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Opting Out of Good Governance

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ABSTRACT

Cross-listing on a U.S. exchange does not bond foreign firms to follow the corporate governance rules of that exchange. Hand-collected data show that 80% of cross-listed firms opt out of at least one exchange governance rule, instead committing to observe the rules of their home country. Relative to firms that comply, firms that opt out have weaker governance practices in that they have a smaller share of independent directors. The decision to opt out reflects the relative costs and benefits of doing so. Cross-listed firms opt out more when coming from countries with weak corporate governance rules, but if firms based in such countries are growing and have a need for external finance, they are more likely to comply. Finally, opting out affects the value of cash holdings. For cross-listed firms based in countries with weak governance rules, a dollar of cash held inside the firm is worth \$1.52 if the firm fully complies with U.S. exchange rules but just \$0.32 if it is non-compliant.

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I. Introduction

Corporate governance mechanisms provide tools for suppliers of capital to control managers. However, investor powers and protections vary widely across countries. In some jurisdictions, corporate governance practices are weak, and insiders can enjoy private benefits at the expense of external capital providers. As a result, outsiders discount financial claims on firms and make it costly for firms to raise funds to pursue growth opportunities.

Firms that conduct business within a single country are typically tied to the corporate governance practices established by their country's legal and regulatory environment. However, firms that cross-list shares on foreign exchanges expose themselves to alternative legal and regulatory environments. This fact forms the basis of one prominent hypothesis for why firms cross-list: the legal bonding hypothesis. According to this hypothesis, managers from countries with weak corporate governance can bond themselves from extracting private benefits at the expense of capital providers by cross-listing into a legal and regulatory environment offering greater investor protections. For firms that have a cross-listing in the U.S., some of these protections are a consequence of needing to comply with SEC regulations concerning disclosures and corporate actions. Others are exchange-specific, and each of the major U.S. exchanges has detailed listing requirements.

This paper documents the extent to which cross-listed firms choose to opt out of exchange-specific governance regulations and explores the consequences of opting out. Existing literature has paid little attention to the possibility that firms can opt out of governance rules, typically assuming that foreign firms agree to comply with the same rules as U.S. firms when they cross-list on a U.S. exchange.¹ In reality, cross-listed firms can decide not to comply with

¹ For instance, Reese and Weisbach (2002) state: "One way to accomplish this bonding is to cross-list on an exchange (NYSE or Nasdaq) in the United States, whose legal system protects minority shareholder interests as well

exchange governance rules. Historically, these compliance choices were not well publicized, but this changed in September 2008, when the SEC mandated that foreign firms listed on U.S. exchanges disclose opt out choices in consolidated and concise form in their 20-F annual filings. Exchange governance rules are organized in this paper into six categories relating to board requirements, auditing, stock issuance, and business practices. This paper presents and analyzes the opt out decisions disclosed in 20-F filings immediately after the SEC rule change.

Four main findings emerge. First, opting out is very common. Figure 1 displays the share of firms that opt out of different numbers of exchange governance requirements. 80.2% of cross-listed firms opt out of at least one category of requirements. A large fraction of firms opt out of many types as well; 47.2% of firms opt out of three or more categories of requirements. Second, opting out of exchange governance requirements is correlated with weaker governance practices. While many governance practices are hard to observe directly, it is possible to measure features of a firm's board of directors. Analysis of the board composition of cross-listed firms reveals that firms opting out of board independence rules, board committee rules, and audit committee rules have significantly fewer independent board members.

Third, the decision to opt out of exchange governance requirements seems to reflect the incentives created by insiders' ability to consume private benefits when governance remains weak and by managers' desire to raise capital when growth opportunities are attractive. Managers of firms based in countries where corporate governance is weak typically give up larger private benefits by complying fully with U.S. exchange requirements. Consistent with this notion, tests reveal that firms are more likely to opt out of U.S. exchange requirements if they are

as any in the world. Such a cross-listing obligates the firm to conform to generally accepted accounting principles (US GAAP), to file reports with the US Securities and Exchange Commission (SEC), to comply with the requirements of the exchange on which it lists, and at least to some extent conform to US securities laws. It thus provides a mechanism by which foreign firms can voluntarily subject themselves to some shareholders' protections under US securities laws."

based in civil law countries and countries with lower measures of the Anti-Self-Dealing Index created by Djankov, LaPorta, Lopez-de-Silanes, and Shleifer (2008). However, managers of firms based in countries with weak governance appear to be more willing to comply with U.S. exchange requirements if they need capital to fund growth of their firm. In particular, firms based in countries with weak corporate governance are less likely to opt out if they are small, are experiencing higher levels of growth in property, plant, and equipment, or are engaging in equity issuances.

The fourth main finding is that opting out has value consequences. Simple analysis of the relationship between opting out and Tobin's q is confounded by unobservable determinants of the value of cross-listed firms, such as the extent of growth opportunities in different countries. However, methods developed by Faulkender and Wang (2006), Dittmar and Mahrt-Smith (2007), and Frésard and Salva (2010) enable a study of the value of cash inside cross-listed firms that are based in countries with weak corporate governance. For cross-listed firms based in civil law countries that are fully compliant with U.S. exchange governance requirements, a dollar inside the firm is worth \$1.52. However, if such a firm opts out of all six types of requirements, a dollar inside the firm is worth only \$0.32.

These findings have implications for several strands of the finance literature. The most direct contributions are to the literature on cross-listing. Karolyi (1998) and Karolyi (2006) survey this literature and discuss the motives for and effects of cross-listing. In characterizing the incentives to cross-list, earlier work emphasized a variety of considerations, including market risk exposures and liquidity. Stulz (1999) and Coffee (1999) raise the possibility that corporate governance issues are central to explaining cross-listing and that managers decide to list on U.S. exchanges in order to commit to abide by certain legal and regulatory practices, thereby limiting

opportunities for insiders to expropriate capital providers. These themes have received significant empirical support, as noted in Karolyi (2012).² Although this literature has pointed out differences between exchange-listed and non-exchange listed ADRs, it has not documented that managers usually opt out of U.S. exchange requirements when they cross-list.³

In the literature on cross-listings, the insights in Doidge, Karolyi, Lins, Miller, and Stulz (2009) (DKLMS) and Doidge, Karolyi, and Stulz (2004) (DKS) are particularly relevant to the study of opting out. DKLMS present evidence that when managers have the opportunity to enjoy private benefits, they are less likely to cross-list their firms on U.S. exchanges. DKLMS also find that managers of firms with better investment opportunities are more likely to cross-list because, by reducing the extraction of private benefits, cross-listing lowers the cost of raising external capital. These same considerations motivating the decision to cross-list help explain the decision to opt out of exchange requirements. Managers of firms that are likely to have the opportunity to enjoy private benefits are less likely to comply with exchange requirements, but, if such managers are in charge of firms with attractive growth opportunities, compliance levels are relatively higher. DKS illustrate that cross-listing is associated with a larger valuation gap for firms based in countries with weak corporate governance practices than it is for firms based in countries with strong corporate governance practices. Similarly, analysis of the extent to which firms opt out of exchange requirements illustrates that opting out has value consequences.

More generally, this paper adds to work on how better governance practices facilitate the process of raising capital from external sources. The modern formulation of agency costs in Jensen and Meckling (1976) illustrates that insiders who want to raise capital must give up larger

² See, for example, Reese and Weisbach (2002), Doidge (2004), Doidge, Karolyi, and Stulz (2004), and Doidge, Karolyi, Lins, Miller, and Stulz (2009).

³ Siegel (2005) also questions the legal bonding hypothesis, argues for a nuanced view of what complying with U.S. securities laws entails, and stresses the importance of reputational bonding as a mechanism for committing to lawfulness, disclosure, and good governance.

claims on their firms if they are expected to divert more resources to their own private benefit. A considerable body of work shows that country-level differences in governance practices affect the ease with which firms can raise external finance.⁴ The consequences of opting out offer more evidence of the effects of strong governance when raising funds from external sources.

Finally, in illustrating how the value of cash inside of firms varies with the extent to which firms opt out of exchange requirements, this paper advances the idea that corporate governance affects valuations. Recent work on this topic, like Gompers, Ishii, and Metrick (2002), Durnev and Kim (2005), Pinkowitz, Stulz, and Williamson (2006), and Bebchuk, Cohen, and Farrell (2009), indicates that financial claims are valued more dearly in the market when corporate governance practices are stronger.

The rest of this paper is organized as follows. Section II describes the governance requirements imposed by U.S. exchanges and documents the extent to which cross-listed firms opt out of these requirements. Section III discusses whether opting out is associated with material differences in the governance practices of cross-listed firms. Section IV provides analysis of potential motivations managers of cross-listed firms might have for opting out, and Section V considers if opting out has value consequences. Section VI concludes.

II. Exchange Governance Requirements and Foreign Firm Opt Outs

When issuing securities in the U.S., foreign private issuers trigger the Securities Act of 1933, the Exchange Act of 1934, and the Sarbanes-Oxley Act of 2002, and thereby become exposed to potential SEC and private enforcement action. These laws and mandated accounting standards remain largely silent on firm governance practices. The major exchanges, namely the

⁴ See, for example, LaPorta, Lopez-de-Silanes, Shleifer, and Vishny (1997); Rajan and Zingales (1998); Beck, Demirguc-Kunt, and Maksimovic (2005); and Djankov, LaPorta, Lopez-de-Silanes, and Shleifer (2008).

NYSE, NASDAQ and AMEX, impose additional governance requirements on listed firms. However, the exchanges make an exception for foreign cross-listing firms, which are excluded from mandatory compliance with many of these rules.⁵ Instead, U.S. stock exchanges permit listed foreign firms to follow their home country governance practices, provided firms disclose how these practices differ from those stated in the exchange requirements.

Prior to 2008, firms that opted out of exchange governance requirements had discretion in how they presented this information, often placing it on the company website or in annual report footnotes. It was not uncommon for investors to be led through a series of cross-references among different disclosure documents and websites in order to compile the firm's governance details.

In September 2008, seeking to standardize these disclosures and to facilitate investors' ability to monitor foreign firms' corporate governance practices, the SEC amended its rules to require foreign firms listed on U.S. stock exchanges to file annual governance disclosures on Form 20-F under a new section, "Item 16G -- Corporate Governance." This rule went into effect for fiscal years ending on or after December 15, 2008. This change raised the potential cost of not disclosing deviations from exchange governance requirements because it added to the risk of stock exchange penalties the additional liability arising from material misstatements or omissions in an annual SEC filing.

This paper presents data of firms' governance exemptions that were made available by the SEC's rule change and hand collected from the first Item 16G of Form 20-F filings. The dataset covers 519 firms listed on the NYSE, NASDAQ, and AMEX markets through Level II ADRs, Level III ADRs, or direct listings, based on the SEC's official list of "Foreign companies

⁵ See, for example, Exchange Act Release No. 24,634, 52 Fed. Reg. 24230 (June 23, 1987) ("Order Approving Proposed Rule Changes by the American Stock Exchange, Inc. and the New York Stock Exchange Inc. to Amend the Exchanges' Listing Standards for Foreign Companies").

registered and reporting with the U.S. SEC; December 31, 2008” (SEC, 2009). The other forms of cross-listing, namely unregistered transactions and Level I ADRs, maintain the Exchange Act’s Rule 12g3-2(b) exemption from registration and are not exchange-listed so they are not subject to exchange governance requirements.⁶

Each of the exchanges has a listing standards manual that details the corporate governance requirements that firms must follow unless they opt out. Table 1 provides general governance rules and then describes each of the provisions imposed by the NYSE, NASDAQ, and AMEX. There are 12 provisions for the NYSE and 20 for NASDAQ and AMEX. The provisions of different exchanges follow the same basic framework. In Table 1, provisions are grouped in the categories of board independence requirements, board committee requirements, audit committee requirements, general corporate practices, shareholder approval requirements for stock issuance, and good governance practices. These categories generally reflect the manner in which the provisions are presented in the exchanges’ listing manuals and by firms in their Item 16G disclosures.

Board independence requirements mandate that a majority of board directors be “independent,” based on several bright line tests including current employment, remuneration, and family connections to current employees. These provisions also require that independent directors have regular meetings that exclude inside directors. Board committee requirements state that executive compensation and nominations for new directors must be determined by a

⁶ U.S. securities laws apply to all foreign private issuers—a term that covers non-U.S. issuers, excluding foreign governments—entering U.S. capital markets to raise capital or to enhance the liquidity of their shares. However, the regulations imposed on foreign firms are intended to be proportional to the perceived investor risk posed by firms’ modes of accessing the U.S. markets. Unregistered transactions, such as those occurring offshore, or through Level I ADR programs which represent shares that are traded only over-the-counter in the U.S., through private placements, or through Rule 144A resales to qualified institutional buyers, do not require filing a registration statement with the SEC and meeting specific disclosure and financial statement requirements, nor will these transactions typically be subject to the Sarbanes-Oxley Act (Cohen et al., 2009).

committee consisting of a majority of independent directors. Audit committee requirements mandate the existence of a chartered audit committee consisting of independent directors and restrict the ability of these directors to participate in the preparation of the firm's financial statements. Shareholder approval requirements for stock issuance stipulate that shareholders be allowed to vote on new equity compensation plans, as well as the issuance of additional company stock. The general corporate practices and good governance practices categories include rules about, for example, soliciting shareholder proxies, distributing annual reports, reviewing big transactions for conflicts of interest, and establishing a posted code of conduct. Table 1 contains additional details about each of these categories.

Provisions tend to be very similar across exchanges, although there are subtle differences. For example, all three exchanges require a majority of directors be independent and that there be executive sessions of non-management directors, but there is variation in exactly how independence is determined and who can and cannot participate in executive sessions. The most notable difference between the requirements of different exchanges, as analyzed in this paper, is that the NYSE's corporate governance standards section does not have provisions categorized as general corporate practices.

The SEC rule requires that a firm note significant differences between its practices and the governance requirements of its exchange in Item 16G. An exemption is coded anytime a requirement is reviewed in an Item 16G disclosure, and a foreign firm's practices are not consistent with the practices that would be followed by a compliant U.S. firm's practice. A firm that opts out of at least one of the specific provisions within a category is coded as opting out of that category. Because the SEC rules only require the disclosure of exemptions, the absence of disclosures on any governance requirement is assumed to indicate compliance. Exemptions are

measured in the first year they are reported under the requirements of the September 2008 SEC rule change; thus these are captured for the first fiscal year of firms that ends on or after December 15, 2008.

Firms' governance exemptions appear to remain very stable following these initial filings. In order to make a change to governance practices, managers typically must win any approvals required by their firm's bylaws or corporate charter. They must also promptly notify the exchange where the firm's shares are listed and file forms noting changes with the SEC. Failing to report exemptions in an accurate and timely manner leaves firms liable to legal action. A review of Form 6-K filings as well as a hand comparison of a sample of Form 20-F filings covering the years 2008-2011 revealed few minor changes to governance practices. Therefore, firms do not appear to temporarily mislead investors by claiming to act in accordance with certain required governance practices and then changing those required practices.

To illustrate the collection procedure, consider the case of Advanced Semiconductor Engineering, Inc., a Taiwan-based company cross-listed on the NYSE. In Item 16G of its 20-F filing for the fiscal year ending December 31, 2008, the company lists its opt outs from NYSE governance rules. For example, the NYSE requires that a listed firm have a nominating committee and a compensation committee, each composed entirely of independent directors and governed by a written charter that provides for certain responsibilities of the committee set out in the NYSE listing standards. The company writes, "We do not have a nominating/corporate governance committee. The ROC Company Law does not require companies incorporated in the ROC to have a nominating/corporate governance committee." With regards to a compensation committee, the company states, "We do not have a compensation committee. Under the ROC Company Law, companies incorporated in the ROC are not required to have a compensation

committee.” In the previous year’s annual filing, prior to the change in SEC disclosure rule, there is no mention of the opt outs from exchange requirements, indicating that the SEC rule change affected company disclosures.

In another example, the Brazilian company CPFL Energia S.A.’s Form 20-F for the fiscal year ending December 31, 2008 indicates that, “The non-management directors of CPFL do not meet at regularly scheduled executive sessions without management”—a would-be violation of the NYSE requirement regarding executive sessions of the board. As with Advanced Semiconductor, the Form 20-F from the prior year does not contain a section indicating opt outs.

The resulting dataset of measured opt outs provides a striking picture of the extent of compliance with exchange governance requirements. 80.2% of firms opt out of at least one category of provisions. Table 2 displays the extent to which firms from different countries opt out of provisions and the extent to which firms opt out of different categories of provisions. The sample includes cross-listed firms with headquarters based in 45 countries.⁷ There is considerable variation in the extent to which firms opt out of different categories of governance requirements, as indicated in the last row of the table that presents the share of firms opting out of each provision. Opting out appears to be common regarding board and audit committee matters. 51.1% of firms opt out of board independence requirements, 54.7% out of board committee requirements, and 40.7% out of audit committee requirements. 61.2% of firms opt out of general corporate practices, 31.2% opt out of shareholder approval requirements for stock issuance, and 27.4% opt out of general good governance practice requirements.⁸

⁷ For eight of the firms in the sample, the headquarters are located in the U.S. Of these firms, six are incorporated in Canada, one in the U.K., and one in the British Virgin Islands. We include these firms in our analysis but the results are robust to excluding them.

⁸ As explained above, NYSE firms are not subject to general corporate practice requirements and therefore cannot have more than 5 total opt outs.

Table 3 provides pairwise correlations indicating the extent to which firms that opt out of one category of requirement are likely to opt out of another category. These correlations are all positive, and 13 of the 15 correlations are also statistically distinguishable from zero. Thus, a firm that opts out of one category of governance requirement typically opts out of others as well. As one might expect, the correlation between opting out of board independence requirements and board committee requirements is very high; its value is 0.6426.

The main variable used to measure opt outs in the analysis below is the total number of opt outs. As indicated in Table 4, which presents descriptive statistics, firms have an average of 2.3 opt outs and a median of 2.0. Thus, the median cross-listed firm opts out of 2 of the 6 categories of governance requirements. These basic patterns in the extent to which firms opt out of exchange governance requirements and the positive correlation among types of opt outs suggest that opting out significantly reduces the impact of U.S. exchange requirements on the governance of cross-listed firms. The next section considers this possibility.

III. Opting Out and Corporate Governance

Because many features of a firm's management practices are difficult to observe, it is challenging to pinpoint whether opting out of exchange requirements is truly associated with weaker corporate governance. Fortunately, it is possible to measure the share of a firm's directors who are independent. A number of studies have shown that firms with more independent directors tend to have better financial performance and more professional board committees.⁹ Hence, the correlation between the extent to which a firm opts out of exchange requirements and the fraction of the directors of that firm who are independent directors would

⁹ See Hermalin and Weisbach (2003) and Adams, Hermalin, and Weisbach (2010) for surveys of this literature. The latter survey emphasizes that causal links from board independence to firm outcomes have not been easy to show.

be an indicator that opt outs are associated with weaker governance. Regressions of this fraction on measures of opt outs reveal this correlation. In such regressions, prior work points out the importance of controlling for the size of the board as well as the size, leverage, and profitability of the firm.

Data

The data for these tests come from a few sources. Information on board independence is from BoardEx, a database containing information on firm leadership and boards for global firms. These data track the individual directors of firms in each year and provide information indicating the extent to which directors also hold management roles. Directors are classified as independent if their role indicates that they are not insiders.¹⁰ The Fraction of Independent Directors is computed for each firm in each year by dividing the number of independent board directors by the total number of board members. Measures of the independence of directors and of board size are merged with the data on cross-listed firms that trade on U.S. exchanges using a name-matching routine. 439 firms are successfully matched.

Information on the characteristics of firms is drawn from Compustat. The log of assets is used as a measure of firm size. Leverage is the ratio of total debt to the sum of total debt and book equity, and profitability is measured as the ratio of net income to assets, or return on assets. The measures of board size, board independence, and firm characteristics are time varying, and in order to reduce the impact of any unusual values in a particular year, average values of these variables taken using data from 2004 to 2008 are used in the specifications. The specifications also include fixed effects for the country of a firm's headquarters as well as fixed effects for the exchange a firm is listed on.

¹⁰ Specifically, "Independent Director," "Independent NED," "Independent Board Member," and "Independent Outside Director" are mapped to the independent indicator.

Results

Analysis of the relationship between opting out and board director independence appears in Table 5. The -0.0330 coefficient on Number of Opt Outs in column 1 indicates that the average share of independent directors is 3.30 percentage points lower for each additional exchange requirement that a firm opts out of. This is a roughly seven percent decrease in the average number of independent board members. The specification in the second column includes controls for the size of the board, the log of firm assets, firm leverage, and the firm's return on assets. The coefficient on the number of opt outs remains negative and significant in this specification, and its magnitude is similar. In addition, smaller firms and firms with larger boards tend to have a lower share of independent directors.

Only three of the categories of exchange governance requirements described in Table 1 relate directly to the independence of directors, namely those related to board independence requirements, board committee requirements, and audit committee requirements. The specifications in columns 3 and 4 of Table 5 provide a test of whether the measures of opting out of these particular requirements identify the extent to which firms have independent directors. In column 3, the coefficients on dummies for firms that opt out of board independence requirements, board committee requirements, and audit committee requirements are each negative and significant. However, the coefficients on the dummies that are equal to one for the other categories of opt outs are each statistically insignificant and small in magnitude.¹¹ Similar results appear in column 4, which presents a specification that includes additional controls. Thus, the measures of the extent to which firms opt out of exchange governance requirements

¹¹ As the NYSE does not have requirements characterized as General Corporate Practice requirements, the dummy for opt outs of such requirements is set equal to zero for NYSE-listed firms.

appear to be meaningfully related to governance practices. Firms that opt out of U.S. exchange governance requirements seem to follow weaker governance practices.

IV. Opting Out and the Costs and Benefits of Complying

Given that such a large fraction of cross-listed firms opt out of U.S. exchange requirements and that opting out appears to be associated with materially distinctive corporate governance choices, it is natural to ask what motivates firms to opt out. Opting out could reflect some of the same costs and benefits that have been used to explain which firms decide to cross-list in the existing literature. Given the findings in recent work, notably Doidge, Karolyi, Lins, Miller, and Stulz (2009), two types of considerations seem especially salient. The first relates to the private benefits managers enjoy. Evidence suggests that these benefits are larger in countries where corporate governance is weak.¹² Thus, managers of firms based in countries where corporate governance is weak might be reluctant to comply fully with U.S. exchange requirements, while the costs of complying for managers of firms based in countries with strong governance practices might be smaller. Alternatively, the benefits of complying with U.S. exchange governance requirements may be larger for firms whose home country requirements are weaker, implying that firms from such countries would be less likely to opt out. These hypotheses can be tested in country-level analysis of what types of environments are home to firms that opt out of U.S. exchange governance requirements.

The second type of consideration relates to a firm's need for capital. For firms that are growing and have a need for external finance, complying fully with U.S. exchange governance requirements might increase access to capital. When a firm is not bound to strong corporate

¹² See, for example, Dyck and Zingales (2004).

governance practices, investors should anticipate potential agency problems and be willing to pay less for an ownership stake. Thus, firms based in countries with weak governance rules that are growing quickly and have a need to raise capital are likely to benefit from committing to stringent governance requirements. Firm-level analysis of the relationship between opting out and measures of growth for firms based in countries with strong and weak governance sheds light on these ideas.

Data

In order to conduct country-level analysis of the correlation between the extent to which a cross-listed firm opts out of U.S. exchange requirements and the governance practices in a firm's home country, firms are assigned a home country on the basis of the location of the firm's headquarters.¹³ Tests consider two measures of the extent to which the home country legal and regulatory environment permit managers to consume private benefits. The first is a dummy that is equal to one for firms based in civil law countries and zero for firms based in common law countries. These legal origins are drawn from Djankov et al. (2008) and the CIA World Factbook. Common law tends to promote market outcomes by protecting private property and contract rights while civil law is more concerned with market failures and supports state-desired allocations in ways that can attenuate the strength of private contracts. La Porta, Lopez-de-Silanes, and Shleifer (2008) reviews research on legal origins, and La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) and Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2003) show that common law countries offer stronger protections to holders of financial claims that are more efficiently enforced.

¹³ An alternative choice of country would be the firm's country of incorporation. However, because the headquarter country will likely have more sizeable assets than the incorporating country when these are different, the headquarter country is a better measure when considering potential legal actions.

The second measure of corporate governance in a country is the Anti-Self-Dealing Index created by Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2008). This index measures the legal protection of minority shareholders against expropriation by corporate insiders, and it has been shown to predict a variety of stock market outcomes. The country-level tests also include controls for market liquidity and GDP per capita. Stock market turnover is defined as the ratio of the value of total shares traded to the average market capitalization, and it is taken from the World Bank Financial Structure Database. GDP per capita is drawn from the Penn World Tables. Each of the independent variables in the country-level analysis is measured using data from the year 2008.

Data for the firm-level analysis are drawn from Compustat. Measures of net property, plant, and equipment (PP&E) growth, and equity issuance are used as proxies for the extent to which a firm is growing and has a need for external finance. Net PP&E growth is computed as the annual percentage change in net PP&E. Equity issuance is the change in common equity plus the change in deferred tax assets minus the change in retained earnings, scaled by lagged assets, following the approach in Baker, Stein, and Wurgler (2003). The specifications used in the firm-level analysis also include country fixed effects, exchange fixed effects, and several additional controls. Firm size is measured using the log of assets; leverage is measured as the ratio of total debt to the sum of total debt and the book value of equity; and profitability is measured as the return on assets or the ratio of net income to assets. The specifications also control for industry q , which is calculated by first, for each firm, computing the ratio of the book value of total assets less the book value of equity plus the market value of equity less the book value of deferred taxes to the book value of total assets. Then the median value of this ratio is calculated for each 2-digit SIC code. In order to reduce the impact of any unusual values in a

particular year, each of the right hand side variables in the firm-level analysis is measured as an average of annual values covering the 2004 to 2008 period. To reduce the influence of outliers, the net PP&E growth and equity issuance variables are censored at the 1% and 99% level.

Summary statistics for these variables appear in Table 4.

Results

Table 6 presents the results of country-level analysis of the relationship between opting out and the home country characteristics of cross-listed firms. The dependent variable in the first two columns is the average of the number of governance categories opted out of by firms that are headquartered in a particular country. The coefficient on the Civil Law Dummy in column 1 is 0.8768, and it is positive and statistically significant, indicating that firms based in civil law countries are more likely to opt out of U.S. exchange governance requirements. In column 2, the coefficient on the Anti-Self-Dealing Index is negative and significant, indicating that firms from countries where regulations limit self-dealing are less likely to opt out. Each of the specifications in Table 6 includes controls for stock market turnover and the log of GDP per capita, so the results on the impact of governance practices in a firm's home country do not merely reflect market liquidity or wealth.

The dependent variable in specifications 3 and 4 is the country average of a dummy equal to one for firms that opt out of any U.S. exchange governance requirement. As such, these columns analyze cross-country variation in the share of firms that opt out of any governance requirement. The results in these columns are similar to those in the first two columns. The share of firms from civil law countries and countries with weak regulations limiting self-dealing are more likely to opt out of the governance requirements of U.S. exchanges. The last two columns present results of tests using a third measure of opting out, namely the average fraction

of opt outs. This measure addresses the issue that the NYSE does not have requirements characterized as General Corporate Practice requirements by scaling the number of opt outs for each firm by the number of categories of requirements imposed by the exchange the firm is listed on. The results in these columns are similar to those in the previous ones.

Overall, the country-level analysis in Table 6 suggests that cross-listed firms are more likely to comply with U.S. exchange governance requirements when they already comply with stringent governance requirements in their home country and are unlikely to be able to consume private benefits. The costs of compliance with U.S. exchange regulations appear to be more likely to dominate the benefits for firms from countries with weak as opposed to strong corporate governance regulations.

The tests presented in Table 7 examine whether firms with higher growth and external financing needs adhere to exchange requirements. The dependent variable in each specification is the number of categories of U.S. exchange governance requirements a firm opts out of. The specifications estimate the relationship between the number of opt outs and various firm characteristics. All regressions include fixed effects for the exchange the firm is listed on as well as country fixed effects. For the sample of firms based in common law countries, the coefficient on PP&E growth is negative but it is insignificant in explaining the number of opt outs, as indicated in the first column. However, this coefficient is negative and significant in the second column, implying that when firms are based in countries with weak corporate governance regulations, they opt out of fewer requirements if they are experiencing higher levels of growth. While there are differences in the significance of the coefficients on PP&E Growth for the sample of firms in common law countries and the sample of firms in civil law countries, an F-test

reveals it is not possible to conclude that the coefficient on net PP&E growth in column 1 is statistically different from the coefficient on this variable in column 2.

The specifications in columns 3 and 4 include controls for firm size, firm leverage, firm profitability, and a measure of q for the firm's industry. Once again, the coefficient on net PP&E growth is negative in both specifications, but it is only significant in column 4, which presents results for the sample of firms based in civil law countries.

The coefficients on Log Assets in these specifications are also noteworthy. These coefficients are positive in both specifications, but only the one in column 4 is significant. Thus, in the sample of firms that are based in civil law countries and cross-list on a U.S. exchange, smaller firms are less likely to opt out of exchange corporate governance requirements. Although coefficients on Industry q are negative in both specifications—suggesting the firms in industries with better investment opportunities are less likely to opt out—these coefficients are not statistically significant.

Columns 5-8 repeat this analysis but instead of exploring the relationship between net PP&E growth and the number of opt outs for firms based in different kinds of countries, the specifications explore the relationship between equity issuance and the number of opt outs. The results in these columns are similar to those in the first four columns. Firms that engage in more equity issuance and that are based in civil law countries opt out of fewer governance requirements than do other firms. It is noteworthy that the coefficients on Equity Issuance are statistically different from each other across both the two samples of firms in columns 5 and 6 and columns 7 and 8.

Taken together, the results in Tables 6 and 7 provide evidence that while on average cross-listed firms from countries with weak corporate governance practices are more likely to opt

out of U.S. exchange governance requirements, if firms from such countries are small, growing and need external finance, they are more likely to comply. Thus, the costs of complying with U.S. exchange governance rules appear, on average, to outweigh the benefits for cross-listed based in countries with weak governance regulations, but the need to fund growth provides especially strong incentives to comply for such firms.

V. Opting Out and Valuations

Opting out of governance requirements could affect the market value of firms. If governance requirements limit the ability of corporate insiders to make choices that generate private benefits at the expense of capital providers, valuations of firms that abide by requirements should be higher than those of firms that do not. Empirically analyzing the impact of opting out on broad measures of firm value such as Tobin's q , however, is challenging. Many determinants of value, including the attractiveness of growth opportunities, are difficult to measure in a cross-country setting. Simple tests of whether Tobin's q varies with the extent to which firms abide by U.S. exchange corporate governance requirements do not yield significant results.

A more revealing approach to exploring the consequences of opting out on firm value focuses on the value of cash holdings, and it is based on the work of Faulkender and Wang (2006), Dittmar and Mahrt-Smith (2007), and Frésard and Salva (2010). These papers develop a method that uses stock market returns to estimate the impact of changes in cash holdings on changes in firm value for different types of firms. Dittmar and Mahrt-Smith (2007) find that the value of cash is lower in poorly governed firms, and their approach can be used to assess if opting out of U.S. exchange governance requirements appears to reduce the value the market

assigns to cash held inside of cross-listed firms from countries with weak governance regulations. The motivation for this hypothesis is that cash reserves can be easily accessed by managers, and managers have considerable discretion in how cash reserves are used. If managers are not constrained by corporate governance rules and regulations, they might have greater latitude to use cash in ways that generate private benefits at the expense of shareholder value. While shareholders of a cross-listed firm from a country with strong governance regulations are protected whether or not the firm opts out of U.S. exchange governance requirements, these U.S. exchange governance requirements might play a more significant role in protecting shareholders of firms from countries with weak governance regulations.

In order to consider how the relationship between changes in cash holdings and changes in firm value varies across different kinds of cross-listed firms, it is informative to regress the annualized excess stock market returns of a firm on changes in cash holdings, changes in cash holdings interacted with a measure of the extent to which cross-listed firms opt out of U.S. exchange requirements, and a set of controls. Given that the consequences of opting out of U.S. exchange requirements are likely to be larger for firms based in countries with weak corporate governance regulations, it is also informative to separately conduct analysis of the subsample of firms based in common law countries and the subsample of firms based in civil law countries. In these specifications, controls for changes in firms' profitability, financial policy, and investment capture idiosyncratic firm characteristics that may be correlated with both firm cash holdings and returns. A more detailed discussion of this approach appears in Faulkender and Wang (2006) and Dittmar and Mahrt-Smith (2007). Frésard and Salva (2010) use this framework to illustrate that investors place a higher value on the cash held by foreign firms that are cross listed in the U.S.

Data

Following the methodology used in prior work, annualized excess stock market returns are calculated using CRSP data. The returns of the 25 reference portfolios come from Kenneth R. French's website.¹⁴ Excess returns are calculated on a monthly basis and annualized for the regressions. Data used to compute the control variables are drawn from Compustat, and these controls include the change in earnings, the change in net assets, the change in R&D expenditures, the change in interest expenses, the change in dividends, beginning of period cash, the value of total debt, and new finance, which is the sum of new equity issues and new debt issues. Each of these is scaled by the market value of equity. Following Faulkender and Wang (2006), the outcome and control variables are censored at the 1% and 99% level. The data used in analyzing the value of cash holdings cover 2000 through 2011. Each specification includes exchange fixed effects.

Results

The first column in Panel A of Table 8 displays results for the full sample. The -0.0927 coefficient on the interaction of the change in cash holdings and the number of opt outs indicates that opting out of an additional U.S. exchange governance requirement category reduces the value of cash by almost \$0.10, but this coefficient is not statistically significant. The specification that is presented in column 2 includes country fixed effects, and it yields similar estimates.

The next four columns present results for the subsamples of firms based in common and civil law countries. Opting out of U.S. exchange governance requirements should have larger effects if governance practices in a firm's home country are weaker. Consistent with this hypothesis, the coefficient on the interaction of the change in cash holdings and the number of

¹⁴ http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html.

opt outs is negative and significant in columns 5 and 6, but it is insignificant in columns 3 and 4. For firms based in civil law countries, opting out of a requirement reduces the value of each dollar of cash by about \$0.20. Opting out of requirements does not appear to have a statistically significant effect on the value of cash for firms based in common law countries.

Panel B of Table 8 provides estimates of the marginal value of \$1 in cash that are based on the coefficients in Panel A. For the average firm in the full sample, a dollar inside the firm is worth about \$1.21. This estimate is computed using mean values of leverage, lagged cash, and the number of opt outs for firms based in all countries in the sample. For the full sample, on the basis of specifications with country fixed effects, the implied value of a dollar to firms that do not opt out of any U.S. exchange governance requirements is \$1.49, and the implied value of a dollar to firms that opt out of all six types of U.S. exchange governance requirements is \$0.92. The differences in the sign and magnitude of the coefficients on the interaction of the change in cash holdings and the number of opt outs across firms in common and civil law countries imply large disparities in the effects of opting out on the value of cash. For firms based in common law countries that do not opt out of any U.S. exchange governance requirements, a dollar is worth \$1.54, and it is worth \$1.85 for firms from those countries that opt out of all six types of requirements; the difference between these does not have the expected sign, but it is not statistically significant. However, for firms based in civil law countries that do not opt out of any U.S. exchange governance requirements, a dollar is worth \$1.52, and it is only \$0.32 for firms from those countries that opt out of all six types of requirements. The difference between these two values is statistically different from zero.

The coefficients on the controls in Table 8 are similar to those obtained in prior work. In both Faulkender and Wang (2006) and Dittmar and Mahrt-Smith (2007), increases in earnings,

dividends, and assets tend to be associated with larger increases in value. Changes in interest expenses, higher levels of debt, lower levels of lagged cash, and new debt and equity issues tend to be associated with decreases in value. Changes in R&D expenditures are insignificant in explaining changes in value, as they were in Dittmar and Marht-Smith (2007). Although the interactions of the change in cash holdings with lagged cash and with leverage are insignificant in Dittmar and Mahrt-Smith (2007), these interactions also have negative and significant coefficients in Faulkender and Wang (2006).

VI. Conclusion

Foreign firms' ability to opt out of U.S. exchange governance requirements and follow their home country rules provides a window into central questions in corporate governance. As a result of recently enacted SEC disclosure rules, foreign firms listed on U.S. exchanges now must articulate more clearly the extent to which they comply with exchange requirements. Studying the extent to which cross-listed firms opt out provides insight about the costs and benefits of complying with stringent governance rules. Such investigation also sheds light on the effect of governance requirements on valuation.

Analysis of which firms opt out of U.S. exchange requirements and of the consequences of opting out reveals four main findings. First, opting out is quite common. 80.2% of cross-listed firms opt out of at least one U.S. exchange corporate governance requirement. Although prior literature has emphasized the governance differences between cross-listings that do and do not trade on a U.S. exchange, there is considerable heterogeneity in the extent to which listed foreign firms agree to comply with the governance requirements of exchanges. Second, firms

that opt out appear to adopt weaker governance practices. More specifically, firms that opt out of board requirements have fewer independent directors.

Third, the decision to opt out appears to reflect the relative costs and benefits of this governance choice. The costs of complying are likely to be higher for insiders who might enjoy certain private benefits when following weak governance practices allowed in their home country. The benefits of complying are likely to be higher for firms that are attempting to raise capital and grow. Consistent with this tradeoff, the data show that firms based in countries with weak corporate governance are less likely to comply and those that are based in such countries and are expanding and issuing equity are more likely to comply. Finally, the results indicate that opting out of U.S. exchange requirements has consequences for how the market values cash holdings. For firms from countries with weak governance requirements, cash within the firm is worth significantly less if the firm opts out of more U.S. exchange requirements.

While making a causal statement is difficult due to endogeneity concerns, the evidence indicates that compliance facilitates the ability of firms to raise external finance to pursue growth. Foreign firms bond themselves to the more stringent corporate governance requirements of U.S. exchanges in a manner that has meaningful effects on their access to capital and their market valuation. However, the high share of foreign firms that opts out, especially foreign firms from countries with weak governance regulations, suggests that the costs of complying with strict governance requirements are too high for many insiders. This implies a limit to the extent cross-listed firms can effectively borrow the U.S. governance environment. Strong foreign institutions do not appear to easily substitute for the institutional environment in a firm's home country.

These results suggest refinements to the legal bonding hypothesis used to explain cross-listing. While the presumption that all cross-listed firms completely bond themselves to U.S. law and exchange rules does not appear to be true, the cost-benefit framework proposed in the existing literature explains the extent of compliance among firms that do cross-list. An important question for future research is why firms choose to cross-list in the U.S. but opt out of its exchanges' rules.

References

- Adams, Renée B., Benjamin E. Hermalin, and Michael S. Weisbach. 2010. "The Role of Boards of Directors in Corporate Governance: A Conceptual Framework and Survey." *Journal of Economic Literature* 48 (1): 58–107.
- Baker, Malcolm, Jeremy C. Stein, and Jeffrey Wurgler. 2003. "When does the market matter? Stock prices and the investment of equity-dependent firms." *Quarterly Journal of Economics* 118 (3): 969–1005.
- Bebchuk, Lucian, Alma Cohen, and Allen Ferrell. 2009. "What Matters in Corporate Governance?" *Review of Financial Studies* 22 (2): 783–827.
- Beck, Thorsten, Asli Demirguc-Kunt, and Vojislav Maksimovic. 2005. "Financial and Legal Constraints to Growth: Does Firm Size Matter?" *Journal of Finance* 60 (1): 137–177.
- Coffee Jr., John. 1999. The Future as History: "The Prospects for Global Convergence in Corporate Governance and its Implications." *Northwestern University Law Review* 93: 641-707.
- Cohen, Alexander F., and Kirk A. Davenport, Bryant B. Edwards, Antti V. Ihamuotila, Jeffrey H. Lewis, Mark A. Stegemoeller, Michael W. Sturrock, Joel H. Trotter, John D. Watson, Jr. 2009. "Latham & Watkins' Securities Offerings and Listings in the U.S.: An Overview for Non-US Issuers." *International Financial Law Review*.
- Dittmar, Amy, and Jan Mahrt-Smith. 2007. "Corporate Governance and the Value of Cash Holdings." *Journal of Financial Economics* 83 (3): 599–634.
- Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2003. "Courts." *Quarterly Journal of Economics* 118 (2): 453–517.
- Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2008. "The Law and Economics of Self-dealing." *Journal of Financial Economics* 88 (3): 430–465.
- Doidge, Craig, G. 2004. "U.S. Cross-Listings and the Private Benefits of Control: Evidence from Dual-Class Firms." *Journal of Financial Economics* 72 (3): 519–553.
- Doidge, Craig, G. Andrew Karolyi, and René M Stulz. 2004. "Why Are Foreign Firms Listed in the U.S. Worth More?" *Journal of Financial Economics* 71 (2): 205–238.
- Doidge, Craig, G. Andrew Karolyi, Karl Lins, Darius Miller, and René M Stulz. 2009. "Private Benefits of Control, Ownership, and the Cross-listing Decision." *Journal of Finance* 64 (1): 425–466.

- Durnev, Art, and E. Han Kim. 2005. "To Steal or Not to Steal: Firm Attributes, Legal Environment, and Valuation." *Journal of Finance* 60 (3): 1461–1493.
- Dyck, Alexander, and Luigi Zingales. 2004. "Private Benefits of Control: An International Comparison." *Journal of Finance* 59 (2): 537–600.
- Fama, Eugene F., and Kenneth R. French. 1993. "Common Risk Factors in the Returns on Stocks and Bonds," *Journal of Financial Economics* 33 (1): 3-56.
- Faulkender, Michael, and Rong Wang. 2006. "Corporate Financial Policy and the Value of Cash." *Journal of Finance* 61 (4): 1957–1990.
- Frésard, Laurent, and Carolina Salva. 2010. "The value of excess cash and corporate governance: Evidence from U.S. cross-listings." *Journal of Financial Economics* 98 (2): 359–384.
- Gompers, Paul, Joy Ishii, and Andrew Metrick. 2003. "Corporate Governance and Equity Prices." *Quarterly Journal of Economics* 118 (1): 107-155.
- Hermalin, Benjamin E. and Michael S. Weisbach. 2003. "Boards of Directors As An Endogenously Determined Institution: A Survey of The Economic Literature," *FRB New York - Economic Policy Review* 9 (1): 7–26.
- Jensen, Michael, and William Meckling. 1976. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." *Journal of Financial Economics* 3 (4): 305–360.
- Karolyi, G. Andrew. 1998. "Why Do Companies List Shares Abroad?: A Survey of the Evidence and Its Managerial Implications." *Financial Markets, Institutions & Instruments* 7: 1–60.
- . 2006. "The World of Cross-Listings and Cross-Listings of the World: Challenging Conventional Wisdom." *Review of Finance* 10 (1): 99–152.
- . 2012. "Corporate governance, agency problems and international cross-listings: A defense of the bonding hypothesis." *Emerging Markets Review* 13 (4): 516–547.
- La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny. 1997. "Legal Determinants of External Finance." *Journal of Finance* 52 (3): 1131-1150.
- La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny. 1998. "Law and Finance." *Journal of Political Economy* 106 (6): 1113–1155.
- La Porta, Rafael, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2008. "The Economic Consequences of Legal Origins." *Journal of Economic Literature* 46 (2): 285–332.
- Pinkowitz, Lee, Rohan Williamson, and René Stulz. 2006. "Does the Contribution of Corporate Cash Holdings and Dividends to Firm Value Depend on Governance? A Cross-Country Analysis." *Journal of Finance* 61 (6): 2725-2751.

- Rajan, Raghuram, and Luigi Zingales. 1998. "Financial Dependence and Growth." *The American Economic Review* 88 (3): 559–586.
- Reese, William, and Michael Weisbach. 2002. "Protection of Minority Shareholder Interests, Cross-listings in the United States, and Subsequent Equity Offerings." *Journal of Financial Economics* 66 (1): 65–104.
- Siegel, Jordan. 2005. "Can Foreign Firms Bond Themselves Effectively by Renting U.S. Securities Laws?" *Journal of Financial Economics* 75 (2): 319–359.
- Stulz, René. 1999. "Globalization, Corporate Finance, and the Cost of Capital." *Journal of Applied Corporate Finance* 12 (3): 8–25.

Figure 1

Share of Firms Opting Out of Different Numbers of Requirements

Notes: This figure displays the share of firms that opt out of different numbers of exchange governance requirements. Each bar represents the share when the number of categories of opt outs correspond to the values displayed on the x-axis.

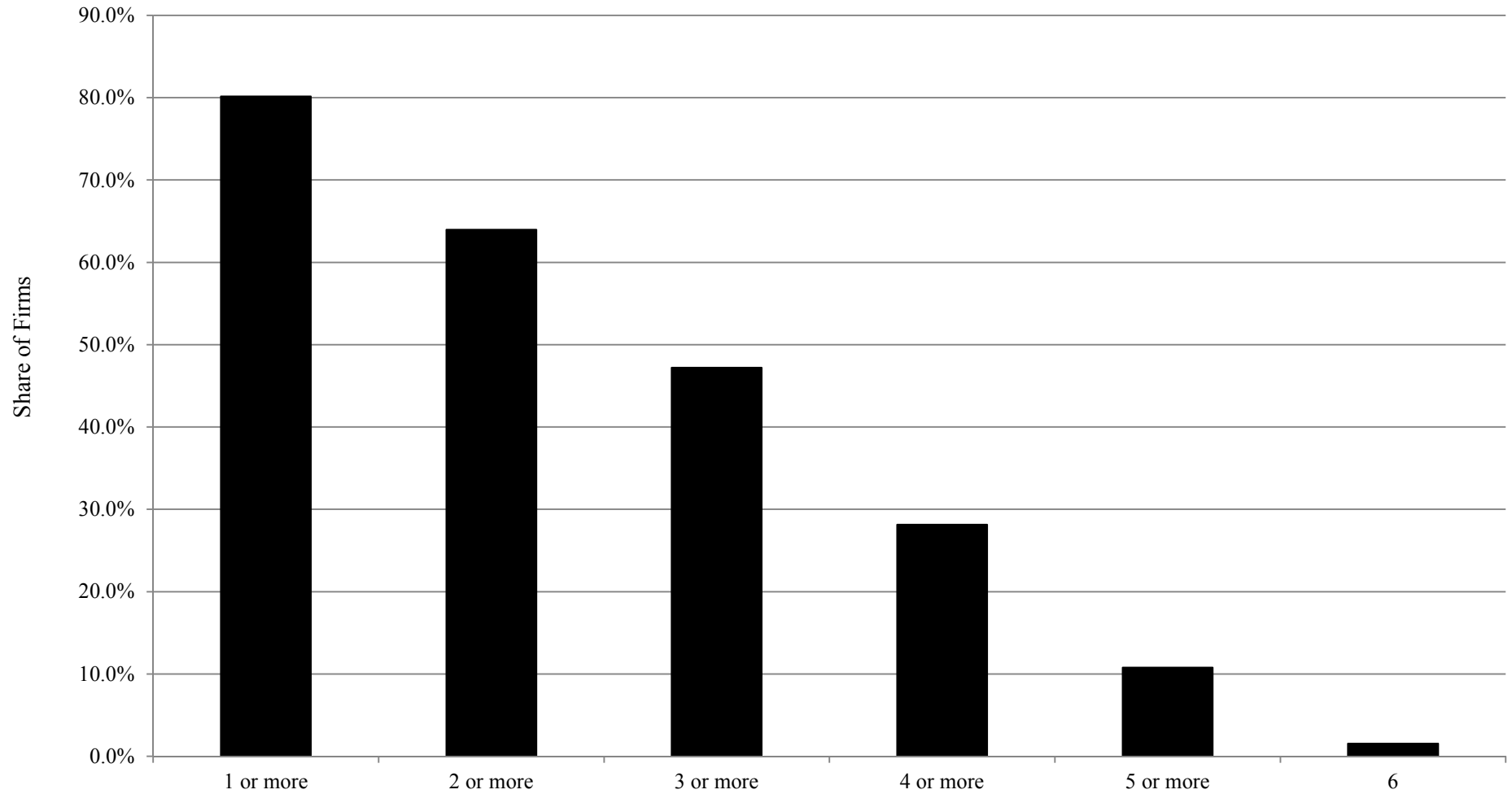


Table 1**Description of the U.S. Stock Exchanges' Governance Requirements**

Notes: This table provides a description of each of the governance requirements of the NYSE, NASDAQ, and AMEX that foreign cross-listed firms might opt out of. For each exchange, the individual requirements are grouped into the larger categories used in the paper: Board Independence, Board Committee, Audit Committee, General Corporate Practices, Shareholder Approval for Stock Issuances, and General Good Governance Practices.

Governance Requirement	Description
A. NYSE	
<i>General Rules</i>	Listed firms that are foreign private issuers, as such term is defined in Rule 3b-4 under the Exchange Act, are permitted to follow home country practice in lieu of the provisions of Section 303A of the NYSE Listed Company Manual. Section 303A.11 requires the disclosure of differences between the corporate governance rules contained in Section 303A which reflect the practices required of domestic firms and a particular foreign firm's practices. Deviations from exchange requirements related to provisions for shareholder approval for issuance of securities (Rule 312.03) and solicitation of proxies (Rule 402.00,402.04) need not be disclosed in Item 16G so these are not captured in the analysis.
Board Independence Requirements	
Majority Board Independence	Rule 303A.01 requires that a majority of the directors of a listed firm be independent. Independence is determined in accordance with the criteria in Rule 303A.02. To be considered independent, the Board must determine that the member has no material relationship with the firm. The NYSE also has identified certain specific relationships with the firm that preclude an individual from being considered independent until 3 years after the specified relationship has ended. The bright line test items include: being an employee of the firm, receiving direct compensation of \$120,000 in any year, or being an executive officer or having a family member be an executive officer of an entity that receives the greater of \$1 million or 2% of its consolidated gross revenues from the firm.
Executive Sessions of Non-Management Directors	Rule 303A.03 requires that non-management directors meet at regularly scheduled sessions without management. This NYSE requirement allows directors to be included in such sessions who are not considered independent for reasons other than being an officer of the firm. In the event that executive sessions include non-independent members, the NYSE recommends that there be one meeting per year where only independent members meet in executive session.
Board Committee Requirements	
Establish Nominating Committee or Nomination Decisions by Independent Directors	Rule 303A.04 requires that listed firms have a nominating committee composed entirely of independent directors or that the directors be nominated by the independent board members. The committee is required to have a written charter that describes the committee's purpose and responsibilities and also requires the committee to conduct an annual performance appraisal. The committee's responsibilities include identifying and selecting the director nominees unless the firm is legally bound by law or contract to have others nominate certain directors.
Establish Compensation Committee or Compensation Decisions by Independent Directors	Rule 303A.05 requires that listed firms have a compensation committee composed entirely of independent directors. The committee is required to have a written charter which describes the committee's purpose and responsibilities and also requires the committee to conduct an annual performance appraisal. Among the committee's responsibilities are to set the CEO's compensation and to make recommendations to the board for the compensation of non-CEO executive officers.

Audit Committee Requirements

Audit Committee: Minimum of Three Members	Rule 303A.07(a) requires that the audit committee of listed firms have at least three members and each member must have knowledge in finance. At least one of its members must have experience in accounting or financial matters. This rule also limits the number of audit committees on which a member can serve to three unless the board determines that simultaneous service on multiple boards does not interfere with the member's duties to this committee.
Audit Committee: Independent Members	Rule: 303A.07(b) requires that in addition to the independence requirements set forth in Rule 10A-3 under the Exchange Act that prohibit a director from receiving compensation from the firm or being an affiliated person of the firm or any of its subsidiaries, each audit committee member must satisfy the specific bright line test requirements for independence set in 303A.02 that are described above.
Audit Committee: Charter	Rule 303A.07(c) requires that the audit committee have a written charter that addresses the duties and responsibilities of the audit committee which must include those set out in Rule 10A-3 of the Exchange Act and under Section 303A.07(c). The Exchange Act principally requires the committee to be responsible for the appointment, compensation, retention, and oversight of the outside auditors and have such auditors report directly to the committee. Section 303A.07(c) requires the committee to conduct a performance appraisal of the committee, to obtain and review the outside auditors report of the firm's internal controls, to discuss policies regarding risk and risk management, to review the firm's financial statements and disclosures, and to set hiring policies involving employees of the outside auditor.
Audit Committee: Internal Audit Function	Rule 303A.07(d) requires that each listed firm have an internal audit department to provide management and the audit committee with ongoing assessments of the firm's risk management processes and system of internal control.

Shareholder Approval Requirements for Stock Issuances

Shareholder Approval to Establish or Amend Equity Compensation Plan	Rule 303A.08 requires that shareholders must be given the opportunity to vote on all equity compensation plans and material revisions thereto.
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General Good Governance Practices

Corporate Governance Guidelines	Rule 303A.09 requires that listed firms must adopt and disclose their corporate governance guidelines. The board of directors should evaluate the performance of its functions and its committees at least once a year.
Code of Business Conduct and Ethics	Rule 303A.10 requires that listed firms must adopt and disclose a Code of Business Conduct and Ethics for directors and employees and promptly disclose any waivers of the code for directors or executive officers. The code of ethics must deal with conflicts of interest, corporate opportunities, compliance with laws and regulations, and confidentiality.
Corporate Governance Website Portal	Rule 303A.14 requires that listed firms have and maintain a publicly accessible website.

B. NASDAQ

General Rules

The 5600 series rules of the NASDAQ Manual comprise the NASDAQ's Corporate Governance Requirements. The requirements under this section are more comprehensive than the 303A corporate governance requirements contained in the NYSE Listed Company Manual. Rule 5615 provides that a foreign firm may follow its home country practice in lieu of the requirements of Rule 5600, provided that the foreign private issuer discloses in its annual reports filed with the SEC each requirement of the 5600 series rules that it does not follow and describes the home country practice followed instead.

Board Independence Requirements

Majority Board Independence	Rule 5605(b)(1) requires that a majority of the Board of Directors be independent directors as defined in Rule 5605(a)(2). To be independent, the individual cannot be an executive officer or employee of the firm, or an individual that has a relationship with the firm that the board determines would interfere with the individual exercising independent judgment. This definition differs from the NYSE definition in that the NASDAQ permits a relationship so long as the board determines that that it will not interfere with the individual's independent judgment. The NASDAQ also lists certain specific relationships with the firm that would disqualify an individual from being considered independent for a period of 3 years after the specified relationship ends. The bright line test indicate that a relationship exists if an individual is an employee of the firm, if he or a family member receives direct compensation of \$120,000 or more in any 12 month period, if the individual is an executive officer of the firm, or if the individual or a family member is an executive officer of an entity that receives the greater of \$200,000 or 5% of its consolidated gross revenues from the firm in a given year.
Executive Sessions of Independent Directors	Rule 5605(b)(2) requires that the independent directors must have regularly scheduled meetings at which only they are present. There should be a minimum of two executive sessions each year.

Board Committee Requirements

Establish Compensation Committee or Compensation Decisions by Independent Directors	Rule 5605(d)(1) requires that the compensation of the CEO and other executive officers be determined, or recommended to the Board of Directors, either by a majority of the independent directors or by a compensation committee comprised solely of independent directors. The CEO may not be present during voting or deliberations. Unlike the NYSE rule, no charter is required for the compensation committee.
Establish Nominating Committee or Nominating Decisions by Independent Directors	Rule 5605(e)(1) requires that director nominees must be selected or recommended for selection by the board of directors, either by a majority of the independent directors or by a nominations committee comprised solely of independent directors, in accordance with the nominations process set forth in a formal written charter or board resolution.
Adopt Charter or Board Resolution Governing Nominating Committee	Rule 5605(e)(2) requires that the board must adopt a charter or resolution describing the committee's responsibilities, including the nomination process.

Audit Committee Requirements

Audit Committee Charter	Rule 5605(c)(1) requires that each firm adopt a formal written audit committee charter that explains the duties and responsibilities of the audit committee which, at a minimum, must include those set out in Rule 10A-3 of the Exchange Act. The purpose of the committee is to oversee the firm's financial reporting process and oversee auditor independence.
Audit Committee Composition Members Independent	Rule 5605(c)(2)(A)(i) requires that the firm must have an audit committee of at least three members who are independent as defined under Rule 5605(a)(2), meet the independence criteria set forth in Rule 10A-3(b)(1) under the Exchange Act and satisfy certain other criteria. The independence requirements set forth in Rule 10A-3 under the Exchange Act prohibit a director from receiving compensation for anything other than board and committee service from the firm or being an affiliated person of the firm or any of its subsidiaries. The SEC provides limited exemptions from the audit committee requirements for firms from certain countries where country laws require a statutory auditor or board of auditors.
Audit Committee No Participation in Preparing Financial Statements	Rule 5605(c)(2)(A)(iii) requires that each member must certify that they have not participated in the preparation of the firm's financial statements at any time during the last three years.

Audit Committee Member Financial Literacy	Rule 5605(c)(2)(A)(iv) requires that each member must be able to read and understand financial statements and at least one member of the audit committee must have past employment in finance or accounting.
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General Corporate Practices

Hold Annual Shareholder Meeting	Rule 5620(a) requires that each firm with listed common stock must hold an annual meeting of shareholders no later than one year after the end of the firm's fiscal-year end.
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Solicit Proxies and Provide Proxy Statement for Shareholder Meetings	Rule 5620(b) requires that each firm must solicit proxies and provide proxy statements for all meetings of shareholders and provide copies of such proxy solicitation to the NASDAQ.
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Distribution of Annual Reports	Rule 5250(d)(1) requires that firms must make their annual report available to shareholders containing audited financial statements within a reasonable period after it is filed with the SEC.
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33.33% Quorum	Rule 5620(c) requires that each firm must provide for a quorum for any meeting of its shareholders. The quorum may not be less than 33.33% of the outstanding shares of the firm's voting common stock.
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Shareholder Approval Requirements for Stock Issuances

Shareholder Approval to Establish or Amend Equity Compensation Plan	Rule 5635(c) requires shareholder approval when an equity compensation plan is established or materially amended.
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Shareholder Approval for Change of Control	Rule 5635(b) requires a shareholder vote before the firm's common stock is issued if such issuance will result in a change of control of the firm.
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Shareholder Approval for Acquisition of Stock or Assets of Related Party or Involving a 20% Private Issuance	Rule 5635(a) requires a shareholder vote before the firm's stock is issued in connection with certain acquisitions of stock of another firm where a related party is involved or where the stock to be issued exceeds 20% of the firm's stock.
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Shareholder Approval for 20% Private Issuance at Below Market Value	Rule 5365(d)(1-2) requires a shareholder vote if 20% or more of the firm's stock is issued privately at a price below the current market value of the stock.
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General Good Governance Practices

Direct Registration Program	Rule 5255a requires that securities listed on the NASDAQ must be eligible for a direct registration program operated by a clearing agency. Direct registration allows the shareholder to be registered directly with the transfer agent without the need of a physical certificate to provide evidence of ownership.
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Code of Conduct	Rule 5610 requires that listed firms must adopt a code of conduct applicable to all directors, officers, and employees.
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Conflicts of Interest	Rule 5630(a) provides that the audit committee or another independent body of the board of directors of each firm must conduct appropriate review and oversight of all related party transactions for potential conflict of interest situations on an ongoing basis.
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C. AMEX Requirements

General Rules

AMEX Rule 110 provides that a foreign private issuer may follow its home country practice in lieu of the requirements of Part 8 of the AMEX Company Guide, provided that the foreign private issuer discloses in its annual reports filed with the SEC or on its website each requirement of Part 8, as well as certain specified provisions outside of Part 8, that it does not follow and describes the home country practice followed instead.

Board Independence Requirements

Majority Board Independence	Rule 802(a) requires that a majority of the Board of Directors be independent directors as defined in Rule 803(A)(2). To be independent, the individual cannot be an officer or employee of the firm, or an individual that has a relationship with the firm that the board determines would interfere with the individual exercising independent judgment. This differs from the NYSE rule in that it allows a relationship to exist so long as the board determines that it will not interfere with the individual carrying out the required duties.
Executive Sessions of Independent Directors	Rule 802 (c) requires that the independent directors must have regularly scheduled meetings at which only they are present. There should be a minimum of one executive sessions each year.

Board Committee Requirements

Establish Compensation Committee or Compensation Decisions by Independent Directors	Rule 805(a) requires that compensation of the CEO and other executive officers must be determined, or recommended to the Board of Directors, either by a majority of the independent directors or by a compensation committee comprised solely of independent directors. The CEO may not be present during voting or deliberations. No charter is required. Under the AMEX rules a compensation is not required if the independent directors approve CEO compensation.
Establish Nominating Committee or Nominating Decisions by Independent Directors	Rule 804(a) requires that director nominees must be selected, or recommended for selection by the board of directors, either by a majority of the independent directors or by a nominations committee comprised solely of independent directors, in accordance with the nominations process set forth in a formal written charter or board resolution. A nomination committee is not necessary if the independent directors nominate the directors.
Adopt Charter or Board Resolution Governing Nominating Committee	Rule 804(c) requires that the board adopt a charter or resolution describing the committee's responsibilities, including the nomination process.

Audit Committee Requirements

Audit Committee Charter	Rule 803(B)(1) requires that each firm adopt a formal written audit committee charter that explains the duties and responsibilities of the audit committee which, at a minimum, must include those set out in Rule 10A-3 of the Exchange Act.
Audit Committee Composition Members Independent	Rule 803(B)(2)(a)(i) requires that each firm must have an audit committee of at least three members who are independent as defined under Rule 803(A)(2), meet the independence criteria set forth in Rule 10A-3(b)(1) under the Exchange Act, and satisfy certain other criteria.
Audit Committee No Participation in Preparing Financial Statements	Rule 803(B)(2)(a)(ii) requires that each member must certify that they have not participated in the preparation of the firm's financial statements at any time during the last three years.
Audit Committee Member Financial Literacy	Rule 803(B)(2)(a)(iii) requires that each member must be able to read and understand financial statements and that at least one member of the audit committee must have past employment in finance or accounting.

General Corporate Practices

Hold Annual Shareholder Meeting	Rule 704 requires that each firm hold an annual meeting of shareholders no later than one year after the end of the firm's fiscal-year end.
Solicit Proxies and Provide Proxy Statement for Shareholder Meetings	Rule 705 requires that each firm must solicit proxies and provide proxy statements for all meetings of shareholders and provide copies of such proxy solicitation to the AMEX.
Distribution of Annual Reports	Rule 610 requires that each firm must make their annual report available to shareholders containing audited financial statements within a reasonable period after it is filed with the SEC.

33.33% Quorum Rule 123 requires that each firm must have a quorum for any meeting of its shareholders. The quorum may not be less than 33.33% of the outstanding shares of the firm's voting common stock.

Shareholder Approval Requirements for Stock Issuances

Establish or Amend Equity Compensation Plan Rule 711 requires shareholder approval when an equity compensation plan is established or materially amended.

Change of Control Rule 713(b) requires a shareholder vote before the firm's common stock is issued if such issuance will result in a change of control of the firm.

Acquisition of Stock or Assets of Related Party or Involving a 20% Private Issuance Rule 712(b) requires a shareholder vote before the firm's stock is issued in connection with certain acquisitions of stock of another firm where a related party is involved or where the stock to be issued exceeds 20% of the firm's stock.

20% Private Issuance at Below Market Value Rule 713(a)(ii) requires a shareholder vote if 20% or more of the firm's stock is issued privately at a price below the current market value of the stock.

General Good Governance Practices

Direct Registration Program Rule 135 requires that securities listed on AMEX must be eligible for a direct registration program operated by a clearing agency. Direct registration allows the shareholder to be registered directly with the transfer agent without the need of a physical certificate to provide evidence of ownership.

Code of Conduct Rule 807 requires that each firm must adopt a code of conduct applicable to all directors, officers, and employees.

Conflicts of Interest Rule 120 requires that each firm conduct appropriate review and oversight of all related party transactions for potential conflict of interest situations on an ongoing basis by the firm's audit committee or another independent body of the board of directors.

Table 2**Summary Statistics of Opt Outs by Country**

Notes: This table provides basic statistics on opting out. It indicates the number of firms that are cross-listed on a U.S. exchange but headquartered in each of the countries in the first column. It also provides the share of firms from each of those countries that opt out of U.S. exchange governance requirements that are associated with the categories displayed in the top row. The last row of the table provides information for the whole sample. General Corporate Practices is only relevant to firms listed on NASDAQ and AMEX, so it is computed only for these firms. The notation "n.a." indicates that the percentage is not available because all firms for that country are listed on the NYSE, and the NYSE does not have requirements characterized as General Corporate Practices.

Country	Number of Firms	Any Provisions	Board Independence	Board Committee	Audit Committee	General Corporate Practices	Shareholder Approval Requirements for Stock Issuance	General Good Governance Practices
Argentina	14	93%	93%	93%	86%	100%	0%	64%
Australia	11	73%	27%	55%	27%	71%	27%	18%
Bahamas, The	1	100%	100%	100%	100%	100%	0%	100%
Belgium	1	0%	0%	0%	0%	n.a.	0%	0%
Bermuda	16	69%	56%	63%	38%	75%	19%	38%
Brazil	29	97%	93%	93%	86%	100%	24%	66%
Canada	39	56%	13%	8%	3%	52%	26%	0%
Cayman Islands	1	0%	0%	0%	0%	0%	0%	0%
Chile	13	100%	100%	100%	85%	n.a.	31%	77%
China	79	59%	32%	30%	18%	36%	24%	14%
Colombia	2	100%	100%	100%	100%	n.a.	50%	50%
Denmark	2	100%	50%	50%	50%	100%	50%	100%
Finland	1	100%	0%	0%	0%	n.a.	100%	0%
France	10	100%	60%	60%	80%	100%	10%	50%
Germany	10	100%	90%	90%	90%	100%	30%	20%
Greece	23	83%	52%	39%	9%	83%	39%	30%
Hong Kong, China	17	76%	71%	65%	24%	64%	29%	24%
Hungary	1	100%	100%	100%	0%	n.a.	0%	0%
India	13	85%	69%	54%	54%	100%	8%	54%
Indonesia	2	100%	100%	50%	100%	n.a.	0%	50%
Ireland	11	64%	18%	27%	27%	50%	18%	27%
Israel	66	82%	35%	39%	12%	63%	45%	11%
Italy	5	100%	80%	80%	100%	100%	20%	20%
Japan	21	100%	95%	90%	95%	100%	71%	48%

Korea, Rep.	11	91%	36%	64%	55%	67%	27%	55%
Luxembourg	4	75%	50%	25%	50%	100%	0%	50%
Mexico	19	100%	95%	95%	79%	100%	42%	32%
Netherlands	15	87%	40%	53%	60%	80%	53%	7%
New Zealand	1	100%	0%	100%	0%	n.a.	0%	0%
Norway	1	100%	100%	100%	100%	n.a.	0%	0%
Panama	2	100%	50%	100%	0%	n.a.	50%	0%
Papua New Guinea	1	100%	100%	0%	0%	100%	0%	0%
Peru	1	100%	100%	100%	100%	n.a.	0%	100%
Philippines	1	100%	100%	100%	100%	n.a.	0%	0%
Portugal	1	100%	100%	100%	100%	n.a.	0%	100%
Russian Federation	5	100%	80%	100%	60%	n.a.	80%	60%
Singapore	1	100%	100%	100%	100%	n.a.	0%	0%
South Africa	6	83%	50%	50%	33%	100%	17%	0%
Spain	5	100%	80%	80%	80%	100%	20%	40%
Sweden	1	100%	100%	100%	100%	100%	0%	0%
Switzerland	7	100%	14%	14%	86%	n.a.	71%	0%
Taiwan, China	10	90%	70%	80%	60%	60%	50%	40%
Turkey	1	100%	100%	100%	100%	n.a.	0%	100%
United Kingdom	30	87%	27%	77%	23%	67%	27%	23%
United States	8	25%	0%	0%	0%	25%	25%	0%
All Countries	519	80.2%	51.1%	54.7%	40.7%	61.2%	31.2%	27.4%

Table 3
Correlation of Opt Outs

Notes: This table displays the correlation matrix for dummy variables indicating whether a cross-listed firm has opted out of a particular category of U.S. exchange governance requirement. There are six dummies, one for each of the categories of requirements listed in the first row and first column. ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

	Board Independence	Board Committee	Audit Committee	General Corporate Practices	Shareholder Approval Requirements for Stock Issuance	General Good Governance Practices
Board Independence	1.0000					
Board Committee	0.6426***	1.0000				
Audit Committee	0.5592***	0.5322***	1.0000			
General Corporate Practices	0.4205***	0.3936***	0.3426***	1.0000		
Shareholder Approval Requirements for Stock Issuance	0.1105**	0.0531	0.0689	0.1382***	1.0000	
General Good Governance Practices	0.4452***	0.402***	0.4423***	0.2658***	0.1089**	1.0000

Table 4**Summary Statistics**

Notes: This table summarizes the variables used in the regressions in Tables 5-8. For Table 5, Fraction of Independent Directors is the average fraction of directors who are classified as independent in the BoardEx database. Number of Opt Outs is the number of governance categories the firm opts out of. The other opt out variables are dummy variables that are equal to one for firms that opt out of distinct categories of requirements that appear in Table 1. Opt Out of General Corporate Practices is equal to zero for all NYSE-listed firms because the NYSE does not have any such requirements. Board Size is the number of directors on the company's board. Leverage is total debt, defined as the sum of short term and long term debt, divided by total debt plus book equity. Return on Assets is net income divided by total assets. All time-varying covariates are averages of the corresponding variables taken over the five years from 2004 to 2008. For Table 6, Average Number of Opt Outs is the number of governance categories the firm opts out of, averaged by country. A firm's country is measured as the reported location of their headquarters. Average of Opt Out Dummy is the country average of a dummy equal to one if a firm opts out of any of the governance requirements. Average Fraction of Opt Outs is the country average of the fraction of categories of requirements that a firm opts out of; there are six categories for NASDAQ and AMEX-listed firms and five for NYSE-listed firms. The Civil Law Dummy is a dummy equal to one for firms with headquarters in a country with a civil law legal origin. The Anti-Self-Dealing Index is drawn from Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2008), and higher values of this variable indicate that a country imposes stronger controls on self dealing. Stock Market Turnover measures the total value of stocks traded as a fraction of average market capitalization. For Table 7, Number of Opt Outs is the number of governance categories the firm opts out of. Net PP&E Growth is the annual first difference in net property, plant, and equipment scaled by lagged property, plant, and equipment. Equity Issuance is the change in common equity plus the change in deferred tax assets minus the change in retained earnings, scaled by lagged assets. Leverage is total debt, defined as the sum of short term and long term debt, divided by total debt plus book equity. Return on Assets is net income divided by total assets. Industry q is calculated by first, for each firm, computing the ratio of the book value of total assets less the book value of equity plus the market value of equity less the book value of deferred taxes to the book value of total assets, and then taking the median value of this ratio for each 2-digit SIC code. All time-varying characteristics are averages of firm variables over the five years from 2004-2008. For Table 8, Annualized Excess Returns is the annualized excess return of the firm relative to the Fama and French (1993) 25 size and book-to-market portfolios. Cash includes cash and marketable securities. Many variables are scaled by the market value of equity (ME). Number of Opt Outs is the number of governance categories that firms opt out of. Earnings is earnings before extraordinary items plus interest, deferred taxes, and investment tax credits. Net assets is the value of assets net of cash, and R&D is the value of R&D expenses. Interest expenses include total interest and related expenses. Dividends include common dividends paid, and lagged cash is the lagged value of cash. Debt/Market Value is the ratio of the sum of long term and short term debt to the sum of the long term debt, short term debt, and the market value of equity. New Finance is the sum of net equity issues and net debt issues.

Variable	Mean	Standard Deviation	Median
<i>Table 5</i>			
Fraction of Independent Directors	0.4293	0.2206	0.4615
Number of Opt Outs	2.3179	1.6803	2.0000
Opt Out of Board Independence Requirements	0.5106	0.5004	1.0000
Opt Out of Board Committee Requirements	0.5472	0.4982	1.0000
Opt Out of Audit Committee Requirements	0.4066	0.4917	0.0000
Opt Out of General Corporate Practices	0.2678	0.4433	0.0000
Opt Out of Shareholder Approval Requirements for Stock Issuance	0.3121	0.4638	0.0000
Opt Out of General Good Governance Practices	0.2736	0.4462	0.0000
Board Size	9.9271	4.8657	9.0000
Log Assets	7.1807	2.8473	7.0242
Leverage	0.3196	0.2775	0.2960
Return on Assets	0.0078	0.1754	0.0354
<i>Table 6</i>			
Average Number of Opt Outs	2.6039	1.1790	2.6154
Average of Opt Out Dummy	0.8608	0.2450	1.0000
Average Fraction of Opt Outs	0.4360	0.3205	0.4000
Civil Law Dummy	0.6667	0.4767	1.0000
Anti-Self-Dealing Index	0.5029	0.2374	0.4600
Stock Market Turnover	0.8456	0.6275	0.8100
Log GDP Per Capita	10.0167	0.8518	10.3402

Table 7

Number of Opt Outs	2.3179	1.6803	2.0000
Net PP&E Growth	0.3521	0.6186	0.1668
Equity Issuance	0.2025	0.3546	0.0390
Log Assets	7.1807	2.8473	7.0242
Leverage	0.3196	0.2775	0.2960
Return on Assets	0.0078	0.1754	0.0354
Industry q	1.6281	0.4188	1.5390

Table 8

Annualized Excess Returns	0.0738	0.6243	-0.0306
Change in Cash Holdings/ME	0.0224	0.1916	0.0049
Number of Opt Outs X Change in Cash Holdings/ME	0.0583	0.5221	0.0000
Number of Opt Outs	2.2923	1.6633	2.0000
Change in Earnings/ME	0.0259	0.2108	0.0072
Change in Net Assets/ME	0.1141	0.5004	0.0498
Change in R&D/ME	0.0004	0.0162	0.0000
Change in Interest Expenses/ME	0.0017	0.0217	0.0000
Change in Dividends/ME	0.0013	0.0203	0.0000
Lagged Cash/ME	0.2978	0.4501	0.1592
Debt/Market Value	0.2902	0.2683	0.2569
New Finance/ME	0.0497	0.1940	0.0023
Lagged Cash/ME X Change in Cash Holdings/ME	0.0019	0.2555	0.0002
Leverage X Change in Cash Holdings/ME	0.0097	0.0923	0.0000

Table 5

Independent Directors and Opting Out

Notes: The dependent variable is the average fraction of directors who are classified as independent in the BoardEx database. Number of Opt Outs is the number of governance categories the firm opts out of. The other opt out variables are dummy variables that are equal to one for firms that opt out of distinct categories of requirements that appear in Table 1. Opt Out of General Corporate Practices is equal to zero for all NYSE-listed firms because the NYSE does not have any such requirements. Board size is the number of directors on the company's board. Leverage is total debt, defined as the sum of short term and long term debt, divided by total debt plus book equity. Return on Assets is net income divided by total assets. The dependent variable and the time-varying covariates are averages of the corresponding variables taken over the five years from 2004 to 2008. Each specification is an OLS specification that includes country fixed effects as well as fixed effects for the exchange the firm is listed on. Heteroskedasticity-consistent standard errors that correct for clustering at the country level appear in parentheses. ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Dependent Variable:	Fraction of Independent Directors			
	(1)	(2)	(3)	(4)
Number of Opt Outs	-0.0330*** (0.0066)	-0.0336*** (0.0063)		
Opt Out of Board Independence Requirements			-0.0562*** (0.0203)	-0.0460** (0.0207)
Opt Out of Board Committee Requirements			-0.0388* (0.0222)	-0.0456** (0.0194)
Opt Out of Audit Committee Requirements			-0.0872*** (0.0263)	-0.0910*** (0.0250)
Opt Out of General Corporate Practices			0.0179 (0.0364)	0.0090 (0.0351)
Opt Out of Shareholder Approval Requirements for Stock Issuance			-0.0166 (0.0160)	-0.0088 (0.0155)
Opt Out of General Good Governance Practices			0.0049 (0.0236)	-0.0048 (0.0222)
Board Size		-0.0114*** (0.0023)		-0.0110*** (0.0023)
Log Assets		0.0146* (0.0073)		0.0163** (0.0070)
Leverage		0.0492* (0.0275)		0.0430 (0.0312)
Return on Assets		0.0743 (0.0484)		0.0790 (0.0537)
Country Fixed Effects?	Yes	Yes	Yes	Yes
Exchange Fixed Effects?	Yes	Yes	Yes	Yes
No. of Obs.	439	438	439	438
R-Squared	0.4831	0.5156	0.4988	0.5305

Table 6**Country Characteristics Associated with Opting Out**

Notes: The dependent variable in the first two columns is the number of governance categories the firm opts out of, averaged by country. A firm's home country is measured as the reported location of its headquarters. The dependent variable in columns 3 and 4 is the country average of a dummy equal to one if a firm opts out of any of the governance requirements. The dependent variable in columns 5 and 6 is the country average of the fraction of categories of requirements that a firm opts out of; there are six categories for NASDAQ and AMEX-listed firms and five for NYSE-listed firms. The Civil Law Dummy is a dummy equal to one for firms with headquarters in a country with a civil law legal origin. The Anti-Self-Dealing Index is drawn from Djankov, La Porta, Lopez-de-Silanes, and Shleifer (2008), and higher values of this variable indicate that a country imposes stronger controls on self dealing. Stock Market Turnover measures the total value of stocks traded as a fraction of average market capitalization. The specifications are OLS specifications, and heteroskedasticity consistent standard errors appear in parentheses. ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Dependent Variable:	Average Number of Opt Outs		Average of Opt Out Dummy		Average Fraction of Opt Outs	
	(1)	(2)	(3)	(4)	(5)	(6)
Civil Law Dummy	0.8768** (0.3404)		0.1281* (0.0732)		0.1933*** (0.0631)	
Anti-Self-Dealing Index		-1.3589** (0.6074)		-0.2433** (0.1113)		-0.2691** (0.1199)
Stock Market Turnover	-0.2213 (0.2990)	0.0327 (0.2813)	0.0064 (0.0580)	0.0251 (0.0629)	-0.0374 (0.0541)	0.0041 (0.0550)
Log GDP Per Capita	-0.1703 (0.1841)	-0.3420* (0.1806)	-0.0573 (0.0382)	-0.0591 (0.0409)	-0.0412 (0.0359)	-0.0767** (0.0365)
Constant	3.9504** (1.6970)	6.6969*** (1.7526)	1.3617*** (0.3570)	1.5712*** (0.3706)	0.8209** (0.3370)	1.4057*** (0.3553)
No. of Obs.	43	40	43	40	43	40
R-Squared	0.1783	0.1641	0.1478	0.1275	0.2291	0.1848

Table 7

Firm Characteristics Associated with Opting Out

Notes: The dependent variable is the number of governance categories the firm opts out of. Net PP&E Growth is the annual first difference in net property, plant, and equipment scaled by lagged property, plant, and equipment. Equity Issuance is the change in common equity plus the change in deferred tax assets minus the change in retained earnings, scaled by lagged assets. Leverage is total debt, defined as the sum of short term and long term debt, divided by total debt plus book equity. Return on Assets is net income divided by total assets. Industry q is calculated by first, for each firm, computing the ratio of the book value of total assets less the book value of equity plus the market value of equity less the book value of deferred taxes to the book value of total assets, and then taking the median value of this ratio for each 2-digit SIC code. All control variables are averages of firm variables over the five years from 2004 to 2008. Each specification is an OLS specification with country fixed effects, as well as fixed effects for the exchange the firm is listed on. Standard errors clustered at the country level appear in parentheses. ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Dependent Variable: Countries in Sample:	Number of Opt Outs							
	Common Law	Civil Law	Common Law	Civil Law	Common Law	Civil Law	Common Law	Civil Law
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Net PP&E Growth	-0.0980 (0.2332)	-0.2882*** (0.0859)	-0.0866 (0.2059)	-0.2252** (0.0988)				
Equity Issuance					0.1543 (0.1814)	-0.9760*** (0.2042)	0.3963 (0.3482)	-0.7247*** (0.2050)
Log Assets			0.0363 (0.1276)	0.2083*** (0.0711)			0.0553 (0.1268)	0.2036*** (0.0600)
Leverage			0.3756 (0.9397)	-0.5853 (0.5129)			0.5134 (0.9084)	-0.6444 (0.4898)
Return on Assets			-0.1387 (0.8739)	-0.5399 (0.7463)			0.0244 (1.0777)	-0.9638 (0.8534)
Industry q			-0.3165 (0.3319)	-0.1672 (0.2307)			-0.3066 (0.3582)	-0.0936 (0.2348)
Country Fixed Effects?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Exchange Fixed Effects?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of Obs.	219	292	219	292	220	278	220	278
R-Squared	0.1662	0.4085	0.1799	0.4484	0.1722	0.4242	0.1918	0.4592

Table 8

Opting Out and the Value of Cash

Panel A

Notes: The dependent variable is the annualized excess return of the firm relative to the Fama and French (1993) 25 size and book-to-market portfolios. Cash includes cash and marketable securities. Many variables are scaled by the market value of equity (ME). Number of Opt Outs is the number of governance categories that firms opt out of. Earnings is earnings before extraordinary items plus interest, deferred taxes, and investment tax credits. Net assets is the value of assets net of cash, and R&D is the value of R&D expenses. Interest expenses include total interest and related expenses. Dividends include common dividends paid, and lagged cash is the lagged value of cash. Debt/Market Value is the ratio of the sum of long term and short term debt to the sum of the long term debt, short term debt, and the market value of equity. New Finance is the sum of net equity issues and net debt issues. The specifications are OLS specifications, and the specification in the even numbered columns include country fixed effects. All specifications include fixed effects for the exchange the firm is listed on. Heteroskedasticity-consistent standard errors that correct for clustering at the firm level appear in parentheses. ***, **, and * denote significance at the 1, 5, and 10 percent levels, respectively.

Dependent Variable Countries in Sample:	Annualized Excess Returns					
	All		Common Law		Civil Law	
	(1)	(2)	(3)	(4)	(5)	(6)
Change in Cash Holdings/ME	1.6489*** (0.2216)	1.6878*** (0.2274)	1.8365*** (0.3396)	1.8587*** (0.3455)	1.6403*** (0.3087)	1.6502*** (0.3112)
Number of Opt Outs X Change in Cash Holdings/ME	-0.0927 (0.0739)	-0.0945 (0.0736)	0.0543 (0.0947)	0.0515 (0.0939)	-0.1955** (0.0909)	-0.1997** (0.0913)
Number of Opt Outs	0.0058 (0.0062)	0.0056 (0.0073)	0.0091 (0.0092)	0.0145 (0.0092)	0.0007 (0.0086)	-0.0074 (0.0106)
Change in Earnings/ME	0.5006*** (0.0942)	0.4976*** (0.0942)	0.4679*** (0.1331)	0.4601*** (0.1347)	0.4558*** (0.1198)	0.4660*** (0.1164)
Change in Net Assets/ME	0.1592*** (0.0407)	0.1776*** (0.0404)	0.1914** (0.0786)	0.2135** (0.0826)	0.1532*** (0.0474)	0.1651*** (0.0443)
Change in R&D/ME	0.0857 (0.7674)	0.2540 (0.7733)	0.4435 (0.9091)	0.6163 (0.9051)	0.2410 (1.6119)	0.3232 (1.6542)
Change in Interest Expenses/ME	-2.3311*** (0.6745)	-2.2656*** (0.6663)	-4.2232*** (0.9908)	-4.1335*** (1.0000)	-1.3657* (0.7715)	-1.3077* (0.7481)
Change in Dividends/ME	2.1220*** (0.5176)	2.2446*** (0.5230)	2.7898*** (0.7375)	2.8959*** (0.7541)	1.5429** (0.6849)	1.6995** (0.6981)
Lagged Cash/ME	0.1488*** (0.0522)	0.1691*** (0.0547)	0.2633*** (0.0740)	0.2995*** (0.0774)	0.0352 (0.0553)	0.0506 (0.0587)
Debt/Market Value	-0.1663*** (0.0472)	-0.1579*** (0.0488)	-0.0776 (0.0730)	-0.0722 (0.0774)	-0.2054*** (0.0623)	-0.2092*** (0.0625)
New Finance/ME	-0.1450 (0.0949)	-0.1545 (0.0996)	-0.1095 (0.1446)	-0.1415 (0.1531)	-0.1957 (0.1249)	-0.1745 (0.1295)
Lagged Cash/ME X Change in Cash Holdings/ME	-0.6474*** (0.1187)	-0.6712*** (0.1221)	-1.1488*** (0.3055)	-1.1451*** (0.3123)	-0.4436*** (0.1142)	-0.4458*** (0.1167)
Leverage X Change in Cash Holdings/ME	0.0654 (0.3776)	-0.0021 (0.3797)	0.0407 (0.5776)	0.0662 (0.5748)	0.1040 (0.4854)	0.0119 (0.4865)
Country Fixed Effects?	No	Yes	No	Yes	No	Yes
Exchange Fixed Effects?	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,370	2,370	1,180	1,180	1,190	1,190
R-squared	0.1603	0.1771	0.1901	0.1977	0.1560	0.1861

Panel B

Notes: This panel displays mean values of lagged cash, leverage, and the number of opt outs for different samples. It also provides estimates of the marginal value of a dollar for firms based in different legal environments that are implied by the regression results in Panel A.

Countries in Sample:	All		Common Law		Civil Law	
	(1)	(2)	(3)	(4)	(5)	(6)
Mean Lagged Cash	0.2950	0.2950	0.2938	0.2938	0.2962	0.2962
Mean Leverage	0.2906	0.2906	0.2336	0.2336	0.3442	0.3442
Mean Number of Opt Outs	2.9195	2.9195	2.2168	2.2168	3.5810	3.5810
Marginal Value of \$1, Average Number of Opt Outs	1.21	1.21	1.61	1.65	0.84	0.81
Marginal Value of \$1, Number of Opt Outs=0	1.48	1.49	1.49	1.54	1.54	1.52
Marginal Value of \$1, Number of Opt Outs=6	0.92	0.92	1.82	1.85	0.37	0.32