.42) | -0.055 (1.22) | -0.075* (1.83) | -0.073* (1.77) | -0.051 (1.13) |
| Firm Growth | 0.804*** (5.69) | 0.638*** (4.31) | 0.769*** (5.56) | 0.664*** (4.37) | 0.708*** (4.81) | 0.735*** (5.18) | 0.722*** (5.18) | 0.717*** (4.76) |
| Global Industry Q | 0.998*** (4.61) | 1.303*** (5.69) | 1.047*** (5.27) | 1.284*** (4.97) | 1.018*** (4.66) | 1.290*** (5.58) | 1.014*** (5.12) | 1.320*** (5.12) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 9,503 | 8,120 | 9,756 | 7,867 | 8,773 | 8,850 | 9,461 | 8,162 |
| R-Squared | 0.004 | 0.021 | 0.012 | 0.010 | 0.020 | 0.005 | 0.006 | 0.021 |
| | Panel B | | | | | | | |
| | Spamann ADR Index (1997 Values) | | Judicial Efficiency | | Investor Protection | | Accounting Disclosures | |
| | High ADRI | Low ADRI | High JE | Low JE | High IP | Low IP | High ACC | Low ACC |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Investable | 0.140*** (2.71) | 0.389*** (2.76) | 0.089* (1.71) | 0.360*** (2.98) | 0.055 (0.82) | 0.144** (2.38) | 0.073 (1.28) | 0.296*** (3.59) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 8,244 | 1,748 | 7,817 | 2,175 | 5,354 | 4,638 | 6,232 | 3,760 |
| R-Squared | 0.001 | 0.146 | 0.046 | 0.010 | 0.048 | 0.036 | 0.010 | 0.035 |

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses underneath the coefficient estimates. Separate regressions are estimated for firms domiciled in countries with high (above-median) and low (below-median) institutional development. Institutional development is measured using either Spamann's (2010) "corrected" anti-director rights index, judicial efficiency, investor protection, and an accounting disclosures index. Panel A includes all non-investable firms and investable firms domiciled in countries with either high or low levels of institutional development, as indicated. Panel B includes only investable and non-investable firms domiciled in countries with either high or low levels of institutional development. The dependent variable is Tobin's q . Openness to foreign investors is measured using investable dummies. Investable is a dummy variable that is set equal to one in years in which the firm is designated as investable. Firms are deemed investable if its stock is free from both country-level and firm-level restrictions on foreign investment. Also estimated but not reported are a constant, firm-level controls, and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5, and 10% levels, respectively.

Table 9

Regression estimates of the effect of investability on firm value by level of corporate governance and institutional development

| | Corporate Governance Measures | | | | | | | |
|--------------|----------------------------------|--------------------|-------------------|--------------------|------------------------------|--------------------|-----------------------------|-------------------|
| | Ownership Structure | | | | Closely Held Shares (%) | | | |
| | Single-Class Shares | | Dual-Class Shares | | High Closely Held Shares (%) | | Low Closely Held Shares (%) | |
| | Spamann ADRI Index (1997 Values) | | | | | | | |
| | High ADRI | Low ADRI | High ADRI | Low ADRI | High ADRI | Low ADRI | High ADRI | Low ADRI |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Investable | 0.137** (2.27) | 0.273*** (3.29) | 0.017 (0.15) | 0.256 (1.39) | 0.135 (1.58) | 0.320* (1.83) | -0.046 (0.66) | -0.148* (1.78) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 9,303 | 7,851 | 7,831 | 7,900 | 4,678 | 4,133 | 4,772 | 4,094 |
| R-Squared | 0.004 | 0.022 | 0.013 | 0.014 | 0.001 | 0.001 | 0.001 | 0.001 |
| | Judicial Efficiency | | | | | | | |
| | High JE | Low JE | High JE | Low JE | High JE | Low JE | High JE | Low JE |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Investable | 0.121** (2.25) | 0.360* (1.68) | 0.086 (0.58) | 0.255*** (2.59) | 0.051 (0.71) | 0.926*** (3.95) | -0.056 (0.75) | 0.015 (0.18) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 9,390 | 7,764 | 7,997 | 7,734 | 4,682 | 4,129 | 4,739 | 4,127 |
| R-Squared | 0.013 | 0.010 | 0.011 | 0.015 | 0.001 | 0.001 | 0.001 | 0.001 |
| | Investor Protection | | | | | | | |
| | High IP | Low IP | High IP | Low IP | High IP | Low IP | High IP | Low IP |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Investable | 0.134 (1.56) | 0.132** (2.35) | -0.107 (0.66) | 0.250* (1.72) | 0.037 (0.47) | 0.453*** (2.81) | -0.174 (1.16) | 0.043 (0.94) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 8,655 | 8,499 | 7,749 | 7,982 | 4,586 | 4,225 | 4,361 | 4,505 |
| R-Squared | 0.023 | 0.006 | 0.013 | 0.015 | 0.001 | 0.001 | 0.001 | 0.001 |
| | Accounting Disclosure Index | | | | | | | |
| | High ACC | Low ACC | High ACC | Low ACC | High ACC | Low ACC | High ACC | Low ACC |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Investable | 0.065 (1.14) | 0.418*** (3.19) | 0.070 (0.35) | 0.201** (2.18) | 0.046 (0.65) | 0.656*** (2.75) | -0.051 (0.70) | -0.011 (0.12) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 9,250 | 7,949 | 7,887 | 7,844 | 4,643 | 4,168 | 4,732 | 4,134 |
| R-Squared | 0.008 | 0.020 | 0.010 | 0.017 | 0.001 | 0.001 | 0.001 | 0.001 |

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses underneath the coefficient estimates. Separate regressions are performed for single- and dual-class investable firms, and high and low closely held share (%) firms, by level of institutional development. Institutional development is measured using either Spamann's (2010) "corrected" anti-director rights index, judicial efficiency, investor protection, and an accounting disclosures index. Panel A includes all non-investable firms, and investable firms of the type indicated. In Panel B, only investable and non-investable firms of the indicated type are included. The dependent variable is Tobin's q . Openness to foreign investors is measured using investable dummies. Investable is a dummy variable that is set equal to one in years in which the firm is designated as investable, zero otherwise. Also estimated but not reported is a constant, control variables and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5, and 10% levels, respectively.

Appendix 1

Regression estimates of the effect of investability on firm value by level of institutional development

| Panel A | | | | | | |
|--------------|------------------------|--------------------|---------------------|--------------------|--------------------------|--------------------|
| | Voice & Accountability | | Political Stability | | Government Effectiveness | |
| | High | Low | High | Low | High | Low |
| Investable | 0.147** (2.16) | 0.160** (2.49) | 0.066 (1.39) | 0.346*** (2.98) | 0.073 (1.46) | 0.463*** (3.26) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 8,487 | 9,136 | 9,254 | 8,369 | 9,723 | 7,900 |
| R-Squared | 0.027 | 0.003 | 0.016 | 0.014 | 0.011 | 0.012 |
| Panel A | | | | | | |
| | Regulatory Quality | | Rule of Law | | Control of Corruption | |
| | High | Low | High | Low | High | Low |
| Investable | 0.116** (2.04) | 0.239*** (2.81) | 0.100** (2.05) | 0.350** (2.32) | 0.127** (2.54) | 0.211 (1.44) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 9,379 | 8,244 | 9,582 | 8,041 | 9,608 | 8,015 |
| R-Squared | 0.004 | 0.022 | 0.017 | 0.007 | 0.006 | 0.014 |
| Panel B | | | | | | |
| | Voice & Accountability | | Political Stability | | Government Effectiveness | |
| | High | Low | High | Low | High | Low |
| Degree Open | 0.028 (0.43) | 0.200*** (2.85) | 0.047 (1.01) | 0.395*** (2.91) | 0.061 (1.22) | 0.518*** (3.71) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 3,749 | 6,243 | 6,356 | 3,636 | 6,775 | 3,217 |
| R-Squared | 0.091 | 0.001 | 0.012 | 0.024 | 0.052 | 0.002 |
| Panel B | | | | | | |
| | Regulatory Quality | | Rule of Law | | Control of Corruption | |
| | High | Low | High | Low | High | Low |
| Degree Open | 0.111* (1.81) | 0.179** (2.41) | 0.069 (1.50) | 0.708*** (3.36) | 0.081* (1.74) | 0.537*** (2.61) |
| Time Dummies | Yes | Yes | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| # Obs | 5,427 | 4,565 | 7,569 | 2,423 | 6,139 | 3,853 |
| R-Squared | 0.015 | 0.023 | 0.011 | 0.010 | 0.003 | 0.050 |

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses underneath the coefficient estimates. Separate regressions are estimated for firms domiciled in countries with high (above-median) and low (below-median) institutional development, using the components of institutional development. Panel A includes all non-investable firms and investable firms domiciled in countries with either high or low levels of institutional development, as indicated. Panel B includes only investable and non-investable firms domiciled in countries with either high or low levels of institutional development. The dependent variable is Tobin's q . Openness to foreign investors is measured using investable dummies. Investable is a dummy variable that is set equal to one in years in which the firm is designated as investable. Firms are deemed investable if its stock is free from both country-level and firm-level restrictions on foreign investment. Also estimated but not reported are a constant, firm-level controls, and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5, and 10% levels, respectively.

Appendix 2

Regression estimates of the effect of investability on firm value by level of corporate governance and the components of institutional development

| Corporate Governance Measures | | | | | | | | | | | |
|-------------------------------|---------|-------------------|--------|---------|------------------------------|----------|-----------------------------|---------|--|--------|--|
| Ownership Structure | | | | | Closely Held Shares (%) | | | | | | |
| Single-Class Shares | | Dual-Class Shares | | | High Closely Held Shares (%) | | Low Closely Held Shares (%) | | | | |
| Voice & Accountability | | | | | | | | | | | |
| High VA | | Low VA | | High VA | | Low VA | | High VA | | Low VA | |
| (1) | | (2) | | (3) | | (4) | | (5) | | (6) | |
| Investable | 0.205** | 0.148** | 0.038 | 0.265 | 0.049 | 0.238** | -0.015 | -0.028 | | | |
| | (2.50) | (2.23) | (0.33) | (1.28) | (0.53) | (2.10) | (0.11) | (0.39) | | | |
| # Obs | 8,255 | 8,899 | 7,863 | 7,868 | 4,357 | 4,454 | 4,222 | 4,644 | | | |
| R-Squared | 0.025 | 0.004 | 0.017 | 0.012 | 0.001 | 0.001 | 0.001 | 0.001 | | | |
| Political Stability | | | | | | | | | | | |
| High PS | | Low PS | | High PS | | Low PS | | High PS | | Low PS | |
| (1) | | (2) | | (3) | | (4) | | (5) | | (6) | |
| Investable | 0.064 | 0.427*** | 0.078 | 0.216 | 0.010 | 0.504*** | -0.025 | -0.036 | | | |
| | (1.23) | (3.46) | (0.73) | (0.95) | (0.05) | (3.32) | (0.37) | (0.21) | | | |
| # Obs | 9,007 | 8,147 | 7,878 | 7,853 | 4,543 | 4,268 | 4,657 | 4,209 | | | |
| R-Squared | 0.015 | 0.016 | 0.016 | 0.012 | 0.001 | 0.001 | 0.001 | 0.001 | | | |
| Government Effectiveness | | | | | | | | | | | |
| High GE | | Low GE | | High GE | | Low GE | | High GE | | Low GE | |
| (1) | | (2) | | (3) | | (4) | | (5) | | (6) | |
| Investable | 0.089* | 0.627*** | 0.093 | 0.227** | 0.035 | 1.105*** | -0.046 | 0.112 | | | |
| | (1.73) | (2.75) | (0.62) | (2.07) | (0.52) | (3.72) | (0.65) | (1.09) | | | |
| # Obs | 9,369 | 7,785 | 7,985 | 7,746 | 4,683 | 4,128 | 4,753 | 4,113 | | | |
| R-Squared | 0.013 | 0.014 | 0.011 | 0.015 | 0.001 | 0.001 | 0.001 | 0.001 | | | |
| Regulatory Quality | | | | | | | | | | | |
| High RQ | | Low RQ | | High RQ | | Low RQ | | High RQ | | Low RQ | |
| (1) | | (2) | | (3) | | (4) | | (5) | | (6) | |
| Investable | 0.120** | 0.321*** | 0.179 | 0.088 | 0.076 | 0.362*** | -0.045 | 0.019 | | | |
| | (2.03) | (2.94) | (0.98) | (0.82) | (0.81) | (3.03) | (0.57) | (0.17) | | | |
| # Obs | 9,084 | 8,070 | 7,926 | 7,805 | 4,565 | 4,246 | 4,616 | 4,250 | | | |
| R-Squared | 0.005 | 0.024 | 0.012 | 0.015 | 0.001 | 0.001 | 0.001 | 0.001 | | | |
| Rule of Law | | | | | | | | | | | |
| High RL | | Low RL | | High RL | | Low RL | | High RL | | Low RL | |
| (1) | | (2) | | (3) | | (4) | | (5) | | (6) | |
| Investable | 0.116** | 0.550** | 0.044 | 0.239 | 0.061 | 0.994*** | -0.053 | 0.187** | | | |
| | (2.22) | (2.36) | (0.34) | (1.28) | (0.86) | (3.66) | (0.77) | (2.18) | | | |
| # Obs | 9,373 | 7,781 | 7,840 | 7,891 | 4,684 | 4,127 | 4,749 | 4,117 | | | |
| R-Squared | 0.016 | 0.010 | 0.017 | 0.012 | 0.001 | 0.001 | 0.001 | 0.001 | | | |
| Control of Corruption | | | | | | | | | | | |
| High CC | | Low CC | | High CC | | Low CC | | High CC | | Low CC | |
| (1) | | (2) | | (3) | | (4) | | (5) | | (6) | |
| Investable | 0.127** | 0.398** | 0.188* | 0.089 | 0.115 | 1.032* | -0.041 | 0.048 | | | |
| | (2.32) | (2.02) | (1.73) | (0.45) | (1.46) | (1.84) | (0.61) | (0.32) | | | |
| # Obs | 9,375 | 7,779 | 7,864 | 7,867 | 4,718 | 4,093 | 4,781 | 4,085 | | | |
| R-Squared | 0.006 | 0.018 | 0.016 | 0.011 | 0.001 | 0.001 | 0.001 | 0.001 | | | |

The table reports coefficient estimates from firm-fixed effects regressions with t-statistics (absolute value) adjusted for firm-level clustering presented in parentheses underneath the coefficient estimates. Separate regressions are performed for single- and dual-class investable firms, and high and low closely held share (%) firms, by level of institutional development using the components of institutional development. Panel A includes all non-investable firms, and investable firms of the type indicated. In Panel B, only investable and non-investable firms of the indicated type are included. The dependent variable is Tobin's q . Openness to foreign investors is measured using investable dummies. Investable is a dummy variable that is set equal to one in years in which the firm is designated as investable, zero otherwise. Also estimated but not reported is a constant, control variables and a full set of year dummies. Statistical significance is denoted by ***, **, * for the 1%, 5, and 10% levels, respectively.

