Opting out of good governance

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A R T I C L E   I N F O

A B S T R A C T

Cross-listing on a US exchange does not force foreign firms to follow the exchange's corporate governance rules. Hand-collected data show that 80% of cross-listed firms opt out of at least one exchange governance rule and those that opt out have a smaller share of independent directors. Cross-listed firms opt out more when coming from countries with weak corporate governance rules, but if these firms are growing and need external financing, they are more likely to comply. For firms in such countries, opting out also lowers firm valuations, decreases the value of cash holdings, and reduces investment sensitivity to market valuations.

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1. Introduction

Corporate governance mechanisms provide tools for suppliers of capital to control managers and protect minority shareholders. However, investor powers and protections vary widely across countries. In some jurisdictions, the regulatory environment is 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 (Shleifer and Wolfenzon, 2002).

In response to these incentives, firms' corporate governance practices can vary widely both across and within countries. Durnev and Kim (2005) and Doidge et al. (2007), among others argue that the benefits of choosing stronger corporate governance are more attractive for firms seeking to raise capital, especially when those firms are based in countries with weaker legal and regulatory regimes. Moreover, markets should reward stronger governance choices with higher valuations, and the association between stronger governance and higher valuations should be more pronounced for firms facing weaker country-level regimes. These themes have received significant empirical support.[1] However, because governance choices are difficult to measure directly, this evidence has relied primarily on subjective governance data collected by private agencies.[2] This paper uses a novel objective measure of firm-level corporate governance hand-collected for 519 firms based in 45 countries to evaluate the cost-benefit framework for firm governance choices, assessing both country-level and firm-level determinants of corporate governance, as well as the market valuation consequences of firms' governance choices.

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[1] In addition to Durnev and Kim (2005) and Doidge et al. (2007), see Reese and Weisbach (2002), Doidge (2004), Klapper and Love (2004), Doidge et al. (2004), and Doidge et al. (2009). Karolyi (1998, 2006, 2012) surveys this literature and discusses the motives for and effects of cross-listing.

[2] Subjective governance measures developed by Credit Lyonnais Securities Asia (CLSA), Standard & Poor's (S&P), and Institutional Shareholder Services (ISS) have been used by Klapper and Love (2004), Durnev and Kim (2005), Doidge et al. (2007, 2009), and Hugill and Siegel (2014) to show that the relationship between governance scores and firm characteristics is consistent with the cost-benefit framework of corporate governance choices.
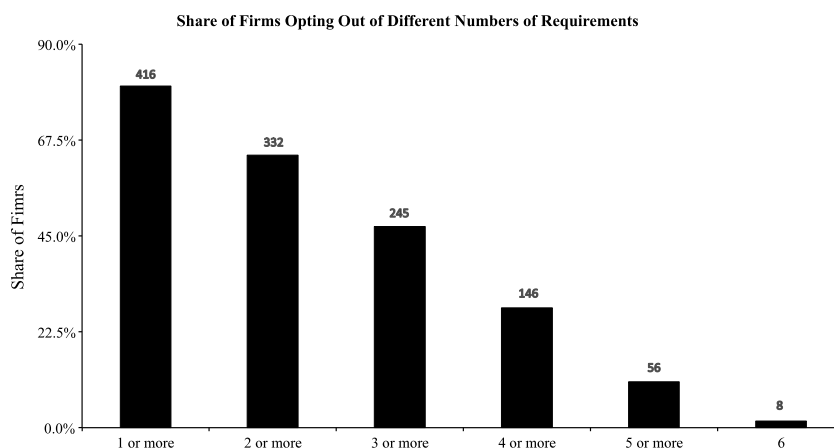
Fig. 1. Share of firms opting out of different numbers of requirements. Notes: This figure displays the share of firms that opt out of different numbers of exchange governance requirements. Each bar represents the share when the number of categories of opt outs correspond to the values displayed on the *x*-axis. The number above the bar reflects the raw count of firms from our sample in each category.

The measure of governance is developed for a large sample of firms that cross-list their shares for trading in the US through an American Depositary Receipt (ADR) program. Firms that cross-list shares on US exchanges expose themselves to alternative legal and regulatory environments, including Securities and Exchange Commission (SEC) regulations concerning disclosures and corporate actions, the scrutiny of US equity market analysts and institutional investors, and the exchange's detailed listing regulations. Exchange-specific listing regulations explicitly aim to promote good corporate governance, so studying compliance with them provides a powerful perspective on the determinants of governance choices.

This paper documents the extent to which cross-listed firms choose to opt out of US exchange-specific governance regulations, analyzes what drives the choice to opt out, and explores the consequences of this choice.[3] The prevalence of opt outs offers a novel, objective perspective on firm-level governance, providing a unique way to examine how firm characteristics and country institutions affect cross-listed firms' governance decisions, and how these governance decisions influence firm value.

Exchange rules refer to structures that are relevant to the cost-benefit framework for governance choice, but data limitations have prevented extensive formal analysis of firm compliance.[4] Historically, compliance choices were not well publicized. But this changed in September 2008, when the SEC deemed the compliance choices important for investors and mandated that foreign firms listed on US exchanges disclose opt out choices in a more consolidated and concise form in their Form 20-F annual filings. Organizing the exchange-specific governance rules into six categories relating to board requirements, auditing, stock issuance, and business practices, this paper presents and analyzes the opt out choices disclosed in the Form 20-F filings immediately after the SEC rule change.

Four main findings emerge. First, opting out is very common, and there is substantial heterogeneity across and within countries. Fig. 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. 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. In countries where corporate governance is weak, the gap between US exchange requirements and home country requirements is larger, and so managers of complying firms likely give up larger private benefits. Consistent with this notion, tests reveal that firms are more likely to opt out of US exchange requirements if they are based in civil law countries and countries with lower measures of the anti-self-dealing Index created by Djankov et al. (2008). However, managers of firms based in countries with weak governance appear to be more willing to comply with US 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. Cross-sectional analysis of the relationship between opting out and Tobin's *q* shows a negative correlation between opting out and valuation. However, this relationship may be confounded by unobservable determinants of the value of cross-listed firms, such as the extent of growth opportunities in different countries. Two separate approaches exploit time series variation within firms interacted with opt out differences across firms. First, the methods

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[3] Listing on alternative exchanges with weaker rules (e.g., OTCQX) or deregistering in response to rule changes might be considered more aggressive forms of non-compliance. We do not focus on this behavior, as it may reflect other factors affecting firms in addition to their governance choice.

[4] For example, an important set of these rules covers board structure and independence, which have been found to affect firm values and performance. Adams et al. (2010) survey this literature and Dahya et al. (2008) provide evidence that board structure affects valuations within the sample of cross-listing firms.

developed by Faulkender and Wang (2006), Dittmar and Mahrt-Smith (2007), and Frésard and Salva (2010) enable a test of the effects of governance on the value of cash inside cross-listed firms. For cross-listed firms based in civil law countries that are fully compliant with US 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. The second approach, following the framework of Chen et al. (2007) and Foucault and Frésard (2012), examines the extent to which valuations guide firm investment choices, and how this changes with opting out. Consistent with a weaker relationship between markets and firm behavior for non-compliant firms, cross-listed firms demonstrate a decreasing sensitivity to Tobin's q as opt outs increase. As with the results on the value of cash, these results are driven by civil law firms, as firms from common law countries exhibit no variation in investment responsiveness to q as opt outs vary.

These results map directly into ideas and findings on the determinants of international corporate governance presented by Klapper and Love (2004), Durnev and Kim (2005) and Doidge et al. (2007), among others. These papers use a variety of governance measures collected by private agencies to assess the determinants and consequences of corporate governance across different countries and firms, focusing on the interaction between the legal environment of these countries and firm characteristics, especially countries with weak investor protections.[5] Notably, Doidge et al. (2007) present a model of how cross-listing strengthens incentives for better corporate governance that is ideal for interpreting the results in this paper. The discussion of this paper's results uses the framework for interpretation.[6]

This paper adds to the international corporate governance literature in three ways. First, it provides a new measure of the decision to opt out of US governance exchange provisions and quantifies the extent to which cross-listed firms bond to these provisions. Although the cross-listing literature has pointed out differences between exchange-listed and non-exchange-listed ADRs, it has not provided detailed analysis of the extent to which managers actually opt out of US exchange requirements when they cross-list. More generally, few studies have been able to observe the governance choices of cross-listed firms, which offer significant insight into the motives for cross-listing and also into the channels through which the cross-listing decision influences corporate governance and valuation.[7] Moreover, the valuation results suggest that these opt out decisions are either an economically meaningful component of the governance environment in the United States, or they proxy for other firm corporate governance characteristics.

Second, using the number of opt outs as an objective measure of corporate governance decisions, this paper confirms prior findings on the relationship between corporate governance decisions, firms' external finance needs and countries' legal environments, complementing previous research that has relied on subjective and potentially noisy governance scores (e.g., Klapper and Love (2004), Durnev and Kim (2005), and Doidge et al. (2007)). The results presented here confirm the prediction from Doidge et al. (2007) that firm characteristics provide considerable explanatory power for global firms, as firm characteristics predict exchange rule compliance within the sample of cross-listed firms. The presence of steeper governance-valuation gradients for firms coming from countries with weak institutions nicely matches predictions and empirical results in Doidge et al. (2004), Durnev and Kim (2005), Dahya et al. (2008), and Frésard and Salva (2010).

Finally, in illustrating how firms' valuation, value of cash and investment-q sensitivity vary with firms' opt out decisions, this paper advances the idea that corporate governance affects valuations and investment. Recent work on this topic, such as Gompers et al. (2003), Durnev and Kim (2005), Pinkowitz et al. (2006), and Bebchuk et al. (2009), indicates that financial claims are valued more dearly in the market when corporate governance practices are stronger. As Karolyi (2012) notes, the cross-listing literature has struggled to reach consensus about the sign and persistence of valuation effects and their relation to legal bonding. Instead of comparing cross-listed firms to domestic counterparts or to US firms, which may suffer from omitted variable bias, this paper documents evidence supporting the cost-benefit framework of corporate governance using variation within the sample of firms cross-listed on US exchanges and controlling for home country effects.[8] However, establishing causality is difficult, so caution is warranted in interpreting these relationships as implying what would happen if firms made different choices.

The rest of this paper is organized as follows. Section 2 describes the governance requirements imposed by US exchanges and documents the extent to which cross-listed firms opt out of these requirements. Section 3 discusses whether opting out is associated with material differences in the governance practices of cross-listed firms. Section 4 examines the characteristics of cross-listed firms that correlate with opt outs. Section 5 considers the valuation consequences of opting out. Section 6 concludes.

2. Exchange governance requirements and foreign firm opt outs

When issuing securities in the US, 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 NYSE, NASDAQ, and

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[5] Dahya et al. (2008), and Frésard and Salva (2010) also study the relationships between governance, firm characteristics, and valuations for firms from weaker investor protection regimes and find similar results to this paper.

[6] The cost-benefit framework made explicit in Doidge et al. (2007) forms the basis for a prominent governance-driven hypothesis for why firms cross-list: the legal bonding hypothesis described in Stulz (1999) and Coffee Jr. (1999). According to this hypothesis, managers from countries with weak regulatory and legal environments can bond themselves from extracting private benefits by cross-listing into an environment offering greater investor protections. Siegel (2005) questions the legal bonding hypothesis, argues for a nuanced view of what complying with US securities laws entails, and stresses the importance of reputational bonding as a mechanism for committing to lawfulness, disclosure, and good governance.

[7] One exception is Hope et al. (2007), who investigate cross-listing firms' choice of disclosure regime.

[8] In this regard, the paper is similar to sub-analyses in Foucault and Frésard (2012) and Doidge et al. (2009).

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.[9] Instead, US 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. 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 US 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.

While it is expected that firms listed on the exchanges comply with the governance rules, the firms retain the ability to change their exemptions as circumstances warrant. Despite this flexibility, firms' exemption decisions are relatively static, as documented in the Data Appendix and they seem to reflect deeper structural characteristics of the firms. In circumstances in which firms fail to comply with exchange provisions, the exchange maintains the threat of delisting for those firms that choose to not comply.[10] However, due to the extreme nature of this threat, other punishments exist: the NYSE may issue a public reprimand letter to a company, or suspend a company's listing.[11]

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 registered and reporting with the US SEC; December 31, 2008" (SEC, 2009). More detail on the collection procedure is provided in the Data Appendix.

Each of the exchanges has a listing standards manual that details the corporate governance requirements that firms must follow unless they opt out. Appendix Table 1 provides details concerning general governance rules and then gives an in depth description of each of the provisions imposed by the NYSE, NASDAQ, and AMEX. There are 12 provisions for the NYSE and 20 for the NASDAQ and AMEX. The provisions of different exchanges follow the same basic framework. 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 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. Appendix Table 1 contains additional details about each of these categories.

Provisions tend to be very similar across exchanges, although there are a few 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 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 1 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.[12] 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% opt out of board committee requirements, and 40.7% opt 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.[13] It is noteworthy that different cross-listed firms from the same country exhibit

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[9] 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").

[10] For example, see section 303.A.I.13 in the NYSE rulemaking announcement: https://www.sec.gov/rules/sro/34-47672.html.

[11] An example of this occurred on December 27, 2012, where Gildan Activewear was sent a reprimand letter by the NYSE over a failure to file annual meeting documents in a timely fashion (source: StreetInsider). Unfortunately, there does not appear to be an easily accessible database that documents the extent of these violations.

[12] For eight of the firms in the sample, the headquarters are located in the US. 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.

[13] As explained above, the NYSE does not maintain a set of rules under the category of general corporate practice requirements, and hence firms cross-listed in the NYSE cannot have more than five total opt outs.

Table 1
Summary statistics of opt outs by Country.

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%

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.

distinct opt out disclosures; this implies that firms may not simply opt out because home country requirements prevent a firm from adopting the requirements of a US exchange.

Table 2 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 3, 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 two of the six categories of governance requirements. These basic patterns in the extent to which firms opt out of exchange

Table 2
Correlation of opt outs.

	Board independence	Board committees	Audit committee requirements	General corporate practices	Shareholder approval requirements for stock issuance	General good governance practices
Board independence	1.0000					
Board committees	0.6426***	1.0000				
Audit committee requirements	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

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% levels, respectively

governance requirements and the positive correlation among types of opt outs suggest that opting out significantly reduces the impact of US exchange requirements on the governance of cross-listed firms. The next section considers this possibility.

3. Opting out and corporate governance

Because many features of a firm's management practices are difficult to observe, it is challenging to identify whether the measured opt outs of exchange requirements is truly associated with material differences in 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.[14] Hence, a negative correlation between a firm's measured opt outs and the fraction of the directors of that firm who are independent directors would 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. It is important to note that the negative correlation in this regression is not a causal statement about opt outs causing changes in board governance, but is instead consistent with the hypothesis that the number of opt outs proxies for firms' corporate governance.

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.[15] 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 US 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, the average values of these variables are 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.

Results

Analysis of the relationship between opting out and board director independence appears in Table 4. 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

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[14] See Hermalin and Weisbach (2003) and Adams et al. (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.

[15] Specifically, any board member measured by BoardEx as "Independent Director", "Independent NED", "Independent Board Member", and "Independent Outside Director" is mapped to the independent indicator. This categorization excludes officers, trustees, labor representation, as well as chairmen and any directors not explicitly coded as independent. It is possible that these independent directors still maintain some material affiliation with the firm. Unfortunately, BoardEx does not record these connections. Such mismeasurement would likely attenuate the relationship between opt outs and the share of independent directors.

Table 3

Summary statistics.

Variable	Mean	Standard deviation	Median
Table 4			
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
Table 5			
Average number of opt outs	2.6039	1.1790	2.6154
Average of opt out dummy	0.8608	0.2450	1.0000
Average number of opt outs of specific provisions	2.0672	0.9691	2.0000
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 6			
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 7			
Tobin's q-Industry q	0.0377	0.6425	−0.0143
Log Assets	7.1807	2.8473	7.0242
Leverage	0.3196	0.2775	0.2960
ROA	0.0078	0.1754	0.0354
Age	15.3064	8.3943	14.0000
Any Optout	0.8015	0.3992	1.0000
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 9			
Capital expenditures/Lagged net plants, property and equipment	0.3757	0.5460	0.2248
Total optouts	2.4804	1.6838	3.0000

additional exchange requirement that a firm opts out of. This is a roughly seven percent decrease (3.30 × 2.3 opt outs on average) 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. Appendix Table 2 presents an expanded version of Table 4 that addresses further concerns about potential omitted variables, including controls for industry, firm age, and the presence of insiders or the likelihood of state control. In all cases, the main result on the correlation between opt outs and board independence remains strongly significant and negative.

Table 3 (*continued*)

Tobin's q	1.9342	1.7994	1.3073
Cash flow/assets	0.0529	0.1720	0.0806
Log assets	7.2762	2.8732	7.3823

Notes: This table summarizes the variables used in the regressions in Tables 4–9. For Table 4, 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 5, 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 Number of Important Opt Outs is the country average of the number of the following governance categories the firm opts out of: Board Independence, Board Committee, Audit Committee, and Shareholder Approval for Stock Issuance. 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 et al. (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, Tobin's q is measured as 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, less industry q for the firm's SIC two-digit industry, following Gompers et al. (2003). Any Optout is a dummy equal to one if a firm opts out of any of the governance requirements. 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. Age is proxied as the number of years the firm has been listed on Compustat. The variables are averages of firm variables over the five years from 2004 to 2007. For Table 8, 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. For Table 9, investment is defined as capital expenditures divided by lagged net property, plant and equipment (Net PPE). Tobin's q is measured as 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. Number of Opt Outs is the number of governance categories the firm opts out of. Cash Flow/Assets is measured as depreciation plus income before extras divided by book value of total assets. Log Assets is the log of total assets.

Only three of the categories of exchange governance requirements 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 4 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.[16] 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 appear to be meaningfully related to governance practices. Firms that opt out of US exchange governance requirements seem to follow weaker governance practices.[17]

4. Opting out and the costs and benefits of complying

Given that such a large fraction of cross-listed firms opt out of US exchange requirements and that opting out appears to be associated with materially distinctive governance choices, it is natural to view the number of opt outs as a proxy for firms' corporate practices and ask what motivates firms to opt out. The theories in Durnev and Kim (2005) and Doidge et al. (2007) provide natural hypotheses to test using this measure. Theory implies, and empirical evidence suggests that the private benefits managers enjoy are larger in countries where corporate governance is weak.[18] Thus, managers of firms based in countries where legal enforcement of shareholder rights is weak might be reluctant to comply fully with US exchange requirements, while the costs of complying for managers of firms based in countries with strong investor protections might be smaller. However, the benefits of complying with US 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. This hypothesis can be tested in country-level analysis of what types of environments are home to firms that opt out of US exchange governance requirements.

Regardless of which of these hypotheses dominates, for firms that are growing and have a need for external finance, complying with US exchange governance requirements might increase access to capital by improving firm-level governance. When a firm is not bound to strong corporate governance practices, investors should anticipate potential agency problems and be willing to pay less for an ownership stake. Thus, growing firms with financing needs, based in countries with weak investor protections benefit more 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. These analyses control for country

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[16] 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.

[17] Appendix Table 3 presents a robustness check that replaces board independence with CLSA governance scores, which others have used to proxy for corporate governance quality. The sample is substantially smaller than the main analysis sample, with 106 firms in total, however the number of opt outs is strongly negatively correlated with the CLSA measure, even when controlling for country fixed effects, which suggests the opt out measure captures a dimension of governance that is not subsumed by country effects.

[18] See, for example, Dyck and Zingales (2004).

Table 4
Independent directors and opting out.

Dependent variable:	Fraction of independent directors			
	(1)	(2)	(3)	(4)
Number of opt outs	−0.0330***	−0.0336***		
	(0.0066)	(0.0063)		
Opt out of board independence requirements			−0.0562***	−0.0460**
			(0.0203)	(0.0207)
Opt out of board committee requirements			−0.0388*	−0.0456**
			(0.0222)	(0.0194)
Opt out of audit committee requirements			−0.0872***	−0.0910***
			(0.0263)	(0.0250)
Opt out of general corporate practices			0.0179	0.0090
			(0.0364)	(0.0351)
Opt out of shareholder approval requirements for stock issuance			−0.0166	−0.0088
			(0.0160)	(0.0155)
Opt out of general good governance practices			0.0049	−0.0048
			(0.0236)	(0.0222)
Board size		−0.0114***		−0.0110***
		(0.0023)		(0.0023)
Log assets		0.0146*		0.0163**
		(0.0073)		(0.0070)
Leverage		0.0492*		0.0430
		(0.0275)		(0.0312)
Return on assets		0.0743		0.0790
		(0.0484)		(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

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 Appendix 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.

* Denote significance at the 10% level.
** Denote significance at the 5% level.
*** Denote significance at the 1% level.

fixed effects in all specifications, which will hold fixed the difference between the US and origin countries' legal environment, thus addressing potential selection due to the country-level differences.

Data

In order to conduct country-level analysis of the correlation between the extent to which a cross-listed firm opts out of US 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.[19] Tests consider two measures of the extent to which the home country legal and regulatory environment permits 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.

The second measure of corporate governance in a country is the anti-self-dealing Index created by Djankov et al. (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 et al. (2003). The specifications used in the firm-level analysis also include country fixed effects, exchange fixed effects, and several additional controls.

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[19] 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.

Table 5
Country characteristics associated with opting out.

Dependent variable:	Average number of opt outs		Average number of specific opt outs		Average of opt out dummy	
	(1)	(2)	(3)	(4)	(5)	(6)
Civil law	0.8768[**]		0.8893[***]		0.1281[*]	
	(0.3404)		(0.2740)		(0.0732)	
Anti-self-dealing index		−1.3589[**]		−1.2261[**]		−0.2433[**]
		(0.6074)		(0.5629)		(0.1113)
Turnover	−0.2213	0.0327	−0.0796	0.0639	0.0064	0.0251
	(0.2990)	(0.2813)	(0.2266)	(0.2413)	(0.0580)	(0.0629)
Constant	3.9504[**]	6.6969[***]	3.3191[**]	6.0303[***]	1.3617[***]	1.5712[***]
	(1.6970)	(1.7526)	(1.5617)	(1.6611)	(0.3570)	(0.3706)
No. of Obs.	43	40	43	40	43	40
R-squared	0.1783	0.1641	0.2482	0.1939	0.1478	0.1275

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 number of the following governance categories the firm opts out of, averaged by country: Board Independence, Board Committee, Audit Committee, and Shareholder Approval for Stock Issuance. The dependent variable in columns 5 and 6 is the country average of a dummy equal to one if a firm opts out of any of the governance requirements. Civil Law is a dummy equal to one for firms with headquarters in a country with a civil law legal origin. Anti-Self-Dealing Index is drawn from Djankov et al. (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.

[*] Denote significance at the 10% level.

[**] Denote significance at the 5% level.

[***] Denote significance at the 1% level.

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. The sample for this calculation includes all firms in Compustat. 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 3.

Results

Table 5 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 US exchange governance requirements. This coefficient is also economically significant, as it equals 0.7437 standard deviations in the number average number of opt outs (mean of 2.6039). 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 5 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.

One concern is that some provisions are not especially binding and that these less important provisions may drive the results. To address this concern, the regression uses a measure that includes the four opt-out categories focused on specific provisions of governance: Board Independence, Board Committee, Audit Committee, and Shareholder Approval for Stock Issuance, labeled "Opt Outs of Specific Provisions". For example, one of the requirements under General Good Governance Practices includes having a "Code of Conduct", which is much less specific in terms of governance practices. We note that while we would ideally run each opt-out independently in our setup, we lack statistical power to identify each effect uniquely. The results in these columns are similar to those in the previous ones.

The dependent variable in specifications 5 and 6 is the country average of a dummy equal to one for firms that opt out of any US 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 US exchanges. Appendix Table 4 confirms the correlation between country-level governance and country average opt outs using the Law and Order Index from the World Bank's Worldwide Governance Index and a Composite Index, which is the average of the Law and Order Index and the anti-self dealing Index. In all cases, the results are consistent with the idea that better governed countries tend to have lower average levels of opt outs.

Overall, the country-level analysis in Table 5 suggests that cross-listed firms are more likely to comply with US 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 US exchange regulations may be higher than the benefits for

Table 6

Firm characteristics associated with opting out.

Dependent variable:	Number of opt outs							
Countries in sample:	Common law (1)	Civil law (2)	Common law (3)	Civil law (4)	Common law (5)	Civil law (6)	Common law (7)	Civil law (8)
Net PP&E growth	−0.0980	−0.2882***	−0.0866	−0.2252**				
	(0.2332)	(0.0859)	(0.2059)	(0.0988)				
Equity issuance					0.1543	−0.9760***	0.3963	−0.7247***
					(0.1814)	(0.2042)	(0.3482)	(0.2050)
Log assets			0.0363	0.2083***			0.0553	0.2036***
			(0.1276)	(0.0711)			(0.1268)	(0.0600)
Leverage			0.3756	−0.5853			0.5134	−0.6444
			(0.9397)	(0.5129)			(0.9084)	(0.4898)
Return on assets			−0.1387	−0.5399			0.0244	−0.9638
			(0.8739)	(0.7463)			(1.0777)	(0.8534)
Industry q			−0.3165	−0.1672			−0.3066	−0.0936
			(0.3319)	(0.2307)			(0.3582)	(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

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 two-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% levels, respectively

Table 7

Opting out and Tobin's q.

Dependent variable	Tobin's q				
Countries in sample:	All (1)	Common law (2)	Civil law (3)	High anti-self-dealing (4)	Low anti-self-dealing (5)
Any optout	−0.1396	−0.0213	−0.3081**	−0.1754	−0.1450
	(0.1055)	(0.0826)	(0.1449)	(0.1514)	(0.1308)
Log assets	−0.0352	−0.0624	−0.0115	−0.0353	−0.0385
	(0.0267)	(0.0443)	(0.0283)	(0.0453)	(0.0235)
Leverage	0.0403	0.0003	0.0862	−0.0525	0.1649
	(0.2209)	(0.3927)	(0.2372)	(0.3643)	(0.1627)
Return on assets	0.7413*	0.6063	1.5996**	0.9580*	0.1563
	(0.3767)	(0.3877)	(0.6676)	(0.4863)	(0.4457)
Age	−0.0050	−0.0024	−0.0080	−0.0017	−0.0042
	(0.0053)	(0.0067)	(0.0066)	(0.0070)	(0.0076)
Country fixed effects?	Yes	Yes	Yes	Yes	Yes
Exchange fixed effects?	Yes	Yes	Yes	Yes	Yes
No. of Obs.	466	209	257	208	240
R-squared	0.1766	0.1534	0.2370	0.1594	0.2320

Notes: The dependent variable is Tobin's q, measured as 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, less industry q for the firm's SIC two-digit industry, following Gompers et al. (2003). Optout is a dummy equal to one if a firm opts out of any of the governance requirements. 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. Age is proxied as the number of years the firm has been listed on Compustat. Both the dependent variable and control variables are averages of firm variables over the five years from 2004 to 2007. 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% levels, respectively.

firms from countries with weak as opposed to strong corporate governance regulations. Alternatively, the default decision for firms from countries with weak governance may be to opt out because their home country exchange rules are so different from the US exchanges. To hold fixed this concern, subsequent regressions will include country fixed effects to compare firms from the same home country with the same potential default decision.

The tests presented in Table 6 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 US 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 controls 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 Net 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

Table 8
Opting out and the value of cash.

Dependent variable	Annualized excess returns				
Countries in sample:	All	Common law	Civil law	High anti-self-dealing	Low anti-self-dealing
	(1)	(2)	(3)	(4)	(5)
Change in cash/ME	1.6878***	1.8587***	1.6502***	1.8252***	1.7478***
	(0.2122)	(0.3166)	(0.2708)	(0.2989)	(0.3254)
Number of optouts * Change in cash/ME	−0.0945	0.0515	−0.1997***	−0.0276	−0.1532*
	(0.0573)	(0.0670)	(0.0412)	(0.0446)	(0.0760)
Number of optouts	0.0056	0.0145*	−0.0074	0.0062	−0.0034
	(0.0050)	(0.0072)	(0.0086)	(0.0048)	(0.0148)
Change in earnings/ME	0.4976***	0.4601**	0.4660***	0.5373***	0.3824***
	(0.1175)	(0.1706)	(0.1157)	(0.1525)	(0.1311)
Change in net assets/ME	0.1776***	0.2135	0.1651***	0.2546	0.1334***
	(0.0584)	(0.1364)	(0.0510)	(0.1462)	(0.0337)
Change in R\&D/ME	0.2540	0.6163	0.3232	0.4092	0.2201
	(1.0234)	(1.3368)	(0.9671)	(1.2351)	(1.5280)
Change in interest expense/ME	−2.2656***	−4.1335***	−1.3077*	−2.4315**	−1.1878
	(0.6087)	(0.5239)	(0.6808)	(1.0161)	(0.8087)
Change in dividends/ME	2.2446***	2.8959***	1.6995*	3.7704***	0.8538
	(0.6355)	(0.7491)	(0.9179)	(0.5778)	(0.6349)
Lagged cash/ME	0.1691**	0.2995**	0.0506	0.1828	0.0836
	(0.0776)	(0.1167)	(0.0490)	(0.1091)	(0.0862)
Debt/market value	−0.1579***	−0.0722	−0.2092***	−0.1332	−0.2089**
	(0.0418)	(0.0809)	(0.0481)	(0.0776)	(0.0938)
New finance/ME	−0.1545	−0.1415	−0.1745	−0.3153**	−0.0767
	(0.1058)	(0.1776)	(0.1443)	(0.1343)	(0.1635)
Lagged cash/ME * change in cash holdings/ME	−0.6712***	−1.1451***	−0.4458**	−1.0258***	−0.3146***
	(0.1415)	(0.2654)	(0.1639)	(0.1659)	(0.1137)
Leverage * change in cash holdings/ME	−0.0021	0.0662	0.0119	0.2040	−0.6240
	(0.2675)	(0.3769)	(0.2809)	(0.3315)	(0.5702)
Country fixed effects?	Yes	Yes	Yes	Yes	Yes
Exchange fixed effects?	Yes	Yes	Yes	Yes	Yes
No. of Obs.	2370	1180	1190	1203	1072
R-squared	0.1771	0.1977	0.1861	0.1929	0.1580
Countries in sample:	All	Common law	Civil law	High anti-self-dealing	Low anti-self-dealing
	(2)	(3)	(4)	(5)	(6)
Mean lagged cash	0.2938	0.2938	0.2938	0.2938	0.2938
Mean leverage	0.2336	0.2336	0.2336	0.2336	0.2336
Mean number of opt outs	2.9195	2.9195	2.9195	2.9195	2.9195
Marginal value of $1, Average number of opt outs	1.21	1.69	0.94	1.51	1.03
Marginal value of $1, Number of opt outs = 0	1.49	1.54	1.52	1.55	1.46
Marginal value of $1, Number of opt outs = 6	0.92	1.85	0.32	1.47	0.57

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. All specifications include fixed effects for the exchange the firm is listed on and the country where the firm is headquartered. Heteroskedasticity-consistent standard errors that correct for clustering at the country level appear in parentheses. The bottom 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 the top panel.

* Denote significance at the 10% level.
** Denote significance at the 5% level.
*** Denote significance at the 1% level.

levels of growth. While there are differences in the significance of the coefficients on Net 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 US 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.

Table 9

Opting out and investment sensitivity to Tobin's *q*.

Dependent variable	Capital expenditures/lagged net PPE				
Countries in sample:	All	Common law	Civil law	High anti-self-dealing	Low anti-self-dealing
	(1)	(2)	(3)	(4)	(5)
Tobin's *q*	0.0971***	0.0841***	0.1435***	0.0980***	0.0888***
	(0.0135)	(0.0109)	(0.0270)	(0.0224)	(0.0081)
Number of opt outs ∗ Tobin's *q*	−0.0129***	−0.0086	−0.0249***	−0.0098	−0.0140***
	(0.0044)	(0.0064)	(0.0055)	(0.0073)	(0.0027)
Cash flow/assets	0.2901***	0.2648**	0.2666**	0.2210	0.3522***
	(0.0839)	(0.1001)	(0.0969)	(0.1422)	(0.0455)
Log assets	−0.0826**	−0.0677	−0.1079***	−0.0432	−0.1180***
	(0.0329)	(0.0448)	(0.0330)	(0.0446)	(0.0310)
Firm fixed effects?	Yes	Yes	Yes	Yes	Yes
No. of Obs.	5508	2648	2860	2411	2894
R-squared	0.3451	0.2837	0.4543	0.3262	0.3778

Notes: The dependent variable is investment, defined as capital expenditures divided by lagged net property, plant and equipment (Net PPE). Tobin's *q* is defined is measured as 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. Number of Opt Outs is the number of governance categories the firm opts out of. Cash Flow/Assets is measured as depreciation plus income before extras divided by book value of total assets. Log Assets is the log of total assets. Column 1 includes all firms. Columns 2 and 3 split on firms headquartered in Common and Civil Law countries, respectively. Columns 4 and 5 split on the median value of the Anti-self-dealing index measure from Djankov et al. (2008). All specifications include firm fixed effects. Heteroskedasticity-consistent standard errors that correct for clustering at the country level appear in parentheses. ***, **, and ∗ denote significance at the 1, 5, and 10% levels, respectively.

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 of the two samples of firms in columns 5 and 6 and columns 7 and 8. Appendix Table 5 confirms the results on firm characteristics and opt outs using the Opt Outs of Specific Provisions measure from Table 5 as the left hand side variable. In all cases, Net PP&E Growth and Equity Issuance are negatively correlated with the Opt Outs of Specific Provisions measure in civil law countries, consistent with the results in Table 6.

Taken together, the results in Tables 5 and 6 provide evidence that while on average cross-listed firms from countries with weak corporate governance practices are more likely to opt out of US exchange governance requirements, if firms from such countries are small, growing and need external finance, they are more likely to comply, reflecting better corporate governance practices[20]

5. Opting out, valuations, and investment

Since opting out appears to be associated with materially distinctive governance choices, firms' opt out measures should be related to the market value of firms. If good governance practices 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 exchange requirements should be higher than those of firms that do not. Additionally, following Doidge et al. (2004) and Durnev and Kim (2005), the gap in valuations between firms that opt out of requirements and those that do not should be largest for firms based in countries with weak corporate governance regulations. Although many determinants of value, including the attractiveness of growth opportunities, are difficult to measure in a cross-country setting, it is possible to use simple tests, similar to those presented in Gompers et al. (2003), to analyze if Tobin's *q* varies with the extent to which firms abide by US exchange corporate governance requirements. These tests can be run separately for firms grouped by the governance rankings of their home countries, using legal origin and the anti-self-dealing index to measure the strength of governance practices.

Another approach to exploring the consequences of opting out on firm value focuses on the value of cash holdings, based on the work of Faulkender and Wang (2006), Dittmar and Mahrt-Smith (2007), and Frésard and Salva (2010). These studies use 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, an approach that can be used to assess if opting out of US exchange governance requirements reduces 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 US exchange governance requirements, these US exchange governance requirements might play a more significant role in protecting shareholders of firms from countries with weak governance regulations.

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[20] To confirm that the results do not depend on splitting by common and civil law, Appendix Tables 11 and 12 replicate the specifications in Table 6 with splits based on the anti-self dealing Index and the Composite Index, which combines the Law and Order Index and anti-self dealing Index.

To examine the relationship between changes in cash holdings and changes in firm value 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 US exchange requirements, and a set of controls. Given that the consequences of poor corporate governance are likely to be larger for firms based in countries with weak investor protections, 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 US, relative to foreign firms that are not cross-listed, motivated by the legal bonding aspect of cross-listing.

Finally, opting out could also have an impact on the extent to which valuations guide firm investment choices. Managers at firms that do not abide by US exchange requirements might have more latitude in setting investment with the goal of extracting private benefits and without regard to value-based indicators of investment opportunities like Tobin's q. Foucault and Frésard (2012) provide a framework for considering this possibility which employs specifications like those presented in Fazzari et al. (1988) and subsequent work.

Specifications in which a measure of firm capital expenditures is regressed on Tobin's q, Tobin's q interacted with a measure of the extent to which firms opt out of US exchange requirements, and controls for firm cash flows and size reveal if the sensitivity of firm investment choices to investment opportunities varies with the extent of corporate governance practices. Complying with US exchange requirements is likely to have smaller consequences for firms based in countries with strong investor protections, so the impact of opting out on investment-Tobin's q sensitivities should be smaller for such firms. This possibility can be explored by running specifications for subsamples of firms selected on the basis of their home country governance practices.

Data

The data used for the three sets of tests described in this section are primarily drawn from Compustat and CRSP. For the analysis of the relationship between opting out and firm value, a firm's industry-adjusted Tobin's q is measured as 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 less industry q for the firm's SIC 2 digit industry. As controls, the specification includes lagged values of the log of total firm assets, leverage, which is total debt scaled by total debt plus the book value of equity, return on assets, which is net income divided by total assets, and firm age, which is measured as the number of years the firm has been listed in Compustat. The dependent and independent variables are averaged over the 2004–2007 period to reduce the impact of unusual values in any particular year. 2008 values are not used because of the large drop in valuations that occurred at the start of the crisis. Each specification includes fixed effects for the country where a firm is based and fixed effects for the US exchange the firm is listed on.

The methodology used in prior work is followed to construct data to study the value of cash holdings. Annualized excess stock market returns are calculated using CRSP data. The returns of the 25 reference portfolios come from Kenneth R. French's website.[21] 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 fixed effects for the country where a firm is based and fixed effects for the US exchange the firm is listed on.

To study the sensitivity of investment to investment opportunities, investment is measured as the ratio of capital expenditures to lagged net property, plant, and equipment. Investment opportunities are measured using Tobin's q, computed as in Section 4. The sample covers 1989 to 2011, the same sample used by Foucault and Frésard (2012). As controls, the specifications include lagged cash flow scaled by firm assets, where cash flow is depreciation plus income before extras (following Baker et al. (2003)), and the lagged log of firm assets. The specifications used in this analysis include firm fixed effects.

Results

Table 7 presents the results of tests of the relationship between opting out and firm value. The first column presents results for the full sample, and the −0.1396 coefficient on the opt out dummy, which is equal to one for firms that opt out of US exchange requirements, indicates that opting out is associated with lower Tobin's q, but this coefficient is not statistically significant. The next four specifications present results for subsets of firms based in countries with strong and weak governance practices, first measured using legal origin and then splitting on the median of the anti-self-dealing index. For firms headquartered in countries of civil law origin, we see a difference in q of 0.3081 for those firms that choose to opt out of any provisions compared to those who fully comply. This finding suggests that firms that are not held to high governance standards in the home market are assigned lower valuations when they do not abide by US exchange governance requirements. This effect is of the same magnitude as the difference between

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[21] http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/Data_Library/tw_5_ports.html Using the 25 Portfolios Formed on Size and Book-to-Market (5 × 5). Appendix Table 13 replicates the specifications in Table 8 using the global Fama–French factors.

exchange cross-listed and non-cross-listed firms in Table 4 of Doidge et al. (2004), implying economically significant differences in how the market views firms from countries with weak governance that choose to opt out of the governance requirements. However, similar results do not obtain when the sample is split using the anti-self-dealing index, as indicated in columns 4 and 5. Appendix Table 10 reports results from splitting firms based on the Law and Order Index and the Composite Index, which combines the Law and Order Index and anti-self dealing Index. Results are similar to Table 7, but only statistically significant in the case of the Composite Index.

Analysis of the value of cash holdings gives rise to more consistent results. The first column in Panel A of Table 8 displays results of such analysis using the full sample. The interaction of the change in cash holdings and the number of opt outs yields a coefficient equal to −0.0945, which indicates that opting out of an additional US exchange governance requirement category reduces the value of cash by almost $0.10. However this coefficient is not statistically significant.

The next four columns present results for the subsamples of firms based in common and civil law countries. Opting out of US 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 opt outs is negative and significant in columns 3 and 5, but it is insignificant in columns 2 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 US exchange governance requirements is $1.49, and the implied value of a dollar to firms that opt out of all six types of US 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 US 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 US 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. When jointly estimated in a single regression, the difference in the effect of opting out of a governance requirement for civil and common law firms is 0.2511 and statistically significant at the 99% level. This implies that every opt out decreases the value of a dollar by 25 cents in a civil law country compared to a common law country.

Appendix Tables 6, 7, 8, and 9 present a set of specifications designed to confirm the robustness of the relationship between opt outs and the value of cash. Appendix Table 6 replicates Table 8 but replaces total opt outs with Specific Opt Outs. Appendix Table 7 splits firms based on the Law and Order Index and on the Composite Index, which combines the Law and Order Index and anti-self dealing Index. Appendix Table 8 replicates Table 8 while including industry and country-by-industry fixed effects to control for variation across countries in access to alternative forms of financing and exposure to the business cycle for firms in different industries. Appendix Table 9 replaces these industry fixed effects with firm fixed effects. In all cases, the results are consistent with the findings in Table 8, suggesting that firms in low governance countries display a lower value of cash as the number of opt-outs increases.

Frésard and Salva (2010) study the impact of cross-listing on the value of excess cash and find that the value of a dollar of excess cash is worth $0.58 for a non-US firm, while it is worth $1.61 for a cross-listed firm. By matter of comparison, the Fresard and Salva valuation of a dollar for a cross-listed firm is approximately the same as the estimated valuation for a fully compliant cross-listed firm. Across all countries, cross-listed firms that fully opt out still have higher valuations of cash than non-cross-listed firms, but interestingly, for firms cross-listing from civil law countries, the value of cash for fully non-compliant firms is approximately equivalent to the estimates from Fresard and Silva of a firm that chooses not to cross-list.

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 Mahrt-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).

Table 9 presents results of tests of the extent to which investment choices are sensitive to investment opportunities, measured using Tobin's q. As in the last two tables, the first column shows results for the full sample. The coefficient on Tobin's q is positive and significant, capturing the fact that firms invest more when investment opportunities are better. The coefficient on the interaction between the number of opt out and Tobin's q is negative, suggesting that the investment of firms that opt out of US exchange requirements is less sensitive to Tobin's q than the investment of firms that do not. Consistent with prior work, the coefficient on cash flows is positive and the coefficient on log assets is negative. As a matter of comparison, Foucault and Frésard (2012) find that cross-listing increases the responsiveness of investment to q by 0.0663 (column 8 of Table 3), while the estimates in Table 9 suggest that a change in opt outs from zero to five (fully compliant to complete opt out) reduces sensitivity by 0.0645, almost the same magnitude.

The interaction term attracts a negative coefficient in the next four columns, but the coefficients are only statistically significant in columns 3 and 5. These results imply that opting out only reduces the sensitivity of investment to Tobin's q for firms based in

countries with weak governance standards, namely those with a civil law legal origin and with a below median anti-self-dealing index measure. Firms from such places that opt out of all six types of exchange governance requirements exhibit virtually no sensitivity of investment to investment opportunities.

There is some debate in the literature about how to interpret these sensitivities. If Tobin's q provides information to firms about how the market values their investment prospects, then a higher investment-q sensitivity may reflect more attentiveness of managers to market signals. Such attentiveness may signal better corporate governance. However, an alternative interpretation is that managers cater to short-run fluctuations in markets. It is not possible to separate these stories without measuring the productivity of marginal investments under strong assumptions. Nevertheless, the results are consistent with the notion that more compliant firms are more responsive to market signals.

6. Conclusion

Foreign firms' ability to opt out of US 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 US 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 corporate governance. Such investigation also sheds light on the effect of good governance on valuation.

Analysis of which firms opt out of US 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 US exchange corporate governance requirement. Although prior literature has noted the governance differences between cross-listings that do and do not trade on a US exchange, there is considerable heterogeneity in the extent to which listed foreign firms comply with the governance requirements of exchanges. Second, firms that opt out appear to have 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 the corporate governance decisions proposed by Durnev and Kim (2005) and Doidge et al. (2007). Consistent with this tradeoff, the data show that firms based in countries with weak investor protections 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 US exchange requirements has consequences for how the market values cash holdings. For firms from countries with poor investor protections, cash within the firm is worth significantly less if the firm opts out of more US exchange requirements, consistent with the idea that the market views these firms as being weakly governed and vulnerable to expropriation. Moreover, firms that opt out that are based in those countries with poor investor protections are less responsive to market signals of investment opportunities, as measured by q, which is also consistent with poor governance.

While making a causal statement is difficult due to endogeneity concerns, the evidence indicates that the corporate governance associated with complying with exchange rules facilitates firms in raising external finance. Many foreign firms bond themselves to the more stringent corporate governance requirements of US 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 opt out, especially foreign firms from countries with weak investor protections, suggests that the costs of fully complying with US exchange requirements are too high for many insiders

Appendix A. Data appendix

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 registered and reporting with the US SEC; December 31, 2008" (SEC, 2009).[22] 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.[23]

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[22] The universe of firms in this paper consists of all foreign private issuers listed on the NYSE, NASDAQ, and AMEX compiled from the SEC's official list of "Foreign companies registered and reporting with the US Securities and Exchange Commission; December 31, 2008" (SEC, 2009). That totals 706 firms, but additionally, the 145 exchange-listed foreign firms registered with the SEC that use one of the other SEC forms for their annual disclosure that do not require the new Item 16G, either the US domestic Form 10K or the Canadian Multijurisdictional Disclosure System Form 40F, are excluded, since we cannot measure their opt out decision. This leaves us with 561 firms, of which we drop 42 firms due miscellaneous specific reasons such as they were a debt issuance, filed 10-Ks, were shell companies, did not file a 20F for FY 2008, or did not have Compustat data available.

[23] US securities laws apply to all foreign private issuers – a term that covers non-US issuers, excluding foreign governments – entering US 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 US 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 US, 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).

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 US 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.[24] 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 Form 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 notes, "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.

Appendix B. Supplementary data

Supplementary material related to this article can be found online at https://doi.org/10.1016/j.jempfin.2017.12.004.

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[24] We randomly select ten companies from our sample (four from civil law and six from common law countries). For each company, we compare the opt out disclosures from fiscal year 2008 to subsequent disclosures from 2009 through 2014. We count the number of changes to each subcomponent of our total opt outs measure (there are 12 provisions for NYSE and 20 for NASDAQ and AMEX, and 6 categories used to group these provisions). For six of the firms there are no changes over the following years. For three of the firms, only one of the 12 or 20 subcomponents changes at any point in time. For one firm, two subcomponents change.

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