Cost of Capital and Liquidity of Foreign Private Issuers Exempted From Filing with the SEC: Information Risk Effect or Earnings Quality Effect?

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Abstract
The sample of foreign private issuers (FPIs) active in the U.S. capital market provides a unique setting to observe the relations among information disclosure, earnings quality and the cost of capital under different institutional factors including investor protection and legal enforcement regimes. In this paper we examine whether receiving an exemption from SEC reporting is associated with greater information risk and ensuing capital market penalties (higher cost of equity capital) and, further, the extent to which this information risk is mitigated by the reporting of higher quality earnings. Our results indicate that, as expected, exempt foreign private issuers, who provide less disclosure to the market, exhibit a higher cost of equity capital, higher total cost of capital, and wider bid-ask spread. Further, as a previous study finds the reporting exemption is associated with lower earnings quality, we also tested our hypotheses conditional on earnings quality. Our results show that findings in Francis et al. (2008) cannot be generalized ipso facto to an international sample. Indeed, the primary relation between disclosures and cost of capital remains significant in our sample even after controlling for earnings quality, disclosure requirements, and enforcement mechanisms, and, further, these results are primarily driven by firms from countries characterized by weak investor protection regimes. These results enhance our knowledge of the characteristics of exempt and reporting FPIs and extend prior empirical evidence on the relations between information risk, earnings quality, cost of capital and firm liquidity.

Keywords: exemption, 1934 Exchange Act, Rule 12g3-2(b), information risk, financial disclosure quality, cost of capital, liquidity, earnings quality, financial analysts’ EPS forecasts, SEC, foreign private issuers

Data availability: The data are available from public sources identified in the text.
1. **Introduction**

Foreign companies that want to access capital in the United States (U.S.) must register with the Securities and Exchange Commission (SEC) pursuant to Rule 12(g) of the Exchange Act of 1934.\(^1\) Section 13 of this Act identifies the extensive and costly reporting requirements for foreign private issuers (FPIs)\(^2\) cross-listing their shares in the U.S.\(^3\) Rule 12g3-2(b) of the Exchange Act provides an exemption from the periodic reporting requirements of Section 13 for FPIs who meet certain thresholds.\(^4\) Firms who request and are granted an exemption pursuant to this rule disclose significantly less information to the U.S. capital market than do firms that report to the SEC pursuant to Section 13.

Previous theoretical research generally predicts that firms with lower information risk (i.e. higher quality disclosures) will be associated with a lower cost of capital (Lambert et al. 2007; Diamond and Verrecchia 1991; Easley and O'Hara 2004). However, empirical evidence on this association is mixed (Francis et al. 2008; Botosan and Plumlee 2002; Kim and Shi 2011; Bhattacharya et al. 2012). Even more importantly, the available evidence it is limited to samples of only U.S. firms. In this paper we seek to provide empirical evidence of the association between information risk and cost of capital using a sample of international firms from over 50 countries.

Furthermore, in a recent paper, Francis et al. (2008) examine the relations among voluntary disclosure, earnings quality and cost of capital for a sample of 677 U.S. firms and find that while more voluntary disclosure is associated with a lower cost of capital, the negative association

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\(^2\) See the definition of foreign private issuer at Exchange Act Rule 3b-4(c) (17 CFR 240.3b-4(c)).

\(^3\) These reporting requirements include supplying a Form 20-F each year to the SEC; a Form 20-F offers investors a great deal of financial and operational information in a common format.

\(^4\) Under Rule 12g3-2(b), FPIs can request an exemption if they have total assets of less than $10 million, more than 500 owners worldwide and less than 300 owners in the United States.
between disclosure and cost of capital becomes insignificant after controlling for earnings quality. Our study examines whether this more “primitive” effect of earnings quality on cost of capital extends to countries outside the U.S. using a sample of international FPIs, characterized by within-sample differences in earnings quality, as previous literature indicates (Gotti and Mastrolia 2012).

Our sample includes all FPIs that are either exempt or reporting from 2000 to 2006.5 We use two measures to estimate the cost of equity capital: the firm’s annual cost of equity capital as measured by realized returns (Guay et al. 2005) and the firm’s implied expected rate of return (Easton 2006; O’Hanlon and Steele 2000). In the additional analyses section, we also calculate each sample firm’s annual total cost of capital as the weighted average cost of the equity capital and the average cost of debt capital (WACC) and we also measure the market liquidity by calculating each sample firm’s bid-ask spread (Welker 1995).

Guided by previous literature, we hypothesize that receiving an SEC exemption leads to greater information risk which, in turn, is associated with capital market penalties including a higher cost of equity capital (Diamond and Verrecchia 1991; Merton 1987; Lambert et al. 2007; Bhattacharya et al. 2012), higher total cost of capital (WACC) (Sengupta 1998; Botosan 1997), and lower liquidity (narrower bid-ask spread) (Welker 1995). We further test whether the information risk is mitigated by reporting higher quality earnings, similar to the evidence provided in Francis et al. (2008). To our knowledge, this is the first paper that examines the role of earnings quality in the relation between information risk and disclosure quality in an international setting; a multi-national setting uniquely allows us to examine these relations under different investor protection, legal enforcement, and home-country required disclosure regimes.

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5 The list of exempt FPIs has not been released by the SEC after this date.
Our results provide evidence to support our hypotheses: exempt companies are associated with a higher cost of equity capital, higher total cost of capital and lower liquidity and the relation, at least for the cost of equity capital measures, is mitigated by reporting higher quality earnings. We also perform several robustness tests that further support our results.

This study makes several contributions to the existing literature. First, by examining the different reactions in debt and equity markets between exempt and reporting FPIs, this study provides empirical evidence of the theoretical link between disclosure quality and cost of capital (Diamond and Verrecchia 1991; Lambert et al. 2007; Easley and O'Hara 2004) in an international setting. Second, a recent paper (Francis et al. 2008), using a sample of 677 US firms, provided evidence that the disclosure effect on cost of capital is reduced or not present when the researchers control for earnings quality. We test whether these findings are robust to different international institutional factors. Our results show that FPIs exempted from filing with the U.S. SEC, and, thus, providing less information disclosure than FPIs filing with the Commission, are characterized by a higher cost of equity capital. Our results also show that the results in Francis et al. (2008) cannot be generalized *ipso facto* to an international sample of companies. Indeed, the primary relation between information disclosure and the cost of equity capital remains significant in our sample even after controlling for earnings quality, disclosure requirements, and enforcement mechanisms. These results enhance our knowledge of the characteristics of exempt and reporting FPIs and extend prior empirical evidence on the relations among information disclosure, earnings quality and cost of capital to a sample of international companies.
Our study might be of interest to policy makers as, in a recent final rule, the SEC relaxed the requirements for the exemption from registration under Section 12(g) for FPIs, thereby making the exemption available to more issuers. Our results suggest that while exempt FPIs are associated with higher information risk than reporting FPIs, the market is aware of the difference as capital market penalties (higher cost of capital) appear to be mitigated by higher quality earnings.

Our study might also be of interest to the investing community in light of the reporting changes for FPIs related to using International Financial Reporting Standards (IFRS) in Form 20-F filings. This study may inform the discussion related to modifications to the 20-F reporting requirements and help to identify a potential consequence of reducing the SEC reporting requirements for FPIs as the results of this study indicate that investors value the disclosures provided by reporting firms in their SEC filings and the data necessary to evaluate a company’s earnings quality.

The paper continues as follows: Section 2 provides a description of the institutional background; Section 3 builds our hypotheses; Section 4 describes our research design and model; Section 5 presents our sample and descriptive statistics; Section 6 presents our results; Section 7 provides our conclusions, highlights some limitations of our study, and indicates the path for further research on the subject.

2. Institutional Background

2.1 Reporting Requirements and Exemption

In their paper, Leuz at al. (2008) provide a comprehensive assessment of the consequences to U.S. companies of voluntary SEC deregistration, or “going dark”. We intend for this paper to add to the findings in Leuz et al. by examining FPIs and modifying the empirical tests to suit the

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6 17 CFR Parts 239, 240, and 249, Sept. 10 2008
more limited information available for our sample firms (i.e. the specific “going dark” date is not known for FPIs).

Next, we present a brief explanation of the SEC rule sections related to the exemption we use as the partitioning variable in this study; much greater detail regarding the exemption is provided in Gotti and Mastrolia (2012).

2.1.1. SEC Rule Sections 12(g) and Rule Exemption 12g3-2(b)

In 1964, Congress adopted Section 12(g) of the Exchange Act to provide investors trading in over-the-counter securities with the same disclosures and protections provided to investors trading in securities that were listed on a national securities exchange. Section 12(g) requires an issuer comply with the reporting requirements of Section 13 of the Exchange Act of 1934.

Rule 12g3-2(b) provides an exemption from the periodic reporting requirements of Section 13 of the Exchange Act of 1934 for certain FPIs. FPIs are eligible to apply for this exemption if (1) they establish a Level I ADR facility or a Rule 144A offering to qualified investors; and (2) if all of the following conditions are met: (i) the company has less than $10 million in assets; (ii) the company has at least 500 shareholders worldwide; and (iii) the company has less than 300 shareholders with addresses in the U.S. A separate exemption from filing with the SEC applies to companies that are not traded on a national exchange or on NASDAQ (Mahoney 2009).

Either compliance with the exemption rule or the periodic reporting requirement is required by law when the company is establishing a sponsored Level I ADR facility to trade its shares on a U.S. stock market. To establish the exemption under this rule, the issuer must supply the SEC

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8 These shares are traded over-the-counter through the Pink Sheets.
9 After October 10, 2008, issuers will be allowed to claim the Rule 12g3-2(b) exemption without regard to the number of holders of the subject class of equity securities. Also, it is important to note that while this requirement appears to be limiting, the rule refers to “owners of record” and not the total number of individual shareholders. This distinction is important because brokerage firms usually hold securities in a street name, so a brokerage firm would count as one owner under this rule when there are likely many individual owners behind the brokerage firm.
with a copy of all the required documents made public in the home country and distributed since
the beginning of the company's last fiscal year.\textsuperscript{10} The issuer should also inform the SEC of the
number of shareholders of the company resident in the U.S., the amount and percentage of shares
they hold, the circumstances under which they acquired the shares (e.g., ordinary trading, exempt
offering, etc.) and the date of the most recent distribution of securities by the company.

To maintain the exemption under the rule, once the SEC has approved the issuer's
establishment of the exemption, the issuer should send the SEC a copy of each required
document soon after it is made public. Once an issuer has timely submitted its application and
obtained the exemption, they can exceed any of the shareholder, U.S. resident shareholder, or
asset thresholds that would have originally resulted in the issuer being ineligible for the
exemption as long as the FPI maintains the exemption by submitting the required non-U.S.
disclosure documents.\textsuperscript{11}

In a recent final rule, the SEC relaxed the application requirements for the exemption,\textsuperscript{12}
thereby expanding the availability of the exemption to more issuers. In this final rule, the SEC
acknowledges that:

Investors will incur costs from the adopted rule amendments to the extent that the amendments encourage more
foreign companies, which otherwise would be required to register their equity securities under the Exchange
Act, to claim the Rule 12g3-2(b) exemption, where the information, enforcement remedies, and other effects of
registration are valuable to investors

\textsuperscript{10} The company is not required to furnish documents such as product catalogs and price lists, and an English
translation is not required for all documents. However, press releases and any documents that are given to
shareholders of the company, not merely made available to the public, must be in English. An exact translation is
not required; an English language version that contains the same information or a summary of the document's
contents in English is acceptable.

\textsuperscript{11} The exemption under the rule is not available to (1) issuers that are subject to the periodic reporting requirements
or who have been subject to those requirements in the past 18 months, (2) issuers that have acquired another
company that was subject to the periodic reporting requirements, or (3) to issuers with securities listed on a U.S.
stock exchange or to Canadian companies.

\textsuperscript{12} 17 CFR Parts 239, 240, and 249, Sept. 10 2008
It is important to focus on the last few words of the SEC comments: enforcement remedies and other effects. As previous literature points out (Lang et al. 2003), the companies in the exempt FPIs sub-sample capture some of the benefits of having their shares traded in the U.S. while they are not subject to the same level of regulation and disclosure. However, since the rule was adopted in 1967, the SEC has never sued any company for false or misleading disclosure in documents furnished under the rule and no investor has successfully sued a company under the rule.

Also, this paper examines the dichotomous classification of exempt versus reporting FPIs based on the legal status of an exemption with the SEC. This is not equivalent to the classification commonly examined in academic studies of Level I vs. Level II and III American Depository Receipts (ADRs). In general, Level II and Level III ADRs are publically traded on major United States stock exchanges (NYSE, NASDAQ, OTC Bulletin Board), while Level I ADRs are traded in the over-the-counter market as “pink sheets” or have limited trading. Level II and Level III ADRs are not eligible for a reporting exemption, but Level I ADRs may be eligible (we have previously identified the eligibility requirements for the exemption). We are not aware of any other academic papers that examine the exempt and reporting subsets of Level I ADRs.

2.1.2 Contents of 20-F Filing

Foreign private issuers that are subject to reporting under Section 13 of the Exchange Act of 1934 (reporting firms) are required to file a Form 20-F with the SEC within 120 days of the issuer’s fiscal year end. A Form 20-F contains a great deal of financial and operational

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13 Exempted FPIs, listed on OTC and Rule 144A, capture some of the advantages of U.S. listing but liquidity effects and limited securities trading do not make this form of listing a perfect substitute for trading on national exchanges.

14 It was 180 days until the recent ruling by the SEC. The new Rule (Release No. 34-58465) has been approved on Sept. 5, 2008 with an effective date of October 10, 2008.
information about the issuer for investors to use in decision making; by comparison, exempt issuers do not file a Form 20-F and are, therefore, not required to make the same financial and operational information available to investors. However, it is also true that exempt FPIs may make extensive voluntary disclosures in the U.S. or in their home country reporting, thereby providing a similar amount of information to investors as do reporting companies. For this reason, we examine whether higher quality earnings mitigate the capital market penalties associated with the information risk.

3. Hypotheses Development

3.1 Accounting disclosures, earnings quality, and cost of equity capital

There is extensive research identifying a relation between information disclosure and the cost of equity capital. Theoretical modeling, including Merton (1987), Diamond and Verrecchia (1991), Easley and O’Hara (2004), and Lambert et al. (2007) show that higher quality accounting disclosure is associated with a lower cost of equity capital and increased liquidity. Merton (1987) models information asymmetry as a limited subset of investors with information about the firm. The firm can increase the subset of informed investors by releasing more information, thus reducing its cost of capital and increasing its market value. Diamond and Verrecchia (1991) show that disclosure of information to the public can reduce information asymmetry and, in turn, increase the firm’s liquidity by attracting large investors resulting in a reduction in the firm’s cost of capital. Easley and O’Hara (2004) present a model where the firm chooses the level and the precision of the information released to investors and private information introduces a form of systematic risk that ultimately influences the firm’s cost of capital. Lambert et al. (2007) model the effects of accounting disclosures on the cost of capital, both directly and indirectly:

The direct effect occurs because higher quality disclosures affect the firm's assessed covariances with other firms' cash flows, which is nondiversifiable. The indirect effect occurs because higher quality disclosures affect
a firm's real decisions, which likely changes the firm's ratio of the expected future cash flows to the covariance of these cash flows with the sum of all the cash flows in the market. Both direct and indirect effects help to explain the association between higher information quality and lower cost of capital.

Lang and Lundholm (1996) test the Merton’s (1987) model and find evidence that better disclosures are associated with a greater analysts’ following and more investor interest, thus higher stock prices and lower cost of capital. Healy, Hutton, and Palepu (1999) test the Diamond and Verrecchia (1991) model and find that better disclosures increase institutional ownership and are associated with higher stock prices and a lower cost of capital. Botosan (1997) finds that manufacturing firms with a higher disclosure index benefit from a lower cost of equity capital and Sengupta (1998) shows evidence that higher disclosure ratings associated with lower cost of debt capital.

Our first hypothesis, reflecting the results of previous empirical literature on the association between disclosure and the cost of equity capital, follows:

**Hypothesis 1:** FPIs that file with the SEC under Rule 12(g) have a lower cost of equity capital than do FPIs that apply for (and receive) an exemption under Rule 12g3-2(b).

In a recent paper, Francis et al. (2008), investigates the relations among voluntary disclosure, earnings quality and cost of capital. Using a sample of 677 companies, all of whom file 10Ks with the SEC, these authors find that more voluntary disclosure is associated with a lower cost of capital. However, after controlling for earnings quality, the negative association between disclosure and the cost of capital becomes insignificant. These results indicate that for their sample of domestic SEC reporting firms, earnings quality is associated with cost of capital and the disclosure effect is secondary. We do not have any previous evidence of a similar effect of earnings quality on cost of capital for international firms, characterized by differences in investor
protection regimes, legal enforcement regimes, and home-country required disclosures, among other things. A recent paper (Gotti and Mastrolia 2012) provides evidence that exempt FPIs are characterized by lower earnings quality than reporting FPIs. Hence, we formulate our second hypothesis in the null form:

**Hypothesis 2:** After controlling for earnings quality, FPIs that file with the SEC under Rule 12(g) do not have a lower cost of equity capital than do FPIs that apply for (and receive) an exemption under Rule 12g3-2(b).

4. Research Design and Model

In this study, we use the cost of equity capital (and in the additional analyses section total cost of capital – WACC - and analysts’ bid-ask spread) as a proxy for the market’s response to differences in disclosure practices and earnings quality between exempt and reporting FPIs.

Since the decision about where and how to cross-list their shares is voluntary, any test to assess differences between exempt and reporting FPIs is potentially subject to selection bias. To account for this selection bias, our research design uses a Heckman (1979) model and estimates, in the first-stage probit model, the decision to apply for the exemption:

\[
\Pr(Exemption = 1) = \alpha_0 + \alpha_1 Size_{t,t} + \alpha_2 BM_{l,t} + \alpha_3 Growth_{l,t} + \delta country_{l,t} + \gamma industry_{l,t} + \epsilon_{l,t}
\]  

(1)

In the first stage model above we test the relevance of different factors on the decision of firms to apply for an exemption under Rule 12g3-2(b). First, the variable Size, proxied by the natural log of book value of total assets, is included in the model as previous research finds this variable to be significant in explaining the decision to cross-list. The variable BM, the book-to-market ratio, is included to proxy for firm-level risk factors; this variable has also been used by previous literature as a measure of unconditional conservatism (Beaver and Ryan 2005). We
include the variable Growth, the percentage of increase of sales from the previous year, to proxy for the different business environments of the firms in our sample. Last, in order to control for differences in local GAAP accounting and to control for industry effects, we include in the first-stage regression binary variables for the firm’s country of incorporation\textsuperscript{15} and industry.\textsuperscript{16}

4.1 Cost of Equity Capital

Prior accounting literature uses various methods to estimate a firm’s cost of equity capital. In this paper, we use two proxies for the cost of equity capital: a historical measure (realized returns) and a forward-looking measure (the implied expected rate of return).

4.1.1 Realized Returns

Realized returns are used as a (historically focused) proxy for expected returns in the empirical accounting literature (Guay et al. 2005) based on the assumption that investors have rational expectations, thus ex-ante unknown information of a single market participant will result in a sum of zero at the aggregate market level. We adopt, in this study, realized returns as a proxy for expected returns and liquidity effects, aware that the underlying assumption of rational expectations ignores the possible effects of changes to expected returns and earnings on unexpected changes in returns.

We gather the data necessary to calculate the realized returns for each firm in our sample from 2000 through 2006 from the Compustat Global Vantage database Issues file (see Appendix 1 for a list of the variables used in the model and the details of our calculations). Then, we test, at the univariate level, whether there is any systematic difference in the models’ variables for the firms in each of our two subsamples: exempt and reporting FPIs.

\textsuperscript{15} Different local GAAP would likely change the common accounting definitions that, in turn, influence our analysis at the second-stage level, and thus, our results. For example, the content of revenues and expenses that we use to calculate what is commonly known as Net Income could be different under different local accounting standards. Additionally, this variable controls for differences in legal origin of a country.

\textsuperscript{16} Consistent with previous research, industry classification is based on Fama and French (1997) definitions.
Finally, we test Hypothesis 1, the association between returns to investors (Ret) and Exemption, controlling for the decision to apply for an exemption as well as other firm-level and country-level variables that previous research has shown might contribute to cross-country differences in returns.

\[ \text{Ret}_{i,t} = \alpha_0 + \alpha_1 \text{Exemption}_{i,t} + \alpha_2 \text{Mills}_{i,t} + \alpha_3 \text{Size}_{i,t} + \alpha_4 \text{AbnAccr}_{i,t} + \beta \Gamma + \varepsilon_{i,t} \]  \hspace{1cm} (2)

Exemption is a binary variable equal to 1 when the FPI is exempt from SEC filings and zero otherwise. We control for both firm and country characteristics. At the firm level we control for Size (the natural log of the total assets) since our univariate analysis suggests that there is a statistically significant difference in the means of these two variables between exempt and reporting firms. We run this model using both OLS and as a second-stage Heckman model, including the inverse Mills ratio from the first-stage model. We also control for country-level factors - \( \Gamma \) - that previous literature (La Porta et al. 1998; La Porta et al. 2006; Djankov et al. 2008; Hope 2003) finds significant in explaining country-level differences in financial reporting quality. In particular, as in La Porta et al. (1998), we control for the legal origin of the issuer, debt/GNP ratio, equity/GNP ratio, rule of law (rule), level of corruption (corr), creditor rights protection (La Porta 1998), and CIFAR score (Hope 2003). A positive and significant coefficient \( \alpha_1 \) would provide evidence in support of our hypothesis of higher returns to investors for exempt FPIs.

We test Hypothesis 2 as follows: we run the second stage model (Model 2 above) controlling for earnings quality by including the variable abnormal accruals (calculated as detailed in Appendix 1) in our main Model (2). Additionally, as a sensitivity test, we subdivide our sample into deciles based on the absolute value of abnormal accruals and run Model (2) for each decile.
to determine if the coefficient of *Exemption* is more significant (statistically and economically) for lower/higher level of abnormal accruals (high/low earnings quality).

### 4.1.2 Implied Expected Rate of Return

One stream of research (Ashbaugh Skaife et al. 2004) uses a firm’s expected rate of return, as reported in *Value Line*, to measure the cost of equity capital. Another stream of research measures a firm’s cost of equity capital from financial analysts’ forecasts and focuses on the implied required rate of return to calculate the firm-level cost of equity capital - PEG ratios (Easton 2004). To be consistent with the theoretical framework of Lambert and al. (2007), we would need to use forward looking information in our cost of equity capital estimations. However, because the companies in our sample are foreign private issuers (FPIs), they have a more limited following by financial analysts, and there is not enough available data regarding earnings per share and dividend forecasts in either the First Call or the I/B/E/S databases to systematically assess differences in the expected cost of equity capital between our sub-samples using these traditional models.17

Alternatively, we follow Easton (2006) and his adaptation of the O’Hanlon and Steele (2000) model to compare estimates of the implied expected rate of return between our two sub-samples. The advantage of this approach is that it is forward-looking in that it estimates the implied rate of return based on market and accounting information, without the need for analysts’ EPS forecast.18 We adopt the following regression model:

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17 The widely adopted PEG model, for instance, requires one-year and two-year ahead EPS forecasts and also one-year ahead dividends forecast. We can find in both First Call and I/B/E/S only 35 firm-year observations from 2000 to 2006 with these pieces of information for our sample of exempt companies.

18 As already noted above, analyst forecast data is not available for most of the firms in our sample.
\[
\frac{\text{EPS}_{i,t}}{\text{BPS}_{i,t-1}} = \delta_0 + \delta_1 \frac{\text{PRC}_{i,t} - \text{BPS}_{i,t}^{t-1}}{\text{BPS}_{i,t-1}^{t-1}} + \delta_2 \text{Exemption}_{i,t} + \delta_3 \text{Exemption}_{i,t} \times \frac{\text{PRC}_{i,t} - \text{BPS}_{i,t}^{t-1}}{\text{BPS}_{i,t-1}^{t-1}} + \\
\delta_4 \text{AbnACCR}_{i,t} + \epsilon_{i,t}
\]  

(3)

Where for firm \( i \) at time \( t \) EPS is the realized earnings per share, BPS is the book value of equity per share, PRC is the share price, and \textit{Exemption} is a dummy variable equal to 1 for exempted FPIs and zero for FPIs filing with the SEC.

Assumptions about the rate of growth beyond the forecast horizon can affect the results of the estimation of the expected rate of returns across different regimes. With this model we are able to capture growth differences across regimes (\( \delta_2 \)) and differences in implied rates of return after controlling for growth differences (\( \delta_3 \)). A positive test of significance for \( \delta_2 \) and \( \delta_3 \) captures the difference in expected cost of equity capital between the two sub-samples and provides evidence supporting our first hypothesis. We then add a variable to control for earnings quality (abnormal accruals) and the same test of significance for \( \delta_2 \) and \( \delta_3 \) tests hypothesis 2.

5. Sample and Descriptive Statistics

5.1 Sample Selection

In the past, the SEC regularly published the list of FPIs with a Rule 12g3-2(b) exemption.\(^{19}\) The list was published in 1999, 2002\(^{20}\), 2003, 2004 and 2005\(^{21}\) (the last list was published on June 21, 2005.\(^{22}\)) Our sample includes all FPIs that are either exempt or reporting (excluding companies that switched from exempt to filing, and vice versa) during the test period.

\(^{19}\) The list is available on the SEC website, for instance in the case of year 2005: http://www.sec.gov/divisions/corpfin/internatl/foreignalpha2005.pdf

\(^{20}\) The SEC did not publish any information between May 10, 1999 and May 1, 2002.

\(^{21}\) The last list of the series has been: SEC Release No. 34-51893; International Series Release No. 1291. June 21, 2005: List of Foreign Issuers That Have Submitted Information under the Exemption Relating to Certain Foreign Securities. The list of foreign private issuer exempted from filing with the SEC is available on the SEC website. After the release on June 21, 2005 there have not been updates to the list.

\(^{22}\) One of the authors contacted the SEC for a more updated list and was informed that an updated list is not and will not be available.
from 2000 to 2006. We use a cross-country sample as previous literature indicates that using a cross-country setting to examine the link between disclosure and the cost of capital can be more promising than a single country study based on firm-level data (Hail and Leuz 2006).

For each year, we manually collect from the SEC website the list of FPIs that are exempt or reporting to the SEC. Next, we collect the available accounting and market information from Compustat Global Vantage (Industrial/Commercial and Global Issue files) and from CRSP for both exempt and reporting issuers. For 2005, the last year that the list of exempt FPIs was available, there were 690 exempt issuers and 1236 reporting issuers. Finally, for one of our additional analyses, we gather analysts’ EPS forecasts and adjusted actual EPS numbers from the I/B/E/S database.

See Appendix 1 for the definition of our variables and details of our calculations. Table 1 lists the countries of origin for each firm-year observation in our sample, separately identifying exempt and reporting issuers.

[Insert Table 1 about here]

5.2 Descriptive Statistics

Table 2 presents the descriptive statistics for our sample: Panel A includes all of the companies that are exempt or reporting (excluding companies that switched from exempt to SEC filing, and vice versa) during the test period (2000-2006). Panel B includes companies that applied for an exemption for at least one year during the test period, and Panel C includes companies that filed with the SEC for at least one year during the test period.

[Insert Table 2 about here]

The table does not include variables coming directly from Compustat Global Vantage because the accounting data for companies from different countries are presented in the database.

23 An alternative way of building our sample is included as a sensitivity test. Results and inferences do not change.
in different currencies and with a different scale. Instead, we calculate relative values of each issuer’s accounting results for comparison purposes – for example, we calculate net income over market value and returns to investors as relative measures for comparison across countries.

On average, companies in our sample have an 19% rate of return to investors, the average corporate tax rate is 20%, the average WACC is 24%, and the average value of forecast error ($FE$) (in percentage over the actual EPS\(^{24}\)) is equal to a negative 7%, and the average absolute value of forecast error ($absFE$) is equal to 29 cents.\(^{25}\) The average cost of debt (Debt) for the sample is 6%.

6. Results

Table 3 reports the results of the probit regression that we adopt as a first-stage Heckman model with standard errors clustered by firm. Our results indicate a negative and significant coefficient for $Size$ ($a_1 = -1.419$, significant at 1% confidence level), while $Growth$ and the Book-to-Market ratio ($BM$) are not significant in influencing the probability of a company to apply for the exemption. As Table 3 shows, the likelihood for a company that is cross-listed in the U.S. to be registered and file with the SEC is higher ($Exemption = 0$) if the company is bigger ($Size$).

[Insert Table 3 about here]

6.1.1 Cost of Equity Capital: Realized Returns

The results in Table 4 show that realized returns are positive and differences between our two sub-samples for all of our Models (1) – (4) are statistically significant: column (1) shows the results of the OLS model, columns (2), (3), and (4) show the results of the second-stage

\(^{24}\) As a sensitivity test, we examine analyst forecast errors. Our results are not tabulated and are available from the authors.

\(^{25}\) This result is a confirmation of the analysts’ EPS forecasts “optimism”, i.e. their systematic overestimation of EPS forecast over actual, found by prior literature (Basu and Markov 2004, among many).
Heckman model with country control variables. The Heckman model in column (4) controls for self-selection bias and other variables that previous literature has found important in cross-country analysis. The results in the table provide evidence in support of our first hypothesis: on average FPIs that are exempt from reporting to the SEC under Rule 12g3-2(b) have a higher cost of equity capital – higher realized returns to investors - than do reporting FPIs. The statistically significant inverse Mills ratio (Mills) suggests the importance of controlling, in the first-stage, for the self-selection effect.

[Insert Table 4 about here]

Previous literature uses abnormal accruals as a measure of a company’s earnings quality (Meuwissen et al. 2007; Van der Meulen et al. 2007; Gotti and Mastrolia 2012). When we introduce abnormal accruals as a control variable in our main model to control for earnings quality (column (5)), the coefficient of our test variable (Exemption) is no longer significant while the coefficient of the control variable for abnormal accruals (abnACCR) is positive and highly significant. This result provides evidence in support of Hypothesis 2 that the negative association between disclosure and the cost of equity capital is primarily driven by earnings quality and after controlling for earnings quality, the negative association becomes insignificant, and, instead, we find strong evidence of a negative association between earnings quality (proxied by abnormal accruals) and realized returns.

6.1.2 Cost of Equity Capital: Implied Expected Rates of Return

Our results in Table 5 also provide evidence in support of Hypothesis 1; we find a higher implied expected rate of return for exempt companies ($\delta_2$ coefficient positive and significantly different from zero) after controlling for a different growth rates between exempt and reporting FPIs. When we test if $\delta_2$ and $\delta_3$ together equal to zero, we can reject the null hypothesis at a
10% confidence level (F = 4.60, Prob > F = 0.01); this joint test of significance captures the difference in expected cost of equity capital between the two sub-samples and provides evidence in support of our first hypothesis. After introducing abnormal accruals as a control variable in our main model in order to control for earnings quality, we find the association between implied expected rate of return and our proxy for earnings quality is significant while the coefficient of our test variable (Exemption) becomes almost insignificant. This result provides evidence in support of Hypothesis 2 that the negative association between disclosure and the cost of equity capital is primarily driven by earnings quality and after controlling for earnings quality, the negative association becomes insignificant.

[Insert Table 5 about here]

6.3 Additional Analyses

6.3.1 Strong vs. Weak Investor Protection Country of Origin

Existing theoretical and empirical literature documents the ability and motivation of managers to divert corporate wealth for their own personal gain (Jensen and Meckling 1976; Shleifer and Vishny 1997; La Porta et al. 1998). Leuz et al. (2003) documents how countries with weak legal investor protection and enforcement regimes are characterized by lower earnings quality (and higher earnings management), as managers in these weak regimes use their discretion in financial reporting to extract benefits from their control of the company at the expense of outside shareholders. These authors find that this activity is less prevalent in countries with strong legal investor protection and enforcement regimes. The most recent study (Djankov et al. 2008) in this stream of literature presents a new measure of legal investor protection: the anti-self-dealing index. The index is calculated based on legal rules prevailing in 2003 in 72 countries around the world, and focuses on private enforcement mechanisms, such as
disclosure, approval, and litigation. This index appears to be more effective than the earlier index of anti-director rights in predicting a variety of stock market outcomes. We use this index to subdivide our sample between strong and weak legal investor protection and enforcement regimes using the median value of the index as partition.

Based on this body of literature, we predict that for the subset of FPIs with a home-country characterized by strong legal investor protection and enforcement regimes, the exemption from reporting to the SEC will not be significantly associated with a lower cost of capital. Vice-versa, we predict that for the subset of FPIs with a home-country characterized by weak legal investor protection and enforcement regimes, the exemption from reporting to the SEC will be significantly associated with a higher cost of capital as investors demand a higher return to compensate them for the additional investment risk.

Therefore, we re-test our hypotheses separately for the subsets of companies from strong and weak legal investor protection and enforcement regimes

6.3.1.1 Realized Returns

When we focus on firms from high investor protection countries (Table 6, columns c and d), we do not find evidence of a statistically significant difference in the returns to investors for exempt vs. filing FPIs; the lack of a significant difference remains even after controlling for earnings quality. These results seem to indicate that investors do not require a risk premium for exempt companies from high investor protection home-countries.

[Insert Table 6 about here]

The results are different when we focus on firms from weak investor protection countries. The results in Table 6 (columns e and f) indicate that the cost of equity capital is higher for exempt FPIs from weak investor protection countries. This strong negative relation holds even
after controlling for earnings quality with abnormal accruals (\textit{abnaccr}). These results seem to indicate that investors do consider the lower information disclosures of exempt FPIs from weak investor protection countries (Leuz et al. 2003) and they demand a returns premium to compensate them for the associated additional risk. In summary, high quality earnings seem to mitigate the strong negative association between disclosures and cost of capital only when the legal investor protection environment is strong. This may explain the difference in results and conclusions between our study and Francis et al (2008): Francis et al. examine U.S. companies (a high investor protection country), while we examine companies from varying investor protection regimes.

6.3.1.2 \textit{Implied Expected Rate of Return}

Our results in Table 7 (column a) also provide evidence in support of Hypothesis 1: we find a higher implied expected rate of return for exempt companies ($\delta_3$ coefficient positive and significantly different from zero) after controlling for a differential growth rate between exempt and reporting FPIs.

[Insert Table 7 about here]

The joint test of significance for the implied expected rate of return for exempt companies ($\delta_1 + \delta_3 = 0$) indicates that we can reject the null hypothesis at 1% confidence level ($F=8.64$, $\text{Prob} > F = 0.003$). However, the joint test of significance for $\delta_2$ and $\delta_3$ together equal to zero and, as a result, we cannot reject the null hypothesis. After introducing a control variable for earnings quality (abnormal accruals) into our main model (column b), we find again that the implied expected rate of return for exempt companies is higher than for reporting companies (joint test of $\delta_1 + \delta_3 = 0$, with $F=8.08$, $\text{Prob} > F =0.004$), however, the interaction coefficient is negative and significant. This result seems to provide some evidence in support of Hypothesis 2:
earnings quality provides a mitigating effect on the association between the implied expected rate of return and the exemption.

6.3.2 Total Cost of Capital (WACC)

In addition to testing the association between disclosure and cost of equity capital, we also test the association between disclosure and the total cost of capital (equity and debt capital). As noted above, previous research finds evidence of a negative association between disclosures and lower cost of equity capital (Botosan 1997) and (separately) a lower cost of debt capital (Sengupta 1998).

We measure the issuer’s total cost of capital using the Weighted Average Cost of Capital (WACC) approach, which measures the expected cost of new capital using the market (hence, forward-looking) value of the components of the total capital (equity and debt) invested in the company. The issuer’s WACC is calculated using common stock, bonds, and any other long term debt and multiplying the cost of each capital component by its proportional weight among capital sources (calculated as detailed in Appendix 1).

We gather the data necessary to calculate WACC for each firm in our sample from 2000 through 2006 from Compustat Global. We test our Hypothesis 1 to determine if there are statistically significant differences in the WACC between exempt and reporting companies using the Heckman (1979) model that controls for factors that might influence the decision of a FPI to apply for an exemption with the SEC introducing the inverse mills ratio variable in the second stage regression. The model is similar to the models presented in Section 4.1.1 above:

\[
WACC_{i,t} = \alpha_0 + \alpha_1 Exemption_{i,t} + \alpha_2 Mills_{i,t} + \alpha_3 Size_{i,t} + \epsilon_{i,t}
\]  

(4)
A positive and significant coefficient $\alpha_1$ would provide evidence in support of our first hypothesis of higher total cost of capital ($WACC$) for exempt foreign private issuers ($Exemption = 1$). All other variables are defined in Section 4.1 above.

Similar to our analysis in Section 4.1.1, we test Hypothesis 2 by including the variable abnormal accruals (calculated as detailed in Appendix 1) as a control variable in Eq. (4).

$$\begin{align*}
WACC_{i,t} &= \alpha_0 + \alpha_1 Exemption_{i,t} + \alpha_2 Mills_{i,t} + \alpha_3 Size_{i,t} + \alpha_4 AbnAccr_{i,t} + \varepsilon_{i,t} \\
\end{align*}$$  \hspace{1cm} (5)

Our results (untabulated) indicate that an exemption is associated with a higher total cost of capital. When we introduce a control variable for earnings quality (abnormal accruals) into the main model, our results (untabulated) indicate that earnings quality has completely mitigated the effect of the exemption on total cost of capital: the coefficient of the variable for abnormal accruals becomes positive and significant, while the coefficient of our test variable ($Exemption$) is no longer significant. These results provide evidence in support of our Hypothesis 2 and are similar to the findings of recent literature (Francis et al. 2008) that attribute the negative association between disclosure and cost of capital to earnings quality not information disclosures.

When we partition our sample into strong vs. weak home-country investor protection regimes, we (again) find differences in the results between the two subsamples. For firms from strong investor protection countries, we do not find a statistically significant difference in WACC between exempt and reporting FPIs. However, for firms from low investor protection countries, the total cost of capital (WACC) is statistically higher for exempt firms than for reporting firms, the difference remains even after controlling for earnings quality (abnormal accruals).

6.3.3 Liquidity
As noted previously, Diamond and Verrecchia (1991) show analytically how the disclosure of information to the public can reduce information asymmetry and increase a firm’s liquidity by attracting large institutional investors. Welker (1995) finds evidence of a negative association between well-regarded disclosure policy\textsuperscript{26} and liquidity (proxied by bid-ask spread). Boone and Raman (2001) find that off-balance sheet R&D assets are inversely associated with liquidity. Bushee and Leuz (2005) provide evidence that the effort required to comply with the reporting requirements of the 1934 Exchange Act are significant for registered firms, and so are the market reactions. They examined firms affected by the 1999 regulatory change, which required that firms quoted in the Over-the-Counter Bulletin Board (OTCBB) comply with the reporting requirements of the 1934 Exchange Act. These authors found that 75% of the firms that had not previously reported to the SEC were voluntarily removed from the OTCBB rather than comply with the reporting requirements. Their study also showed that liquidity for newly reporting firms increased significantly while liquidity for non-reporting firms decreased significantly. Based on this research, we hypothesize that the bid-ask spread (a proxy for liquidity) is wider for exempt FPIs than it is for reporting FPIs. We gather the data necessary to test this from CRSP and calculate the bid-ask spreads as the difference between ask and the bid prices at the end of each financial year from 2000 to 2006 for each firm in our sample.

We test to determine if there are statistically significant differences in the bid-ask spread between exempt and reporting companies using both an OLS and a Heckman (1979) model that controls for factors that might influence the decision of a FPI to apply for the exemption. These models are similar to the models presented in Sections 4.1 and 4.2 above:

\[
\text{Spread}_{it} = \alpha_0 + \alpha_1 \text{Exemption}_{it} + \alpha_2 \text{Mills}_{it} + \alpha_3 \text{Size}_{it} + \alpha_4 \text{AbnACCR}_{it} + \beta \Gamma + \varepsilon_{it} \quad (6)
\]

\textsuperscript{26} Welker’s proxy for disclosure policy is financial analysts’ evaluations of a firm’s overall disclosure efforts.
Where Spread is the difference between ask and the bid price on the firm’s stock at the end of the financial period. A positive and significant coefficient $\alpha_1$ would provide evidence in support of our hypothesis of higher asymmetric information for exempt FPIs ($Exemption = 1$). All other variables are defined in Appendix 1.

Our results (untabulated) show that using liquidity (proxied by bid-ask spread) as the dependent variable, the estimated coefficient for our test variable ($Exemption$) is positive and statistically significant for all the models (OLS and second-stage Heckman models). These results lend evidence in support of our hypothesis; on average, reporting FPIs are characterized by higher liquidity, as measured by a narrower the bid-ask spread, than are exempt FPIs. When we introduce a variable for abnormal accruals in the model to control for earnings quality the coefficient of interest ($Exemption$) is still significant and positive, while the coefficient for abnormal accruals is not statistically different from zero.

6.4 Sensitivity Tests

6.4.1 Companies continuously exempt or filing with the SEC

As a sensitivity test, in order to evaluate if our results are dependent on our sample selection procedure, we repeat all of our tests including in our sample only those companies that were either continuously exempt ($Exemption=1$) or continuously reporting to the SEC ($Exemption=0$) during our sample period 2000 through 2006. Using this restricted sample, our results and inferences generally do not change: the exemption coefficients for the regressions where returns and WACC are dependent variables are still positive and significant, while for model (5) (Bid-ask spread as dependent variable) we no longer have a positive and significant coefficient for the $Exemption$ dummy variable.
We did not use this limited sample as our primary sample as the requirement that a firm be either exempt or filing for all periods of our sample introduces a survivorship bias and severely limits our sample size. Indeed, using this restricted sample, our sample size drops for the exempt subsample for the variable Net Income from 2,931 to 548 firm-year observations, and from 2,797 to 539 firm-year observations for the total number of observations for returns to investors.

6.3.2 Panel Regression in Second-Stage Heckman Models

Our sample includes multiple observations for each issuer introducing a potential for serial correlation of the error terms. To address this concern, as a sensitivity test, we run panel regressions instead of OLS regressions for the second-stage Heckman Models (2). Our main results and inferences for Models (2) do not change. Panel regressions for Model (2), with Returns as the dependent variable provide an estimated coefficient for the binary test variable (Exemption) that is positive and significant at the 10% confidence level (z value of 1.94). Similarly with Bid-ask spread as the dependent variable, the estimated coefficient for the binary test variable (Exemption) is positive and significant at the 10% confidence level.

6.4.3 Country & Firm - Clustered Standard Errors

Third, we realize that the error terms from our models might be not independent for firms in the same country. To address this concern, and to make sure that our results are not caused by violating of one of the OLS assumptions or on the choice of the cluster variable, we run our second-stage models using standard errors clustered by country and also by firm.

Inferences\textsuperscript{27} for all models do not change when we cluster at firm level. When we cluster at country level, inferences do not change for all the models. However, Model (2), with Returns as the dependent variable, presents an estimated coefficient for the binary variable Exemption that is positive, but even more strongly significant (at the 1% confidence level), than in our main model.

\textsuperscript{27} All sensitivity test results are untabulated and are available from the authors.
6.4.4 Earnings Quality Effects

As a sensitivity test, we test hypothesis 2 using a different measure of earnings quality; we subdivide our sample into deciles based on the absolute value of abnormal accruals (\(abnACCR\), defined in Appendix 1) and run our models separately for each decile in the sample. When \(Returns\) is the dependent variable, only the 9\(^{th}\) deciles provide a coefficient estimate for the variable \(Exemption\) that is statistically different from zero. With \(WACC\) as a dependent variable, the 8\(^{th}\) and 9\(^{th}\) deciles are showing a positive and significant (at 5\% and 10\% significance level, respectively) coefficient estimates for the variable \(Exemption\). With bid-ask spread (\(Spread\)) as a dependent variable, the 1\(^{st}\), 3\(^{rd}\) and 4\(^{th}\) deciles provide a positive and significant estimate for the \(Exemption\) coefficient.

6.4.5 Rule of Law (Enforcement)

We argue in this paper that one of the main reasons why exempt FPIs are characterized by higher cost of capital (equity/total) and wider bid-ask spread is because the SEC has a lower enforcement power over exempt FPIs versus reporting FPIs. We control for different enforcement levels at a country level with the variable \(Rule\) from La Porta et al. (1998). Recently La Porta’s measure of enforcement has been criticized because it only measures the rules on the books and does not rely on both inputs and outputs and does not includes both public and private measures of enforcement (Holthausen 2009; Coffee 2007; Mahoney 2009). Among the new measures proposed to address these shortcomings is the rule of law index from Kaufmann, Kraay, and Mastruzzi (Kaufmann et al. 2009). We include this alternate measure of enforcement level in our dataset and re-run Model (2), (4), and (5) to verify the robustness of our results. Our inferences remain unchanged.

7. Conclusions
Previous literature indicates an association between lower information risk and a lower cost of capital (Diamond and Verrecchia 1991; Lambert et al. 2007; Merton 1987), and higher liquidity (Welker 1995). This paper provides evidence, for an international sample of firms, that greater information risk is associated with a higher cost of equity capital and higher cost of total capital. We also find that the relation between the cost of capital and disclosure still persists when we control for earnings quality, providing evidence that the results previously found on a US sample of firms (Francis et al. 2008) cannot be ipso facto generalized to a sample of international firms cross-listed in the U.S. market.

Specifically, our statistical analysis provides evidence that exempt FPIs pay a premium to investors in the form of a higher cost of equity capital (realized returns and implied expected rate of return) and a higher cost of total capital (WACC), as compared to reporting FPIs and this premium is still present after controlling for earnings quality when the firms are from a country characterized by low legal investor protection regimes. Also, we find evidence of a narrower bid-ask spread for reporting FPIs compared to exempt FPIs, a sign of higher liquidity, and this association is between disclosure quality and firm liquidity, robust to the inclusion of an earnings quality factor in the model. Our results are robust to a battery of sensitivity tests.

This study makes several contributions to the existing literature. First, it provides empirical evidence of the theoretical link between disclosure quality and cost of capital for a sample of international companies. Second, it shows that the results found by Francis et al. (2008) for a sample of US firms cannot be simplistically generalized to an international sample as the home-country legal investor protection regime seems to have a differential effect on the relation between earnings quality and returns. Third, our results enhance our knowledge of the characteristics of exempt and reporting FPIs. Fourth, the study might be of interest to policy
makers and investors in light of the recent decision to expand availability of the reporting exemption to a broader set of firms, as this study’s results, combined with the results in Gotti and Mastrolia (2012) would suggest that, for firms from weak home-country legal investor protection regimes, the exemption may result in a higher cost of capital.

7.1 Limitations

In the paper we use a unique sample of companies to test a key theoretical accounting relationship: the association between information risk and the cost of capital. While our results provide strong evidence of an association between the existence of an SEC reporting exemption for FPIs and a higher cost of capital (total/equity) and lower liquidity (larger bid-ask spread), we acknowledge that these results do not provide evidence of a causal relationship.

Additionally, due to data availability, our first proxy for the cost of equity capital is only a rough approximation, since it is based on historical data obtained ex-post rather than on forward-looking expectations. However, as mentioned previously, to mitigate this problem we use the (forward-looking) implied expected rate of return based on Easton (2006) and also calculate the WACC based on the market value of equity and debt to provide a forward-looking dimension to the total cost of capital measure, since the market price incorporates expectations about the company’s future cash flows. Finally, despite the inclusion of extensive country-level controls, this study is not immune to the correlated omitted variable problems present in cross-country studies.

7.2 Future research

Firms traded in the over-the-counter market are not subject to the same level of regulation as reporting FPIs (Lang et al. 2003). Since 1967, when the SEC adopted the exemption under Rule 12g3-2(b), no company has been sued for false or misleading disclosure in documents furnished
under the rule and no investor has successfully sued a company under the rule. Also the SEC has recently relaxed the requirements for firms to claim the reporting exemption. These facts, together with results from this and previous studies (Lang et al. 2003; Gotti and Mastrolia 2012), seem to indicate the need for more research focusing on the characteristics of exempt FPIs, their countries of origin and their economic activities, their involvement in accounting or legal controversies either in their home countries or abroad, and the determinants of their decisions to switch from exempt status to reporting status or vice-versa. We plan to address some of these issues in a current working paper.
List of References


Appendix 1: Variables Definition

To compute the variables used in the model, we obtain the following information for each issuer for each year.

From the Global Vantage database:
- Total sales (DATA1),
- Interest and related expenses (DATA15),
- Income before income taxes and approx. (DATA21)
- Income taxes – Total (DATA23),
- Net income (DATA32),
- Extraordinary Items (DATA33),
- Dividends to common shares (DATA36),
- Total current assets (DATA75),
- Debt in current liabilities (DATA94),
- Dividends (DATA102),
- Current liabilities (DATA104),
- Deferred taxes (DATA105),
- Long term debt (DATA106),
- Other liabilities (DATA109),
- Shareholders’ Equity (DATA135)
- Common Equity (DATA146)
- Price of the company share (PRC – from Global Issue file),
- Number of shares outstanding (SHOUT – from Global Issue file).

From I/B/E/S database:
- One-year ahead EPS estimates,
- Adjusted EPS actual value.

From CRSP database:
- Bid price
- Ask price
- Bid-Ask spread: Ask price-Bid price

Manually collected from the SEC website:
- Exemption, equal to 1 when the foreign private issuer is exempt from SEC filings for at least 1 year from 2000 to 2006, 0 if it is filing at least 1 year over the same time horizon.

We calculate:
• Market value (E) as number of share outstanding (adjusted28) times the price (P) (adjusted) at the beginning of the period.
• Net income as the net income (DATA32) divided by lagged market value.
• Change in net income as DATA32 – lagged DATA32 divided by market value.
• Size is the natural log of the total asset (DATA89).
• BM is the ratio of book value of common equity (DATA146) over market value of equity (E).
• Returns with dividends (RET) as price (adjusted) plus dividends to common shares (DATA36) times share outstanding (adjusted) minus the lagged price (adjusted) divided by the lagged price (adjusted).
• Tc as total income taxes (DATA23) divided by total income before taxes and appr. (DATA21).
• D is the total book value of the firm’s long term debt (DATA106).
• E is the firm’s market value (see above).
• Re is returns to investors – RET - (see above).
• Rd, the cost of debt and leases, calculated as interest and related expenses (DATA15) divided by average total debt \[DATA106(t)+DATA94(t)+DATA106(t-1)+DATA94(t-1)/2\]
• Analysts forecast error (FE) as actual EPS minus median analysts’ one-year ahead forecast EPS. Then we calculate the absolute value as: abs(FE)= absFE
• EPS, Earning per share, calculated as Net Income before extraordinary items (DATA32-DATA33) over number of share outstanding (adjusted) at the beginning of the period. Winsorized at 1 and 99%
• BPS: book value of equity per share, calculated as shareholders’ equity (DATA135) over number of share outstanding (adjusted) at the beginning of the period. Winsorized at 1 and 99%
• The issuer’s WACC is calculated using common stock, bonds, and any other long term debt and multiplying the cost of each capital component by its proportional weight among all capital sources, as the following equation shows:
\[
WACC_{it} = \frac{E}{V} \times Re + \frac{D}{V} \times Rd \times (1 - Tc)
\]
Where:
- WACC = the firm year estimate of the weighted average cost of capital
- Re = the expected rate of return on equity, or cost of equity
- Rd = the expected rate of return on borrowings, or cost of debt
- E = the market value of the firm's equity

28 In order to make shares and stock prices directly comparable through time we use Cumulative Adjustment Factors (CAF) from Wharton Research Data Services (WRDS). We calculate adjusted stock price and adjusted shares outstanding by multiplying numbers from the Global Vantage Global Issue database with the CAF provided by WRDS.
D = the book value of the firm's debt

V = E + D, total capital invested

E/V = the percentage of equity financing

D/V = the percentage of debt financing

Tc = the corporate tax rate

**Abnormal Accruals Modeling for International Companies**

Following previous literature (Francis and Wang 2008) we calculate current accruals using data from COMPUSTAT Global Industrial and Commercial file. We calculate predicted accruals as:

\[
\text{Predicted accruals} = \left\{ \left[ \text{Sales (DATA1)} \text{ in year } t \times \left( \text{current accruals in year } t-1 \text{/sales in year } t-1 \right) \right] - \left[ \text{gross PPE (DATA77)} \text{ in year } t \times \left( \text{depreciation in year } t-1 \times (\text{DATA11-DATA13}) \text{/gross PPE in year } t-1 \right) \right] \right\} / \text{total assets (DATA89) in year } t-1.
\]

Abnormal accruals are defined as the firm’s actual total accruals in year \( t \), minus predicted total accruals for year \( t \) as defined above. Total accruals in year \( t \) are calculated as follows:

\[
\text{Total accruals} = \left( \text{Earnings before extraordinary items} \right. \text{ - Operating cash flows} ) / \text{total assets (DATA89) in year } t-1,
\]

where:

- **Earnings before extraordinary items** = net income (DATA32) - extraordinary items (DATA33); Operating cash flows = Earnings before extraordinary items + Depreciation and Amortization (DATA11) + change in deferred income tax (DATA105) + change in untaxed reserve (DATA108) + change in other liabilities (DATA109) + minority interest (DATA27) - current accruals (as defined below).

- **Current accruals** = change in non-cash working capital = \( \Delta \left[ \text{total current assets (DATA75) - cash and short term investments (DATA60) - treasury stock shown as current assets (DATA73)} \right] - \Delta \left[ \text{total current liabilities (DATA104) - total amount of debt in current liabilities (DATA94) - proposed dividends (DATA102)} \right].

Abnormal accruals are calculated each year for the firms in the sample using data from 2000 to 2006. Because we need data for three consecutive years to calculate abnormal accruals, we collect accounting and market information starting from 1997 so that we can compute abnormal accruals for the period 2000-2005. Abnormal accruals are scaled by a firm’s lagged total assets.

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29 Debt includes the company’s bonds and bank loans. Because there is no available direct valuation of the market value of loans, and because the market value of debt tends to approximate to the book value (for companies that have not experienced recent and significant changes in credit rating), the book value of debt is usually used in the WACC formula as a proxy for the market value of debt.
In more formal notation:

\[
\text{Predicted Accrual} = \frac{\left[ Sales_t \times \left( \frac{CA_{t-1}}{Sales_{t-1}} \right) \right] - \left[ \text{gross PPE}_t \times \left( \frac{\text{depr}_{t-1}}{\text{gross PPE}_{t-1}} \right) \right]}{TA_{t-1}}
\]

All the variables are defined above.
Table 1: Firm-year observations by country of origin (2000-2006)\textsuperscript{30}

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<td>217</td>
</tr>
<tr>
<td>GBR (Great Britain)</td>
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<tr>
<td>GRE (Greece)</td>
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<tr>
<td>HKG (Hong Kong)</td>
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<td>14</td>
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<tr>
<td>IDN (Indonesia)</td>
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<tr>
<td>IND (India)</td>
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<td>48</td>
<td>96</td>
</tr>
<tr>
<td>IRL (Ireland)</td>
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<td>13</td>
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<td>ISR (Israel)</td>
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<td>ITA (Italy)</td>
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<td>JPN (Japan)</td>
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<td>391</td>
<td>574</td>
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<tr>
<td>KOR (Korea)</td>
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<td>40</td>
<td>96</td>
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<td>LBR (Liberia)</td>
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<td>LUX (Luxembourg)</td>
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<td>34</td>
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<tr>
<td>MEX (Mexico)</td>
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<td>74</td>
<td>154</td>
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<tr>
<td>MHL (Marshall Islands)</td>
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<td>MYA (Malaysia)</td>
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<td>61</td>
<td>61</td>
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<tr>
<td>NLD (Netherlands)</td>
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<td>194</td>
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<td>NOR (Norway)</td>
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<td>10</td>
<td>64</td>
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<tr>
<td>NZL (New Zealand)</td>
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<td>23</td>
<td>30</td>
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<td>PAN (Panama)</td>
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<tr>
<td>PER (Peru)</td>
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<td>PHL (Philippines)</td>
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<td>PNP (Papua New Guinea)</td>
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<td>SGP (Singapore)</td>
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<td>46</td>
<td>73</td>
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<td>SVK (Slovak Republic)</td>
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<td>7</td>
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<td>SWE (Sweden)</td>
<td>37</td>
<td>67</td>
<td>104</td>
</tr>
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<td>THA (Thailand)</td>
<td>7</td>
<td>62</td>
<td>69</td>
</tr>
<tr>
<td>TUR (Turkey)</td>
<td>6</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>TWN (Taiwan)</td>
<td>41</td>
<td>28</td>
<td>69</td>
</tr>
<tr>
<td>VGB (British Virgin Islands)</td>
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<td>6</td>
<td></td>
</tr>
<tr>
<td>ZAF (South Africa)</td>
<td>44</td>
<td>88</td>
<td>132</td>
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<tr>
<td><strong>Totals</strong></td>
<td>3,739</td>
<td>2,943</td>
<td>6,682</td>
</tr>
</tbody>
</table>

\textsuperscript{30} The sample includes companies that between 2000 and 2006 have been (in at least one of the years) either exempt from filing, or filing with the SEC. We exclude companies that over the sample period have been both exempt and filing with the SEC.
Table 2: Descriptive Statistics

Panel A: Companies exempted from filing with the SEC 2000-2006

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Mean</th>
<th>S.D.</th>
<th>Min</th>
<th>.25</th>
<th>Mdn</th>
<th>.75</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Income</td>
<td>2931</td>
<td>0.13</td>
<td>0.68</td>
<td>-1.26</td>
<td>0.01</td>
<td>0.06</td>
<td>0.12</td>
<td>6.81</td>
</tr>
<tr>
<td>RET</td>
<td>2797</td>
<td>0.22</td>
<td>0.63</td>
<td>-0.92</td>
<td>-0.12</td>
<td>0.12</td>
<td>0.41</td>
<td>3.75</td>
</tr>
<tr>
<td>Size</td>
<td>2943</td>
<td>7.89</td>
<td>2.11</td>
<td>0.08</td>
<td>7.13</td>
<td>8.36</td>
<td>9.48</td>
<td>13.55</td>
</tr>
<tr>
<td>Tc</td>
<td>2853</td>
<td>0.23</td>
<td>0.34</td>
<td>0.16</td>
<td>0.27</td>
<td>0.35</td>
<td>1.73</td>
<td></td>
</tr>
<tr>
<td>WACC</td>
<td>2217</td>
<td>0.27</td>
<td>0.52</td>
<td>-0.79</td>
<td>0.01</td>
<td>0.20</td>
<td>0.48</td>
<td>2.22</td>
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</table>

Panel B: Companies that file with the SEC 2000-2006

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Mean</th>
<th>S.D.</th>
<th>Min</th>
<th>.25</th>
<th>Mdn</th>
<th>.75</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Income</td>
<td>3714</td>
<td>0.04</td>
<td>0.57</td>
<td>-1.26</td>
<td>-0.00</td>
<td>0.02</td>
<td>0.07</td>
<td>6.81</td>
</tr>
<tr>
<td>RET</td>
<td>3584</td>
<td>0.17</td>
<td>0.69</td>
<td>-0.92</td>
<td>-0.21</td>
<td>0.05</td>
<td>0.37</td>
<td>3.75</td>
</tr>
<tr>
<td>Size</td>
<td>3793</td>
<td>7.57</td>
<td>2.36</td>
<td>-0.34</td>
<td>6.38</td>
<td>7.96</td>
<td>9.39</td>
<td>13.25</td>
</tr>
<tr>
<td>Tc</td>
<td>3683</td>
<td>0.18</td>
<td>0.37</td>
<td>-1.43</td>
<td>0.00</td>
<td>0.21</td>
<td>0.35</td>
<td>1.73</td>
</tr>
<tr>
<td>WACC</td>
<td>2349</td>
<td>0.21</td>
<td>0.55</td>
<td>-0.79</td>
<td>-0.12</td>
<td>0.14</td>
<td>0.39</td>
<td>2.22</td>
</tr>
</tbody>
</table>

Panel C: Correlation Table

<table>
<thead>
<tr>
<th>Exemption</th>
<th>Size</th>
<th>Net Income</th>
<th>Abnaccrw</th>
<th>RET</th>
<th>WACC</th>
<th>Tc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exemption</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size</td>
<td>0.0957*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Income</td>
<td>0.1152*</td>
<td>0.2920*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abnaccrw</td>
<td>0.0997*</td>
<td>-0.033</td>
<td>0.0249</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RET</td>
<td>0.0453*</td>
<td>-0.0078</td>
<td>0.2198*</td>
<td>0.0126</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>WACC</td>
<td>0.0905*</td>
<td>0.0535*</td>
<td>0.2983*</td>
<td>-0.0131</td>
<td>0.7246*</td>
<td>1</td>
</tr>
<tr>
<td>Tc</td>
<td>0.0812*</td>
<td>0.1617*</td>
<td>0.1355*</td>
<td>-0.0009</td>
<td>0.0159</td>
<td>-0.0137</td>
</tr>
</tbody>
</table>

The table reports Pearson correlation coefficients. * denotes significance at the 5% level.

Where Net Income is the winsorized (1%) measure of net income, calculated as the firm’s net income (DATA32) divided by the firm’s lagged market value, RET is the winsorized measure (1%) of the “with dividends” returns to investors, calculated as price (adjusted) plus dividends to common shares (DATA36) times share outstanding minus the lagged price divided by the lagged price, Size is the natural log of the total assets (DATA89), Tc is the winsorized measure (1%) of the corporate tax rate, measured as total income taxes (DATA23) divided income before income taxes and appr. (DATA21), and finally WACC is the winsorized measure (1%) of the weighted average cost of capital, calculated multiplying the cost of each capital component – cost of equity and cost of debt - by its proportional weight among capital sources. Debt is the cost of debt calculated as total interest expenses over the average of total long term debt + debt in current liability multiplied (1-country corporate tax rate)

31 for at least one year between 2000 and 2006.
32 for at least one year between 2000 and 2006.
Table 3 Heckman Model: First-stage probit model predicting exemption decision

\[
\text{Pr}(\text{Exemption} = 1) = \alpha_0 + \alpha_1 \text{Size}_{it} + \alpha_2 \text{BM}_{it} + \alpha_3 \text{Growth}_{it} + \delta \text{Country}_i + \gamma \text{Industry}_i + \varepsilon_{it}
\]  

\[ (1) \]

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>P(Exemption=1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>-1.419</td>
</tr>
<tr>
<td></td>
<td>(-4.64) ***</td>
</tr>
<tr>
<td>BM</td>
<td>3007.404</td>
</tr>
<tr>
<td></td>
<td>(0.95)</td>
</tr>
<tr>
<td>Growth</td>
<td>0.032</td>
</tr>
<tr>
<td></td>
<td>(0.87)</td>
</tr>
<tr>
<td>Observations</td>
<td>3653</td>
</tr>
<tr>
<td>Pseudo R2</td>
<td>0.3571</td>
</tr>
</tbody>
</table>

Figures in brackets are z-statistics. Standard errors are robust and clustered at firm level. Significance levels are based on two-tailed tests. ***, **, * denotes significance at 1%, 5%, 10% levels, respectively.

We include in the model: Size, the natural log of book value of total assets, as previous research finds this variable to be significant in explaining the decision to cross-list; BM, the book-to-market ratio to proxy for firm-level risk factors, that has been used by previous literature as a measure of unconditional conservatism (Beaver and Ryan 2005). Growth is the percentage of increase of sales (DATA1) with respect to the previous year and proxies for the different business environments of the firms in our sample. We include in the first-stage regression binary variables for the firms’ countries of incorporation, to account for possible differences in local GAAPs. Finally we include industry binary variable adopting an industry classification based, for consistency with previous research, on Fama and French (1997) definitions. We exclude for parsimony the country and industry coefficients from the table, available from the authors.

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33 Different GAAPs might influence the meaning of common accounting definitions that, in turn, might influence our analysis at the second-stage level, and thus, our results. For instance, the common definition of Net Income might recognize different revenues and expenses under different accounting standards.
Table 4: OLS and Second-stage Heckman model with dependent variable Returns

\[ \text{Ret}_{lt} = \alpha_0 + \alpha_1 \text{Exemption}_{lt} + \alpha_2 \text{Mills}_{lt} + \alpha_3 \text{Size}_{lt} + \alpha_4 \text{AbnAccr}_{lt} + \beta \Gamma + \epsilon_{lt} \]  

(2)

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Expected Sign</th>
<th>(1) RET</th>
<th>(2) RET</th>
<th>(3) RET</th>
<th>(4) RET</th>
<th>(5) RET</th>
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</thead>
<tbody>
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<td>exemption</td>
<td>(+)</td>
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<td>0.066</td>
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<td></td>
<td></td>
<td>(0.021) ***</td>
<td>(0.026) ***</td>
<td>(0.026) ***</td>
<td>(0.026) **</td>
<td>(0.028)</td>
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<tr>
<td></td>
<td></td>
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<td>(0.005)</td>
<td>(0.005)</td>
<td>(0.006)</td>
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<tr>
<td>mills</td>
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<td>-0.073</td>
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<tr>
<td></td>
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<td>(0.014)</td>
<td>(0.015)</td>
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<tr>
<td>_Origin_2</td>
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<tr>
<td></td>
<td></td>
<td>(0.028) **</td>
<td>(0.048) ***</td>
<td>(0.051) ***</td>
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<td></td>
<td></td>
<td>(0.031)</td>
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<td>(0.084)</td>
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<tr>
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<td>(0.048)</td>
<td>(0.073)</td>
<td>(0.078)</td>
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<td>(0.084)</td>
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<td>(0.020) ***</td>
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<td>cred</td>
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<td>(0.016)</td>
<td>(0.016)</td>
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<td>(0.004) *</td>
<td>(0.005)</td>
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<td>(0.050) **</td>
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<tr>
<td>constant</td>
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<tr>
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<td></td>
<td>(0.038) ***</td>
<td>(0.048) ***</td>
<td>(0.048) ***</td>
<td>(0.243) **</td>
<td>(0.251) **</td>
</tr>
<tr>
<td>Observations</td>
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<td>3653</td>
<td>3653</td>
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</tr>
<tr>
<td>R-squared</td>
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<td>0.0018</td>
<td>0.0036</td>
<td>0.0106</td>
<td>0.0113</td>
<td></td>
</tr>
</tbody>
</table>

SE are in parentheses. Significance levels are based on two-tailed tests. ***, **, * denotes significance at 1%, 5%, 10% levels, respectively. The vector \( \Gamma \) includes all of the country variables that previous literature found important in explaining country-level differences in financial reporting quality. In particular, we control for Legal Origin from to La Porta et al. (1998): Legal origin=1 for firms from Australia, Canada, Malaysia, Singapore, South Africa, Thailand, UK, United States, Hong Kong, India, Ireland, Israel, New Zealand, and British Virgin Islands. Legal origin=2 if the firm is from Brazil, Chile, France, Indonesia, Italy, Netherlands, Spain, Netherlands Antilles, Argentina, Belgium, Greece, Mexico, Peru, Philippines, Portugal, Turkey. Legal origin=3 if the firm is from Germany, Japan, Korea, Austria, Swiss, Taiwan. Legal origin=4 if the firms is from Denmark, Finland, Norway, Sweden. We also control for the ratio Debt/GNP, Equity/GNP, the Rule of Law (Enforcement), Corruption (level of corruption), and Creditor Rights (as defined in La Porta et al. 1998). Finally, we control for CIFAR Score that is used as a proxy for Corporate governance disclosure index by previous literature (Hope 2003). AbnACCR is defined in Appendix 1.
Table 5: Implied Expected Rate of Return (Easton 2006)

\[
\frac{EPS_{it}}{BPS_{i,t-1}} = \delta_0 + \delta_1 \frac{PRC_{it} - BPS_{it}}{BPS_{i,t-1}} + \delta_2 Exemption_{i,t} + \delta_3 Exemption_{i,t} \times \frac{PRC_{it} - BPS_{it}}{BPS_{i,t-1}} + \delta_4 AbnACCR_{i,t} + \varepsilon_{i,t} \tag{3}
\]

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Expected</th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sign</td>
<td>EPS/BPS_{i,t-1}</td>
<td>EPS/BPS_{i,t-1}</td>
</tr>
<tr>
<td>PRC-BPS/BPS_{i,t-1}</td>
<td>0.0000146</td>
<td>0.0021778</td>
<td>(0.000032) (0.0004221) ***</td>
</tr>
<tr>
<td>Exemption</td>
<td>0.0911937</td>
<td>0.3266803</td>
<td>(0.396066) (0.4171858)</td>
</tr>
<tr>
<td>PRC-BPS/BPS*Exemption</td>
<td>(+) 0.0011849</td>
<td>-0.001128</td>
<td>(0.0004088) ** (0.000581) *</td>
</tr>
<tr>
<td>abnACCR</td>
<td>4.525093</td>
<td>(0.8703171) ***</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.3079408</td>
<td>0.5760477</td>
<td>(0.2571762) (0.3043306)</td>
</tr>
<tr>
<td>Observations</td>
<td>5484</td>
<td>4795</td>
<td></td>
</tr>
<tr>
<td>R-squared</td>
<td>0.0018</td>
<td>0.0137</td>
<td></td>
</tr>
</tbody>
</table>

Standard errors are in parentheses. Significance levels are based on two-tailed tests. ***, **, * denotes significance at 1%, 5%, 10% levels, respectively. Where for firm i a time t EPS is the realized earnings per share, BPS is the book value of equity per share, PRC is the share price, and Exemption is a dummy variable equal to 1 for exempted FPIs and zero for FPIs filing with the SEC. AbnACCR is defined in Appendix 1.
Table 6: Second-stage Heckman model with dependent variable Realized Returns. Conditional analysis

\[ \text{Ret}_{it} = \alpha_0 + \alpha_1 \text{Exemption}_{it} + \alpha_2 \text{Mills}_{it} + \alpha_3 \text{Size}_{it} + \alpha_4 \text{AbnACCR}_{it} + \text{Country, Year, and Industry fixed effects} + \epsilon_{it} \]  

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Full sample</th>
<th>High Investor Protection</th>
<th>Low Investor Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(a)</td>
<td>(b)</td>
<td>(c)</td>
</tr>
<tr>
<td>exemption</td>
<td>0.050</td>
<td>0.047</td>
<td>0.032</td>
</tr>
<tr>
<td></td>
<td>(2.30)**</td>
<td>(2.11)**</td>
<td>(0.93)</td>
</tr>
<tr>
<td>mills</td>
<td>-0.110</td>
<td>-0.105</td>
<td>-0.043</td>
</tr>
<tr>
<td></td>
<td>(-2.10)**</td>
<td>(-1.94)*</td>
<td>(-0.58)</td>
</tr>
<tr>
<td>size</td>
<td>0.005</td>
<td>0.003</td>
<td>-0.009</td>
</tr>
<tr>
<td></td>
<td>(0.75)</td>
<td>(0.42)</td>
<td>(-0.94)</td>
</tr>
<tr>
<td>abnACCR</td>
<td>-0.080</td>
<td>-0.175</td>
<td>-1.75</td>
</tr>
<tr>
<td></td>
<td>(-1.76)*</td>
<td>(-2.47)**</td>
<td></td>
</tr>
<tr>
<td>constant</td>
<td>-0.026</td>
<td>-0.005</td>
<td>0.030</td>
</tr>
<tr>
<td></td>
<td>(-1.10)</td>
<td>(-0.02)</td>
<td>(0.09)</td>
</tr>
<tr>
<td>Observations</td>
<td>5,249</td>
<td>4,757</td>
<td>2,956</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.098</td>
<td>0.097</td>
<td>0.083</td>
</tr>
</tbody>
</table>

T values are in parentheses.
Significance levels are based on two-tailed tests. ***, **, * denotes significance at 1%, 5%, 10% levels, respectively.
We do not report the coefficient estimates for fixed effects for parsimony.
AbnACCR is our measure of earnings quality at firm level and is calculated as detailed in Appendix 1.
Table 7: Implied Expected Rate of Return (Easton 2006). Conditional analysis

\[
\frac{\text{EPS}_{t-1}}{\text{BPS}_{t-1}} = \delta_0 + \delta_1 \frac{\text{PRC}_{t-1} - \text{BPS}_{t-1}}{\text{BPS}_{t-1}} + \delta_2 \text{Exemption}_{t,1} + \delta_3 \text{Exemption}_{t,1} \ast \frac{\text{PRC}_{t-1} - \text{BPS}_{t-1}}{\text{BPS}_{t-1}} + \delta_4 \text{AbnACCR}_{t,1} + \varepsilon_{t,1} \quad (3)
\]

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Full Sample</th>
<th>High Investor Protection</th>
<th>Low Investor Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EPS/BPS_{t-1}</td>
<td>EPS/BPS_{t-1}</td>
<td>Selfdealing D=1</td>
</tr>
<tr>
<td>PRC-BPS_{t-1}/BPS_{t-1}</td>
<td>0.000</td>
<td>0.003</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.46)</td>
<td>(5.76)***</td>
<td>(-1.25)</td>
</tr>
<tr>
<td>Exemption</td>
<td>0.090</td>
<td>0.342</td>
<td>0.478</td>
</tr>
<tr>
<td></td>
<td>(0.23)</td>
<td>(0.84)</td>
<td>(1.19)</td>
</tr>
<tr>
<td>PRC-BPS_{t-1}/BPS_{t-1}*Exemption</td>
<td>0.001</td>
<td>-0.001</td>
<td>-0.003</td>
</tr>
<tr>
<td></td>
<td>(2.89)***</td>
<td>(-2.35)**</td>
<td>(-1.12)</td>
</tr>
<tr>
<td>abnACCR</td>
<td>3.671</td>
<td></td>
<td>-6.960</td>
</tr>
<tr>
<td></td>
<td>(3.74)***</td>
<td></td>
<td>(-5.71)***</td>
</tr>
<tr>
<td>Constant</td>
<td>0.310</td>
<td>0.399</td>
<td>-0.241</td>
</tr>
<tr>
<td></td>
<td>(1.20)</td>
<td>(1.31)</td>
<td>(-0.96)</td>
</tr>
<tr>
<td>Observations</td>
<td>5,472</td>
<td>4,876</td>
<td>3,201</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.001</td>
<td>0.011</td>
<td>0.001</td>
</tr>
</tbody>
</table>

T values are in parentheses.
Significance levels are based on two-tailed tests. ***, **, * denotes significance at 1%, 5%, 10% levels, respectively.
Where for firm i a time t EPS is the realized earnings per share, BPS is the book value of equity per share, PRC is the share price, and Exemption is a dummy variable equal to 1 for exempted FPIs and zero for FPIs filing with the SEC. AbnACCR is defined in Appendix 1.