NIPE

Documentos de Trabalho

Working Paper Series

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NÚCLEO DE INVESTIGAÇÃO EM POLÍTICAS ECONÓMICAS

UNIVERSIDADE DO MINHO

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NIPE[*] WP 21/ 2013

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January 2013

Abstract

We examine how the reduction in information asymmetry brought about by the adoption of International Financial Reporting Standards (IFRS) affects the adverse selection costs of issuing equity at home and abroad. In particular, we examine whether there has been a reduction in the costs of raising equity in foreign markets- the capital markets liability of foreignness (CMLOF). Consistent with the view that mandatory IFRS adoption reduces information asymmetry, we find an increase in equity issues following IFRS adoption. In addition, we find an increase in the probability of firms issuing equity (and in the amount of equity raised) in foreign markets following IFRS adoption, suggesting a reduction in CMLOF costs. These results are more pronounced for smaller firms, with lower analyst coverage, and for firms with more need of external finance. Finally, we find lower adverse reaction to the announcement of equity offerings in foreign markets following IFRS adoption.

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1. Introduction

The information asymmetry problems between managers and outside investors make it expensive for firms to issue equity (Myers and Majluf, 1984). These problems are exacerbated when firms raise capital in foreign markets. In addition to the information asymmetry problems associated with raising funds through equity offerings, when firms raise capital in foreign markets they face additional obstacles. Bell, Filatotchev, and Rasheed (2012) describe the costs that foreign firms face in accessing foreign capital markets as the capital market liability of foreignness (CMLOF). In addition to information asymmetry, these include institutional distance, difficulties in information gathering, unfamiliarity, and cultural distance. These costs result in a disadvantage for foreign firms relative to domestic firms when raising capital in foreign markets, which discourages firms from issuing equity abroad and could result in firms forgoing valuable investment opportunities when they are financially constrained, especially for firms from countries with limited capital markets. While firms can employ various strategies to mitigate costs associated with accessing capital markets, such as bonding to tougher regulatory regimes by listing in foreign exchanges with better investor protection (Coffee 1999; Stulz 1999; Doidge, Karolyi, and Stulz 2004), changes in the institutional environment of a country can also help to reduce costs associated with CMLOF by improving, among others, the quality, accessibility, and comparability of financial information. In this study we focus on the latter and explore whether a major change in the institutional environment of a country, the adoption of International Financial Reporting Standards (IFRS) and the events surrounding this major development, leads to a reduction in information asymmetry and CMLOF costs that make issuing equity in foreign markets cost prohibitive.

The adoption of IFRS is one of the most important developments in reporting standards in history. International Financial Reporting Standards were designed primarily to provide more accurate, comprehensive, and timely financial statement information, and to reduce international differences in accounting standards by standardizing reporting formats. Existing literature documents that IFRS require greater disclosure and are more comprehensive than local accounting standards (Ashbaugh and Pincus 2001; Ding et al. 2007) and improve the comparability of firms across markets, which improves capital allocation efficiency (Covrig et al. 2007; Armstrong et al. 2010). Improved disclosure should reduce information asymmetry, enhance liquidity and reduce the cost of capital (Diamond and Verrecchia 1991; Easley and O'Hara 2004). Consistent with this view, several studies document reductions in cost of capital associated with both mandatory and voluntary IFRS adoption (Leuz and Verrecchia 2000; Daske *et al.* 2008; Li 2010; Daske *et al.* 2011). These studies emphasize the importance of both enforcement and firms' reporting incentives on the impact of IFRS adoption.

In this paper, we examine how the adoption of IFRS and its potential reduction in information asymmetry affects subsequent equity offerings. We explore four hypotheses related to the impact of IFRS adoption on a firm's ability to raise capital through equity issues. First, we posit that the adoption of IFRS should lead to an increase in equity issues as a result of an improved information environment. This is likely to happen because the informational asymmetry between managers and investors described in Myers and Majluf (1984) will be mitigated once investors have access to better and more accurate financial information. Thus, the cost of issuing equity will decline and firms will be more inclined to raise funds in the equity markets. Second, we hypothesize that IFRS adoption should lead to an increase in equity issuances in foreign markets as a result of a reduction in the costs associated with the capital market liability of foreignness (CMLOF). One of the objectives of IFRS is to reduce international differences in accounting standards by standardizing reporting formats. This should improve the comparability of firms across countries and should make it easier and less costly for foreign investors to analyze firms' financial statements, which should reduce one of the main sources of CMLOF, difficulties in information gathering. Third, we examine whether the impact of IFRS adoption on subsequent foreign equity issues is more pronounced for more opaque and more financially constrained firms. Such firms stand to gain the most from an improvement in the information environment in their home country because they are the ones with higher ex-ante CMLOF costs.[2] Finally, we conjecture that IFRS adoption should lead to a decline in the adverse stock price reaction to the announcement of foreign equity issues. If the adoption of IFRS leads to improvements in disclosure, managers will be able to convey information to investors in a less costly manner, reducing information asymmetry (Myers and Majluf 1984). Having access to more accurate information, investors would be better able to determine whether management is acting in their own interest (e.g. by issuing equity when the stock price is overvalued) when making a decision to issue equity.

We test our hypotheses using a sample of 41,599 firm-year observations from 28 countries over the period 1991 through 2010. Our sample includes countries that have adopted IFRS or allow firms to use IFRS and have committed to adopt IFRS in the future. We find evidence consistent with our four hypotheses. In line with our first hypothesis, we document a significant increase in equity issuances following IFRS adoption across our sample of firms. In addition, we find that all else equal, the probability that a firm issues equity increases significantly following IFRS adoption. We also find support for our second hypothesis and document significant increases in equity issuances and in the

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[2] When more opaque firms (e.g. small firms with lower analyst coverage) tap into foreign capital markets, host country investors may find it more difficult and costly to obtain information about such firms, relative to large multinational firms. Thus, more opaque firms experience significantly higher CMLOF costs and would benefit the most from a reduction in such costs.

probability of issuing equity in foreign markets following IFRS adoption, suggesting that IFRS adoption may reduce international differences in accounting standards and improve comparability of financial statements, which may lower some of the sources of CMLOF costs. We also find that smaller firms and those with lower analyst coverage and more need of external finance experience a larger increase in equity issuances in foreign markets following IFRS adoption, which is consistent with our third hypothesis. Finally, in line with our fourth hypothesis we show that the adverse price reaction to foreign equity issues drops significantly following IFRS adoption, consistent with a reduction in CMLOF costs post-IFRS.

Our study contributes to the literature in several ways. First, we provide additional evidence supporting the impact of IFRS adoption by examining another avenue through which IFRS adoption can impact a firm – its decision and ability to issue equity at home and abroad. Our findings complement earlier studies documenting positive capital market effects associated with IFRS adoption (Daske et al. 2008, 2009; Li, 2010). To the best of our knowledge, ours is the first study that examines how IFRS adoption may impact a firm's ability to issue equity in foreign markets. In addition, we contribute to the recent strand of literature on the capital market liability of foreignness by testing whether institutional changes in the home country reduce CMLOF costs. To this end, we provide evidence of a significant reduction in CMLOF costs following IFRS adoption that improves firms' ability to raise equity in foreign markets. The evidence presented here underscores the importance of improving the information environment in reducing firms' costs of issuing equity at home and abroad. The rest of the paper is organized as follows. We review the literature and develop the hypotheses tested in the paper in section 2. In section 3 we describe the data and methodology used to test the various hypotheses. In section 4 we present our main results; we provide a discussion of some robustness tests in section 5 and conclude in section 6.

2. Literature Review and Hypotheses Development

     i.   *Equity Issuance and the Capital Market Liability of Foreignness (CMLOF)*

As Myers and Majluf (1984) argue, firms find it costly to raise capital through equity issuances because of the severe information asymmetry problems between manager insiders and outside investors. As Stulz (1999) explains, there are two problems that managers face when raising equity to finance new projects. The first is the information asymmetry problem that arises because manager insiders have more information about their firms' prospects than outside investors. Second, there is an agency problem that

exists given that managers have incentives to both issue equity when they feel that the firm's stock is overvalued and to invest in value-destroying projects (e.g. to obtain perks, such as higher salaries, associated with managing larger firms). Anticipating this, the market reacts adversely (by discounting the stock price) to the announcement of equity offerings. The information asymmetry problems lead to adverse selection costs that increase the cost of raising capital. The result is the widely documented adverse reaction to seasoned equity offerings (SEO) announcements as well as the underpricing of SEOs (see e.g. Asquith and Mullins, 1986; Masulis and Korwar 1986; Corwin, 2003; Altinkilic and Hansen, 2003) [3]

The problems associated with issuing equity are exacerbated when firms raise capital in foreign markets. Firms issuing equity abroad face additional obstacles because local investors tend to be less familiar and have less information about foreign firms. Bell et al. (2012) argue that the costs that foreign firms face in accessing foreign capital markets can be attributed to what they term the capital market liability of foreignness (CMLOF).[4] In addition to information asymmetry, the costs associated with CMLOF include institutional distance, difficulties in information gathering, unfamiliarity, and cultural distance. There is well documented evidence that foreign firms face CMLOF costs when accessing foreign capital markets. For example, Francis, Hasan, Lothian, and Sun (2010) find that foreign firms from segmented markets with high information asymmetry experience larger underpricing at IPOs. Investors' preference for domestic securities - the "home bias" puzzle- also suggests that foreign firms may have a hard time tapping into foreign capital markets. There is a vast literature that documents the home bias and attempts to explain this puzzle (e.g. Kho, Stulz, and Warnock, 2009; Kang and Stulz, 1997).[5]

Given the problems associated with issuing equity, firms that need to access capital markets tend to engage in various strategies in an attempt to mitigate these adverse selection costs. For example, the bonding hypothesis (Coffee, 1999, 2002; Stulz, 1999) suggests that a way for firms to credibly commit to the protection of minority shareholders is to cross-list in countries with stronger investor protection. Reese and Weisbach (2002) provide evidence consistent with the bonding hypothesis and find that equity issuances increase subsequent to cross-listing, especially for firms from countries with weak shareholder

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[3] Eckbo and Masulis (1995) provide a comprehensive survey of the early literature on the price impact of SEO announcements.

[4] CMLOF is an extension of the liability of foreignness (LOF) that has been widely studied in the international business literature. LOF is defined as the additional costs that a foreign firm incurs when operating overseas (Zaheer, 1995). The LOF literature has focused on LOF from a product market perspective, and in general, finds that foreign firms have lower profitability and lower survival rates than their domestic counterparts (Mosakowski and Zaheer 1997).

[5] Karolyi and Stulz (2003), and Lewis (1999) provide a broad review of the home bias literature.

protection.[6] We follow a similar approach in testing our hypotheses. IFRS adoption in the home country should lead to a reduction in the costs associated with difficulties in information gathering for local (host country) investors, which are a major source of CMLOF. The impact should be stronger for firms with higher ex-ante information asymmetry (e.g. smaller firms, with lower analyst coverage), who face higher CMLOF costs. Better quality of accounting information, improved disclosure, and enhanced comparability of financial statements across countries should lead to a reduction in both the information asymmetry and the agency costs associated with raising equity to finance new projects, especially in foreign markets.

ii. International Financial Reporting Standards and Reduction in Information Asymmetry

One of the documented benefits surrounding the adoption of IFRS has been the reduction in information asymmetry. IFRS were designed primarily to provide more accurate, comprehensive, and timely financial statement information, and to reduce international differences in accounting standards by standardizing reporting formats. Existing literature documents that IFRS require greater disclosure and are more comprehensive than local accounting standards (Ashbaugh & Pincus 2001; Ding et al. 2007) and improve the comparability of firms across markets, which improves capital allocation efficiency (Covrig et al. 2007; Armstrong et al. 2010). This improved disclosure should reduce information asymmetry, enhance liquidity and reduce the cost of capital (Diamond & Verrecchia 1991; Easley & O'Hara 2004). Consistent with the view that IFRS or events surrounding its adoption lead to a reduction in information asymmetry, several studies document reductions in cost of capital associated with both mandatory and voluntary IFRS adoption (Leuz & Verrecchia 2000; Daske et al. 2008; Daske et al. 2011; Li 2010) as well as increases in analyst forecast accuracy (Tan et al. 2011). These studies emphasize the importance of both enforcement and firms' reporting incentives on the impact of IFRS adoption. In addition, Armstrong et al. (2010) document incrementally positive reactions associated with events related to IFRS adoption for firms with lower pre-adoption information quality and higher information asymmetry, which suggests that investors perceive that IFRS will lead to improvements in information quality.

While the literature documents evidence that points to a reduction in information asymmetry around IFRS adoption, it is not clear whether IFRS adoption itself or events surrounding IFRS adoption drive the results. Christensen et al. (2012) for example, note that the capital market effects around IFRS adoption can be attributed to contemporaneous changes in reporting enforcement that occurred in five European Union countries. For the purposes of this study, whether the improvement in the information

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[6] See Karolyi (2006, 2012) for a vast review of the cross-listing literature.

environment can be attributed to IFRS adoption itself or to events surrounding its adoption is not crucial, as long as there is a reduction in information asymmetry and informational costs.

Providing further support for the reduction in information asymmetry around the adoption of IFRS, in a related paper Naranjo, Saavedra, and Verdi (2012) test the pecking order theory using IFRS adoption as an exogenous shock to the information environment. Similar to our study, they document that firms are more likely to seek external financing post-IFRS, and that for those firms raising external capital, they are more likely to raise equity than debt. Unlike us, they do not examine how IFRS adoption impacts the costs of CMLOF. They do not test whether firms are more likely to issue equity abroad following IFRS adoption, nor do they test for changes in the market reaction to equity issues in foreign markets following IFRS.

We will also use the adoption of IFRS as an exogenous shock to the information environment to examine whether such a shock leads to a reduction in the cost of raising equity, specifically in foreign markets. An increase in the amount and in the probability of equity issuances abroad following IFRS adoption would indicate a reduction in the costs associated with CMLOF.

iii.   Main Hypotheses

We will test four hypotheses that rely on arguments relating to the costs associated with issuing equity locally and abroad. First, if the adoption of IFRS or events surrounding its adoption reduce information asymmetry, firms should be more likely to issue equity following IFRS adoption because the adverse selection costs of doing so should decline. With better information and more transparent financial statements, it will be easier for investors to assess the firm's future prospects (e.g. assess the future cash flows of new investments) and managers will find it easier and less costly to relay information to investors. In addition, improvements in disclosure quality should reduce the costs associated with monitoring management's activities. Thus, we posit that firms will be more likely to issue equity post-IFRS and that the amount of equity issuances will also increase. With this in mind, we formulate our first hypothesis:

H1: Equity issuances should increase following IFRS adoption, ceteris paribus.

The improved quality of information and comparability of financial statements across countries brought about by the implementation of similar accounting standards should also reduce the cost of obtaining information for investors. As Bell et al. (2012) argue, local investors have a lot more

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information and better knowledge about domestic firms and they face more barriers when attempting to obtain information about foreign firms. Thus, these information costs are a main source of CMLOF. With more comparable financial statements and more accurate information, local investors in host countries will find it easier and less costly to obtain information about foreign firms, which will reduce these informational costs, which are an important source of CMLOF. This reduction in the costs of CMLOF should make it easier (and less costly) for firms to issue equity abroad, which leads us to our second hypothesis:

> *H2: Firms should increase equity issuance in foreign markets post-IFRS because of lower CMLOF costs, ceteris paribus.*

The benefits from an improved information environment (e.g. the reduction in the costs of CMLOF) should be more pronounced for firms with higher ex-ante information asymmetry. All else equal, more opaque firms would face higher information and unfamiliarity costs associated with raising capital in foreign markets. The degree of CMLOF should be more severe for these smaller, lesser known firms. A large multinational firm may still find it easy to raise capital in a foreign market in which it has large scale operations. Local investors should be more familiar with such a company and more information about the firm should be available to them. In contrast, smaller, lesser-known firms, with lower analyst coverage may find it too costly to overcome the high costs of raising capital abroad and may thus refrain from tapping into foreign capital markets. This problem would be exacerbated for firms in dire need of external capital (i.e. financially constrained firms). If capital is limited at home, firms with a need for external finance may indeed have to forgo positive net present value (NPV) projects if they face high CMLOF costs. It is these types of firms that would benefit the most from a reduction in information asymmetry that reduces the costs of CMLOF. Thus, we formulate our third hypothesis:

> *H3: The increase in equity issuances in foreign markets following IFRS should be stronger for more opaque and more financially constrained firms, ceteris paribus.*

The adverse selection costs associated with raising equity capital should go down once information quality improves. Through improvements in disclosure quality managers will be able to convey information to investors in a less costly manner and investors will find it less costly to monitor management; with better and more accurate information, investors would be better able to determine whether managers are acting in their own interest when making a decision to issue equity (e.g. by issuing equity when the stock price is overvalued). With improved transparency and comparability across firms, investors will have better information in assessing firms' growth opportunities and in valuing firms' assets. The informational advantage that managers have over outside investors will go down, and

problems associated with manager's incentive to issue equity when their stock is overvalued will decline. All of this will lower CMLOF costs. The market should thus react less adversely to new equity issuances, especially in foreign markets. Following this logic, we thus formulate our fourth and final hypothesis:

> *H4: The adverse stock price reaction to seasoned equity offerings in foreign markets should be less severe post-IFRS.*

3. Data and Methodology

We test our four hypotheses using a sample of firms in countries that have adopted IFRS or that allow firms to report in accordance with IFRS over the period 1991-2010. We collect dates of actual and planned IFRS adoption for each country in our sample from Deloitte's IAS Plus and verify these dates using various other sources.[7] In addition to the mandatory IFRS adoption date in each country, we identify the date in which a firm voluntarily adopts IFRS prior to the mandatory adoption year using the "Accounting Standards Followed" WorldScope variable, following Daske et al. (2011). For each of these countries, our initial sample consists of all stocks listed in each country's major stock exchange that are covered in Thomson Financial's DataStream database. c We proceed with our data screening by eliminating financial and utilities firms and those firms with missing leverage and return on equity (ROE). Moreover, to make firms more comparable across countries, we further eliminate those with negative sales or with total assets less than \$10 million. Finally, we exclude countries with less than 10 firms with available data and all observations with missing data for the variables used in the main regressions.[8] This screening process leads to a final sample of 41,599 firm-year observations from 28 countries.

We then collect information on new issues from Thomson Financial's Securities Data Corporation (SDC). From SDC we collect information on the date of the issue, the proceeds raised from each issue, the market in which the security was issued, and whether the issue was strictly domestic, foreign, or global (i.e. simultaneous equity issue at home and abroad). For global issues, we compute the proceeds raised in domestic (foreign) markets using the fraction of each global issue raised in the domestic (foreign) market, respectively. For foreign equity issues, the market place of the issue is identified; however, the market place of foreign issues is coded as either US or Europe on SDC. Thus, we cannot

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[7] http://www.IASplus.com/country/useIAS.htm. We also cross-check dates from other sources including the European Corporate Governance Institute and PWC website.
[8] The variables are defined in Appendix A.

identify the foreign country of issue, except for issues that take place in the US.[9] In constructing our sample of SEOs we follow the literature (Corwin 2003) and exclude initial public offerings, unit offers, rights, mutual conversions, and equity offerings by closed-end investment funds, real estate investment trusts (REITs), unit investment trusts, beneficial interests, and utilities.

Table 1 presents some descriptive statistics of equity issues by country and documents the total proceeds (domestic and foreign) raised by firms in each country throughout our sample period. The results in Table 1 show that the total proceeds raised by firms in our sample from 1991-2010 amount to $556 billion; foreign equity issues comprised about 50.5 percent, or $281 billion. The average issue size is $257 million, implying that as expected, our sample comprises large firms. The results document an increase in the number of issues and in the proceeds raised post-IFRS. There were a total of 839 equity issues totaling $255 billion before IFRS adoption, compared to 1,326 equity issues totaling $301 billion following IFRS adoption.

The results in Table 1 also point to an increase in the number of foreign equity issues post-IFRS (582 vs. 437), but a decrease in total proceeds raised in foreign markets, which declined from $155 billion to $126 billion. One possible reason for this could be that smaller firms are raising more equity in foreign markets following IFRS adoption, which may be an early indication of a reduction in the cost of raising capital abroad for such firms. We test this directly in subsequent analyses. Note also that given our sample period, the pre-IFRS period is substantially longer than our post-IFRS period given that most of the countries in our sample adopted IFRS in 2005 or later, as shown in Table 1. Thus, it is not surprising that the total proceeds raised in foreign markets in the pre-IFRS period exceed the proceeds raised post-IFRS. We will control for this and more directly test the impact of IFRS adoption on foreign equity issues in our subsequent analyses.

In addition to the data on equity issues, we also collect financial data and other firm level controls from WorldScope and IBES databases. We focus on those firm-specific characteristics motivated by prior literature that may affect a firm's decision to issue equity. These include leverage (total debt-to-total assets); the market-to-book ratio as a proxy for growth opportunities; analyst coverage, given that firms with more analyst coverage should have lower information asymmetry; the percentage of closely-held shares to control for ownership structure; the proportion of foreign sales – given that firms with a higher proportion of foreign sales may be more likely to raise capital in countries in which they operate. We also compute a firm's need for external financing, given that we posit that such firms may be more

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[9] Ideally, we would like to have the country in which the issue took place to determine whether IFRS adoption in the country of issue facilitates capital raising by foreign firms.

affected by changes in the information environment. We use the Rajan and Zingales (1998) measure of dependence on external finance - (capital expenditures – cash flow from operations) divided by capital expenditures. In some robustness tests, we also use the financing deficit following Frank and Goyal (2003) as an additional proxy for firms' need for external finance.[10]

We also use several country-level measures that have been shown to influence equity issues. These include the local annual stock market return, using DataStream's value-weighted country index; the stock market capitalization as a percent of GDP from Beck and Demirgüç-Kunt (2009), as a proxy for the size of the stock market; GDP per capita and real GDP growth obtained from the World Development Indicators, to control for financial development and growth, and the level of exogenous growth opportunities (the log of the inner product of the vector of global industry PE ratios and the vector of country-specific industry weights) from Bekaert, Harvey, and Lundblad (2007) to capture additional factors that may affect equity issues.[11] These and other variables used in our analyses are defined in Appendix A.

Descriptive statistics of country and firm-level variables are shown in Table 2. As the statistics in Table 2 show, our sample is comprised of large firms; the average number of analysts covering our firms is 16.6. Many of our firms generate a large portion of their sales in foreign markets; for the average firm, foreign sales represent 31.4% of total sales. As a proportion of assets, proceeds raised in domestic (foreign) markets comprise about 0.5 (0.3) percent for the average firm in our sample. The statistics in Table 2 show that the majority of foreign equity issues take place outside of the US, or in Europe. As mentioned earlier, SDC does not provide the actual country in which the foreign issue takes place, but rather codes the market of issue as either "US Public" or "Europe Public."

4. Main Results

   i.   *Proceeds from domestic and foreign equity issues*

As a first test of our hypotheses, we will examine whether the total proceeds raised from equity issues has changed significantly after the adoption of IFRS. Per our first two hypotheses, the improvements in disclosure and information quality brought about by the adoption of IFRS should lead to a decline in the cost of raising equity and lead to a substantial increase in domestic and foreign equity issues post-IFRS. To examine this, we first use the following regression model:

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[10] The financing deficit is the sum of cash dividends, investments, and net changes in working capital, less internal cash flows, scaled by total assets.

[11] Because this measure of growth opportunities does not use local price information, Bekaert et al. (2007) argue that this measure can be useful in addressing endogeneity problems.

$$Y_{it} = \alpha + \beta_1 IFRS_{it} + \boldsymbol{\beta_2 X_{it-1}} + \boldsymbol{\beta_3 Z_{ct}} + \varepsilon_{it} \qquad (1)$$

Y_{it} is the total proceeds raised by firm i in year t as a proportion of total assets; IFRS is an indicator variable equal to one after the year of IFRS adoption and 0 otherwise;[12] X_{it-1} is a vector of firm level controls that have been shown to affect a firm's decision to issue equity or that affect a firm's capital structure. These variables are one-year lagged and include the log of total assets to capture firm size; a proxy for leverage (total debt-to-total assets); the return on equity, ROE (net income divided by total common equity) as a measure of profitability; the market value-to-book value ratio; the percentage of shares that are closely-held, as a proxy for ownership structure; an indicator variable that equals one if the firm has shares cross-listed in the US markets and 0 otherwise- ADR; the proportion of foreign sales; capital expenditure (capital expenditure divided by total assets); a firm's need for external financing following Rajan and Zingales (1998) – capital expenditures minus cash flow from operations as a proportion of capital expenditures; the log of total analysts covering the firm, and an indicator variable that equals one if the firm follows US GAAP in a given year and 0 otherwise. Z_{ct} is a vector of country level controls that includes a crisis indicator that equals one for the period 2007-2009 and 0 otherwise; the domestic annual stock market return – calculated from DataStream's market index; the log of GDP per capita to control for financial development; a proxy for the size of the stock market- stock market capitalization-to-GDP; the annual growth in GDP, and a proxy for exogenous growth opportunities following Bekaert et al. (2007) – the inner product of the vector of global industry PE ratios and country specific industry weights. We also include industry (2-digit SIC) and country fixed effects in all our regressions to control for time-invariant industry and country-specific factors that may affect equity issues.[13]

Our first hypothesis posits that the reduction in information asymmetry brought about by the adoption of IFRS should lead to an increase in equity issues. We thus expect the coefficient β_1 in equation 1 to be positive and significant; this would indicate that the proceeds raised by the average firm in our sample increase significantly following the adoption of IFRS. The results are shown in Panel A of Table 3. In Panel A we present results from total proceeds raised as well as for proceeds raised from primary shares. The first column shows results for total proceeds-scaled by total assets- raised; columns 2 and 3 show results for proceeds raised in foreign and domestic markets, respectively. Columns 4-6 replicate the results using the total proceeds raised from the issue of primary shares.

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[12] When voluntary adopters are included, IFRS equals one after the first year of voluntary or mandatory IFRS adoption. We present results including and excluding voluntary adopters.
[13] Our results are also robust to including year fixed effects in our regressions (unreported).

We first examine whether the results shown in Panel A of Table 3 are in line with our first hypothesis. The coefficient on IFRS is positive and significant at the 1% level in all model specifications. These results reflect a significant increase in proceeds raised from equity issues following the adoption of IFRS, after controlling for various factors that may affect a firm's decision to issue equity, which adds support to our first hypothesis. The results in column 1 suggest that the total proceeds (as a percent of total assets) raised from equity issues are 73 basis points higher following IFRS, which corresponds to a 12.2 percent standard deviation increase.[14] Similarly, the coefficient on IFRS in model 3 indicates that total equity issues raised in domestic markets are 40 basis points higher after IFRS adoption – which corresponds to an 8.3 percent standard deviation increase.[15] Thus, firms significantly increase the proceeds raised from equity issues following IFRS adoption, consistent with the view that there is a decline in information asymmetry that makes it less costly for firms to issue equity. These results are confirmed when we only include the proceeds raised from primary issues (models 4 and 6).[16]

Next we examine whether the results in Panel A of Table 3 provide support for our second hypothesis as well. If IFRS adoption leads to a reduction in CMLOF costs, then we expect an increase in equity issues in foreign markets, given that foreign firms will find it less costly to issue equity abroad. The results in Panel A of Table 3 show that the proceeds raised from foreign equity issues experience a substantial increase following IFRS adoption. The results are both statistically as well as economically significant. Taking the coefficient on IFRS in model 2, the total proceeds raised in foreign markets (as a proportion of total assets) by the average firm increase by 33 basis points, which represents a 9.4 percent standard deviation increase. Firms would avoid raising equity in foreign markets if the information asymmetry and adverse selection costs associated with issuing equity abroad exceed the benefits. Thus, our results are consistent with a reduction in the costs associated with CMLOF. The results hold for proceeds raised in foreign markets through primary shares (model 5).

The results in Panel A of Table 3 also show that larger firms, with higher leverage, and higher profitability (lower ROE) raise less equity both domestically and abroad. More profitable companies (higher ROE) should be able to use internally generated funds to finance growth opportunities; thus as the results show, more profitable firms have less of a need to raise external funds. In addition, firms with higher market-to-book value tend to raise more equity at home and abroad. In line with findings in prior studies (Reese and Weisbach, 2002), we see a significant increase in proceeds raised in foreign markets for firms that have shares cross-listed in the US market. In addition, firms that adopt US GAAP tend to

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[14] The standard deviation of total proceeds-to-total assets is 0.060.
[15] The standard deviation of total proceeds raised in domestic markets-to-total assets is 0.048.
[16] In the remainder of the paper, we preset results using total proceeds raised. Results are similar when we restrict our sample to proceeds from primary shares.

raise more equity in foreign markets, but less equity domestically, which suggests that the adoption of US GAAP may facilitate foreign equity issues. The results also show that firms in more developed countries with larger stock markets tend to raise more equity capital, especially at home. Finally, domestic equity issues decline significantly during the recent financial crisis, and somewhat surprisingly, there are less domestic equity issues associated with strong local stock market performance. The coefficient on stock market return is negative and highly significant. One plausible explanation for this finding is that periods in which the stock market performs well are those in which the incentive for managers to issue equity to take advantage of an overpriced stock is the greatest; this would increase the adverse selection costs of doing so.

As a test of our third hypothesis that posits that more opaque and more external finance-dependent firms should benefit more from the improvement in the information environment and the subsequent reduction in information asymmetry, we interact the IFRS indicator variable with a proxy for firm's need for external finance and with two proxies for information asymmetry. Our proxies for information asymmetry include an indicator variable – Size_p25- that equals one if a firm's total assets fall in the bottom 25th percentile of the distribution in its country and 0 otherwise, and an indicator variable- Analyst_p25- that equals one if the total number of analysts following a firm is in the bottom 25th percentile of the distribution in its country, and 0 otherwise. All else equal, there should be less information available (thus, more information asymmetry problems) for smaller firms with lower analyst coverage. The CMLOF costs will thus be higher for such firms. We present results including these interactions in Panel B of Table 3. To conserve space, we only show results using total proceeds raised. The results are similar (in magnitude and statistical significance) when we restrict the sample to total proceeds raised from primary issues.

First, we analyze the impact of IFRS adoption on firms with a need for external finance. Improvements in the information environment that lower information asymmetry and the adverse selection costs of issuing equity should primarily benefit firms that need to access capital markets. Because IFRS adoption has been shown to reduce information asymmetry, but can also to improve comparability of financial statements across countries, which lowers the costs of gathering information on foreign firms for local investors, we can expect an increase in both domestic and foreign equity issues following IFRS adoption. The results in Panel A of Table 3 show that firms with more need of external finance increase the total proceeds raised from equity issues (Model 1) following IFRS adoption, which is consistent with an overall reduction in information asymmetry that lowers adverse selection costs of raising capital in equity markets. When we separate the proceeds raised in domestic and foreign equity issues, however, the results show no significant increase in proceeds raised for domestic issues (model 7),

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but a significant increase for foreign equity issues following IFRS for firms with more need of external finance (model 4). These results add additional support to the view that IFRS adoption leads to a reduction in CMLOF costs, which leads to an increase in foreign equity issues, especially for firms with more need to access capital markets. The results are economically significant. The results in column 4 of Panel B in Table 3 show that a one standard deviation increase in the need for external finance (0.118) is associated with an 18 basis point increase in proceeds raised in foreign markets (as a % of total assets) following IFRS adoption, which corresponds to a 5.0 standard deviation increase.[17] More importantly, note that the coefficient on the need for external finance in column 4 is negative and significant (-0.003 with a t-statistic of 1.79), which signifies that firms with more need of external finance raised less capital in foreign markets prior to IFRS adoption. A one standard deviation increase in the need for external finance is associated with proceeds raised in foreign markets that are three basis points lower prior to IFRS adoption.

We next examine how IFRS adoption impacts CMLOF costs, primarily for more opaque firms. Ceteris paribus, smaller firms and firms with lower analyst coverage may suffer the most from the CMLOF costs.[18] Thus, we expect a larger increase in proceeds raised from foreign equity issues post-IFRS for such firms. The results in Panel B of Table 3 show results consistent with our third hypothesis. First, we do not observe an increase in proceeds raised from domestic equity issues for firms in the bottom 25th percentile of size and analyst coverage. More importantly, the results in models 5 and 6 of Panel B of Table 3 show a large increase in proceeds raised in foreign markets for firms with lower analyst coverage (those in the bottom 25th percentile) and for small firms (bottom 25th percentile in terms of total assets). The results are economically and statistically significant. From the coefficients in model 5, firms that are in the bottom 25th percentile of analyst coverage increase the proceeds raised in foreign markets by about 10 basis points (2.9 percent of the standard deviation) following IFRS adoption.[19] Similarly, the results in model 6 show that small firms (those in the bottom 25th percentile of assets) increase the proceeds raised in foreign markets (as % of total assets) by 30 basis points (8.6 percent of the standard deviation) following IFRS. The results in model 5 also show that firms with lower analyst

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[17] From model 4, the effect of a one unit change in the need for need for external finance on the proceeds raised in foreign markets after IFRS adoption is 0.0149= -0.0029 (coefficient on need for external finance) + 0.0178 (coefficient on IFRS x need for external finance). Thus, a one standard deviation change in the need for external finance (0.118) is associated with a 0.0018 (0.0149x0.118) increase in the proceeds raised in foreign markets post-IFRS.

[18] A large multinational firm, for example, may not be as exposed to CMLOF costs when raising funds in a foreign market because all else equal, local investors may still be familiar with the firm (as its products may be sold locally as well). In contrast, local investors may not be as familiar with a smaller firm from the same country that is also trying to raise funds in the host country. CMLOF costs (e.g. unfamiliarity and information costs) are bound to be higher for the latter.

[19] The sum of the coefficient on the analyst_p25 indicator (-.0013) and the IFRS x Analyst_p25 (0.0023) = 0.001.

coverage raised less capital in foreign markets prior to IFRS adoption. Again, this could be a result of the high CMLOF costs faced by these firms prior to the adoption of IFRS.

Overall, the results in Panels A and B of Table 3 provide some evidence consistent with our first three hypotheses. One concern with the results presented thus far, however, is that we are including mandatory as well as voluntary IFRS adopters. Ultimately, our goal is to measure how an exogenous shock to the information environment affects firms' decision and ability to raise external capital by affecting the costs associated with issuing equity. Firms may voluntarily adopt IFRS precisely because they may be in need of external financing. As such, IFRS adoption may be used as a signal of their commitment to improve disclosure (an alternate form of bonding). Thus, the increase in equity issues following IFRS adoption may arise endogenously in the results presented earlier. To mitigate the issues associated with the inclusion of voluntary adopters, in Panel C of Table 3 we replicate our results from Panel B excluding voluntary adopters. To conserve space, we show results from the base regressions (as in Panel A) and with the interactions with the small_p25 indicator variable. All other results are similar. The results in Panel C confirm our prior findings. There is a significant increase in proceeds raised after the adoption of IFRS in both domestic and foreign capital markets. The coefficient on IFRS is positive and significant at the 1% level in all model specifications. The magnitude of the coefficients is similar to those reported in Panels A and B. The evidence presented in Panel C continues to support our hypotheses. In line with our first two hypotheses, there is a substantial increase in the proceeds raised through equity issues following IFRS adoption both in domestic as well as in foreign markets. In addition, adding support to the view that IFRS adoption reduces CMLOF costs for more opaque firms, the results in Panel B also show larger increases in foreign equity issues post-IFRS for smaller firms. Thus, in line with our third hypothesis, these findings suggest a decline in the information and unfamiliarity costs associated with CMLOF for firms whose costs are highest ex-ante.[20] There is one result that was insignificant earlier and becomes statistically significant in Panel C. Proceeds raised by small firms in domestic markets are higher by about 28 basis points post-IFRS. Although the sign was the same in Panel B, the result was statistically insignificant.

Thus far, we have provided some evidence of an increase in the amount of equity issues raised in domestic and foreign markets following IFRS. The results are consistent with our hypotheses and with the view that the adoption of IFRS reduced information asymmetry and adverse selection costs associated with raising equity. The significant increase in foreign equity issues suggests a reduction in costs

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[20] In unreported results, we replicate our results in Table 3 using only primary issues. The results presented continue to hold.

associated with CMLOF. As an alternate way to test our hypotheses, in the next section we turn to examine whether firms are more likely to issue equity following IFRS adoption.

ii.   *Changes in the Probability of Equity Issues*

If the adoption of IFRS lowers information asymmetry and adverse selection costs associated with raising equity, the probability of a firm issuing equity should increase post-IFRS, ceteris paribus. To explore whether IFRS adoption leads to an increase in the probability of a firm issuing equity, we will estimate Probit regressions as follows:

$$Equity\ issue_{it} = \alpha + \beta_1 IFRS_{it} + \boldsymbol{\beta_2 X_{it}} + \boldsymbol{\beta_3 Z_{ct}} + \varepsilon_{it} \tag{2}$$

Equity issue$_{it}$ is an indicator variable equal to one if firm i issues equity in year t and 0 otherwise. We also break down the equity issue indicator into two separate indicators for firms issuing equity at home and those issuing equity in foreign markets. IFRS is an indicator variable equal to one starting the year after IFRS adoption and 0 otherwise. X$_{it}$ is a vector of firm level controls that may affect the firm's probability of equity issuance. These variables are the same ones used in equation 1 and described in Appendix A. These include the log of total assets; leverage; ROE; the market value-to-book value ratio; the percentage of shares that are closely-held; an indicator variable that equals one if the firm has shares cross-listed in the US markets and 0 otherwise; the proportion of foreign sales; capital expenditure-to-total assets; the need for external financing following Rajan and Zingales (1998); the log of total analysts covering the firm, and an indicator variable that equals one if the firm follows US GAAP in a given year and 0 otherwise. Z$_{ct}$ is a vector of country variables that includes the stock market return in country c; the log of GDP per capita; the stock market capitalization; GDP growth; a proxy for exogenous growth opportunities (Bekaert et al. 2007), and an indicator of the recent global financial crisis. In addition, all regressions include industry (2-digit SIC) and country fixed effects to capture other time invariant factors that may affect a firm's decision to issue equity. Our primary variable of interest for our first two hypotheses is the coefficient on β$_1$. The hypotheses predict a positive coefficient on β$_1$, suggesting an increase in the probability of a firm issuing equity following IFRS adoption.

The results from Probit regressions are shown in Table 4. In all models we report marginal effects at the average value of the independent variables. For binary variables, the marginal effects are calculated as the discrete change in the expected value of the dependent variable as the indicator variable changes from 0 to 1. In Panel A we present results using the base case specification (with no interaction terms) as a test of our first two hypotheses. We present results for both voluntary and mandatory adopters (models 1-3) as well as for mandatory adopters only (models 4-6). The results in Panel A document a significant

increase in the probability of a firm issuing equity following IFRS adoption. Examining the results in model 1, the coefficient on IFRS indicates that the probability of issuing equity increases by 1.84 percent following IFRS adoption. This constitutes an economically significant increase, relative to the average probability of issuing equity (5.22%). A similar result obtains for domestic equity issues (model 3). The coefficient on IFRS in model 3 indicates a 0.57 percent higher probability of raising equity in domestic markets following IFRS adoption; this is an economically large result, given the average probability of issuing equity domestically (3.75%). The results are thus consistent with our first hypothesis. When we exclude voluntary adopters, the results for total equity issues continue to hold, as can be seen by the IFRS coefficient in model 4 (.0147 with a t-statistic of 4.14). There is no significant increase in domestic equity issues once we exclude voluntary adopters, however.

Our second hypothesis predicts an increase in the probability of issuing equity in foreign markets following IFRS adoption as a result of a decrease in informational costs associated with CMLOF. The results in Panel A of Table 4 provide support for this hypothesis as well. Taking the coefficient on IFRS in column 2 (0.0034 with a t-statistic of 1.94), the results show a 0.34 percent higher probability of issuing equity in foreign markets following IFRS adoption. This constitutes an economically large increase, considering the average probability of issuing equity in foreign markets is 2.46%. We note that this result may be driven by voluntary IFRS adopters. The result is no longer statistically significant once we exclude voluntary adopters (model 5). So, at least for the average firm in our sample, voluntary adoption of IFRS may yield more of a reduction in CMLOF costs. We later examine whether those firms with higher ex-ante CMLOF costs benefit from both mandatory and voluntary IFRS adoption.

The results in Panel A of Table 4 also show that larger firms, with higher leverage, lower profitability, higher market-to-book ratios, and those that cross-list in the US are more likely to issue equity at home and abroad. In addition, firms that adopt US GAAP have a higher probability of issuing equity in foreign markets. The country level variables show a lower probability of issuing equity domestically, but a higher probability of issuing equity in foreign market during the recent financial crisis. Finally, firms in more developed countries with larger stock markets are more likely to issue equity, while those in countries with high stock market returns, higher GDP growth, and more exogenous growth opportunities are less likely to issue equity, especially domestically. The results hold for both mandatory and voluntary IFRS adopters as well as for mandatory adopters only.

Next, we examine the predictions of our third hypothesis using interactions of the IFRS indicator variable and proxies for a firm's external financing need and for information asymmetry (Analyst_p25, and Size_p25), as before. Firms that stand to gain the most from a reduction in costs of CMLOF are

those in need to raise external capital, as well as those with higher ex-ante information asymmetry. If IFRS adoption decreases CMLOF costs, an increase in the probability of foreign equity issues should be stronger for such firms. The results corroborate the predictions of our third hypothesis. In Panel B of Table 4 we present results using these interactions for both mandatory and voluntary IFRS adopters. We replicate the results excluding voluntary adopters in Panel C. Examining the results in model 4 of Panel B, the results show a significant increase in the probability of issuing equity in foreign markets following IFRS for firms with more need of external finance. However, there is no increase in the probability of issuing equity in domestic markets following IFRS for firms with higher need for external finance (model 7). The results also show that smaller firms and those with lower analyst coverage experience a significant increase in the probability of issuing equity in foreign markets post-IFRS, which support the view that IFRS adoption reduced the costs of CMLOF. The results also show that smaller firms and those with lower analyst coverage have a lower probability of issuing equity in foreign markets prior to IFRS adoption. The coefficient on Analyst_p25 in model 5 (-0.0109 with t-statistic of 4.45) indicates a 1.09 percent lower probability of a foreign equity issue prior to IFRS adoption for firms in the bottom 25th percentile of analyst coverage in their country. The result is economically large, when compared to the average probability of issuing equity in foreign markets (2.46%). Similarly, the results in model 6 show that prior to IFRS adoption, small firms (those in the bottom 25th percentile in terms of total assets) have a 0.67% lower probability of issuing equity in foreign markets. These results add support to the view that CMLOF costs were excessively high for smaller firms with lower analyst coverage, which prevented them from tapping into foreign capital markets. However, IFRS adoption lowered such costs, and as such, the probability of raising equity capital in foreign markets increased for these firms following IFRS adoption.

As a robustness test, in Panel C of Table 4 we replicate the results in Panel B, excluding voluntary adopters, which may have other motives for adopting IFRS that may affect their decision to issue equity. Overall, the results in Panel C confirm our findings in Panel B. The results in Panel C continue to show that firms with more need to access capital markets, smaller firms, and those with lower analyst coverage have a higher probability of issuing equity in foreign markets subsequent to the mandatory IFRS adoption in their home country. The magnitude of the coefficients are similar (and in many cases larger) than those in Panel B, suggesting a stronger effect for such firms when IFRS is adopted in their countries. These results suggest that IFRS adoption leads to a reduction in CMLOF costs that makes it possible for such firms to tap into global capital markets.

We have thus far presented evidence that shows an increase in proceeds raised through equity issues and in the probability of issuing equity in both domestic and foreign markets following the adoption of

IFRS, which is consistent with our hypotheses. In addition, the evidence shows that foreign equity issues (and the probability of raising equity in foreign markets) increase following IFRS adoption, especially for firms in need of external finance, and those with more ex-ante information asymmetry (smaller firms and those with lower analyst coverage). Thus, the evidence points to a significant reduction in the adverse selection costs and other information costs of CMLOF, which allows firms to more easily raise capital in foreign markets. Ideally, to more directly test whether the costs associated with CMLOF have decreased, we would need a direct measure of these costs.[21] Lack of data availability prevents us from exploring such an avenue in this paper. However, in the next section, we examine our fourth hypothesis by examining the stock price reaction to seasoned equity offerings following IFRS adoption. While not perfect, this provides a more direct way of examining the costs (i.e. the negative price reaction to SEO announcements) associated with CMLOF.

iii.   Stock price reaction to SEO announcements

We now turn to test our fourth hypothesis. It has been widely documented that because of the information asymmetry problems (i.e. manager may issue equity when the company's stock price is overvalued) the market tends to respond adversely to the announcement of equity issues (see, e.g. Eckbo and Masulis, 1995). These adverse selection costs should be more pronounced when firms issue equity abroad. Thus, improvements in the information environment could lead to a less adverse response to equity issues, especially for firms seeking to raise equity in foreign markets, where investors are less familiar with the firm. To test this prediction, we first compute cumulative abnormal returns for firms in our sample around the filing date of the equity issue.[22] The advantage of testing the stock market's reaction to equity issues is that we can obtain a measure of the adverse selection costs (i.e. the adverse reaction can be interpreted as a proxy for the cost of raising equity). One disadvantage, however, is a large reduction in sample size. Because we need stock price data available for each firm, our sample size drops to 1,724 firm-year observations in this analysis. As such, the results in this section should be interpreted with the caveat that the results may not be representative of all seasoned equity offers during our sample period.

Many of the equity issues in our sample are global issues in which the firm raises equity simultaneously at home and abroad. Given our interest in identifying the market's reaction to foreign equity issues, we face a problem when analyzing stock price reaction to global issues, given that we

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[21] For example, a comparison of foreign versus domestic equity issues in a home market before and after IFRS adoption in the foreign firm's home country.
[22] We compute CARs around the filing date following Ferreira and Laux (2009) who show that the filing date for SEOs corresponds to the announcement date in the majority of cases in their broad sample of SEOs.

cannot determine whether the reaction was a result of the foreign or the domestic issue. To address this, we first classify global issues as "foreign" if the proceeds raised in foreign markets exceed the proceeds raised in the home market for a particular issue. Similarly, a global issue is classified as "domestic" if the majority of the proceeds from the issue are raised in the home market. In some robustness tests (unreported), we exclude global issues from our classification of foreign issues and obtain similar results.[23]

We obtain abnormal returns from the following market model:

$$R_{it} = \alpha + \beta_i R_{ct} + \varepsilon_{it}; t = -260, \dots, -21 \tag{3}$$

R_{it} refers to the daily stock return for firm i on day t; R_{ct} is the daily return on DataStream's value-weighted market index for country c, and ε_{it} is the daily excess return for firm i. We then compute cumulative abnormal returns from day t-2 to day t+2 as well as buy and hold cumulative abnormal returns (BHCAR) around the SEO filing date as follows:

$$BHCAR_i^{(-2,+2)} \prod_{t=-2}^{t=+2}(1 + \varepsilon_{it}) - 1$$

To examine our last hypothesis, we run regressions similar to those in equation 3, but using the CARs as the dependent variable.

$$CAR_{it} = \alpha + \beta_1 IFRS_{it} + \beta_2 Foreign + \beta_3 IFRSxForeign + \boldsymbol{\beta_4 X_{it}} + \boldsymbol{\beta_5 Z_{ct}} + \varepsilon_{it} \tag{5}$$

CAR_{it} is the cumulative abnormal return (buy-and hold abnormal returns) for firm i from t=-2 to t=+2 around the SEO filing date. IFRS is an indicator variable equal to one after the year of adoption of IFRS and 0 otherwise; Foreign is an indicator that equals one if the equity was issued in foreign markets and 0 otherwise. As before, X_{it} is a vector of firm level controls, and Z_{ct} is a vector of country level variables. All firm and country level controls are the same ones used in Tables 3 and 4 and are defined in Appendix A. We also include industry (2-digit SIC codes) and country fixed effects in all regressions to control for other time invariant country and industry factors that may affect CARs, and include a control to capture the time trend in CARs. Per our fourth hypothesis, the variable of interest is β_3 and we expect β_3 to be positive and significant if IFRS adoption leads to a reduction in CMLOF costs. This would indicate a more positive (or less negative) response to the announcement of a foreign equity issue following IFRS.

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[23] Results are available upon request.

The results from the above regressions are presented in Table 5. Consistent with the predictions of our fourth hypothesis, the results indicate a less adverse response to equity issues in foreign markets following IFRS adoption. First, for domestic issues, the reaction is negative but insignificant following IFRS adoption; the coefficient of IFRS in model 1 shows that CARs are 1.59% lower for domestic issues following IFRS adoption. In addition, the results show a negative, but insignificant reaction to foreign equity issues prior to IFRS adoption. Taking the coefficient on the "Foreign" indicator in model 1, CARs are 1.48% lower (although statistically insignificant) for foreign equity issues prior to IFRS adoption. More importantly, the results show that foreign equity issues have higher CARs following IFRS adoption. The results in model 1 show that foreign equity issues have CARs that are 1.02% higher following IFRS adoption, representing 8.8 percent of the standard deviation of CARs.[24] Similar results hold if we use BHCARs as the dependent variable (model 2). BHCARs for foreign issues are 0.81% higher pots-IFRS (or 8.4 percent of its standard deviation). This is consistent with a significant reduction in the CMLOF costs associated with equity issuances in foreign markets.

Overall, the results presented in Table 5 add some additional support to the view that information costs of CMLOF decrease following IFRS adoption. We should expect large adverse reactions to the announcement of foreign issues when CMLOF costs are high. These would drive down the CARs observed around the announcement. If IFRS adoption did not have any impact on costs of CMLOF, we should not observe any significant impact following IFRS for foreign issues. While we acknowledge that the results in this section are for a small subset of the equity issues in our sample, the results continue to support prior findings and the view that IFRS adoption leads to a reduction in costs associated with CMLOF.

Having presented evidence supporting our four hypotheses, we not turn to examine the robustness of our results. We will present the results of some robustness tests in tables and discuss other robustness tests whose results were untabulated.

5. Robustness Tests

One potential issue with the results presented thus far deals with the changing composition of the firms in our sample. During our sample period, DataStream and WolrdScope coverage improved drastically, especially for emerging markets. Thus, it is possible that our results may be driven by new

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[24] The mean and standard deviation of CAR (-2,+2) are -.014 and 0.116, respectively. For BHCARs, the mean (standard deviation) is -.011 (0.097).

firms that are added to our sample in the post-IFRS period, if such firms are more likely to issue equity. If this is the case, it is the composition of the firms in our sample, and not the improvement in information environment that drive our results. To examine this valid possibility, we perform our analyses by restricting our sample to firms that exist and have data available for at least three years before and three years after the adoption of IFRS in their respective countries. This ensures a consistent sample before and after IFRS. Not surprisingly, our sample size drops significantly from 41,599 firm-year observations in Table 3 to 9,762. In Table 6, we replicate some results from Panel A of Table 3 using this subset of firms. The results in Table 6 show that our main results continue to hold. The IFRS coefficient is statistically significant in all model specifications, consistent with our prior findings that proceeds raised through equity issues increase significantly post-IFRS. Importantly, the IFRS coefficient in model 2 (0.0042 with a t-statistic of 2.34) shows a significant increase in proceeds raised in foreign markets following IFRS. In addition, the coefficient is larger than the one in Table 3 (model 2), suggesting that the magnitude of the results is stronger for this subset of firms. These results corroborate our earlier findings and add support to our first two hypotheses. IFRS adoption leads to an increase in subsequent equity issues, suggesting a reduction in the adverse selection costs associated with issuing equity at home and abroad (CMLOF).

Prior studies have shown that many of the benefits associated with IFRS adoption accrue to firms within the European Union (Daske et al.2008). To examine whether the increase in equity issues accrues to firms within the European Union, Table 7 presents results of regressions of total proceeds as a percent of assets, similar to Table 3, including indicator variables for European Union countries. Model 1 shows results for total issues; model 2 shows results for foreign issues, and model 3 shows results for domestic equity issues. The results in Panel 7 suggest that the reduction in information asymmetry and adverse selection costs of issuing equity accrues to firms outside the European Union as well. The coefficient of IFRS in model 2 (0.0018 with a t-statistic of 2.68) shows that firms outside of the European Union experience an 18 basis point increase in proceeds raised in foreign markets (as a % of total assets) following IFRS adoption. Firms in the European Union experience a smaller (9 basis points) increase in proceeds raised in foreign markets following IFRS adoption. Similar results obtain for total equity issues; however, while non-EU firms experience a significant increase in total proceeds raised at home post-IFRS, the increase is not statistically significant for EU firms.

In additional robustness tests (unreported), we use alternate proxies for the need of external finance to examine whether such firms experience an increase in foreign equity issues abroad. In particular, we use the financing deficit following Frank and Goyal (2003) - the sum of cash dividends, investments, and net changes in working capital, less internal cash flows, scaled by total assets. Using this alternate measure,

we confirm our earlier findings. Firms with larger financing deficits experience a more significant increase in proceeds raised in foreign equity issues following IFRS adoption. In addition, the probability of a foreign equity issue is significantly higher for such firms post-IFRS adoption. These results are in line with the view that IFRS adoption leads to a decrease in costs associated with CMLOF.

6. Conclusion

In this paper we examine how changes in the information environment affect the adverse selection costs associated with raising equity capital. In particular, we examine how a decrease in information asymmetry and improvements in comparability and accessibility of financial information across countries around the introduction of IFRS affects the costs associated with issuing equity in foreign markets, or the capital market liability of foreignness (CMLOF).

Using a sample of 41,599 firm-year observations from 28 countries that have adopted IFRS or plan to adopt IFRS and allow firms to prepare their financial statements in accordance with IFRS, we test four hypotheses based on the reduction in information asymmetry around IFRS adoption. First we posit that the adoption of IFRS should lead to an increase in proceeds raised from equity issues. Second, we conjecture that IFRS adoption increases a firm's probability of issuing equity in foreign markets because the improved information environment reduces the costs of CMLOF. Third, we posit that the increase in equity issuances in foreign markets should be stronger for more opaque and more financially constrained firms. Such firms face higher CMLOF costs ex-ante and thus should benefit more from a decline in such costs. Finally, we postulate that the adverse reaction to the announcement of foreign equity issues should be lessened following IFRS adoption as a result of the reduction in costs associated with CMLOF; mainly, informational costs.

We find support for our four hypotheses. We document an increase in equity issues domestically and in foreign markets, in line with our first two hypotheses. In addition, we find evidence of an increase in the probability of equity issues following IFRS adoption. This result holds both for domestic and foreign equity issues. Third, we present evidence documenting a more significant increase in the probability of issuing equity and in the amount equity raised in foreign markets for firms with more need of external finance, and for firms with higher information asymmetry (smaller firms and firms with lower analyst coverage). These findings support our third hypothesis and provide more direct evidence of a reduction in information costs associated with CMLOF for firms with higher ex-ante CMLOF costs. Finally, we show a significant reduction in the adverse stock price reaction to foreign equity issue announcements following IFRS. Average CARs around foreign SEOs are about 1 percent higher (or less negative) following IFRS.

Overall, our results present evidence in line with significant reductions in the costs associated with CMLOF. Following IFRS, such costs appear to have declined significantly, making it easier (and arguably, less costly) for firms to access foreign capital markets. While we document indirect evidence of a reduction in CMLOF costs, the literature would benefit from future research that attempts to measure these costs more directly. Such an approach, while unattainable in this study given data limitations, would add to this literature by quantifying the magnitude of CMLOF costs and by more directly documenting the size of the implied reduction in such costs following IFRS adoption that is documented in this study.

References

Armstrong, C.S., Barth, M.E., Jagolinzer, A.D., Riedl, E.J., 2010. Market reaction to the adoption of IFRS in Europe. *The Accounting Review* 85, 31-61.

Ashbaugh, H., Pincus, M., 2001. Domestic Accounting Standards, International Accounting Standards, and the Predictability of Earnings. *Journal of Accounting Research* 39, 417-434.

Asquith, P., Mullins, D.W. Jr., 1986. Seasoned equity offerings. J*ournal of Financial Economics* 15, 61-89.

Altinkilic, O., Hansen, R.S., 2003. Discounting and underpricing in seasoned equity offers. *Journal of Financial Economics* 69, 285–323.

Beck, T, Demirgüç-Kunt, A, 2009. Financial Institutions and Markets across Countries and over Time: Data and Analysis. Unpublished working paper, World Bank Policy Research.

Bekaert, G., Harvey, C.R., Lundblad, C., Siegel, S, 2007. Global growth opportunities and market integration. *Journal of Finance* 62, 1081-1137.

Bell, G. R., Filatotchev, I., and Rasheed, A. 2012. The liability of foreignness in capital markets: Sources and remedies. *Journal of International Business Studies* 43, 107-122.

Christensen, H.B., Hail, L., Leuz, C., 2012. Mandatory IFRS reporting and changes in enforcement. Unpublished working paper. University of Chicago.

Coffee, J., 1999. The future as history: the prospects for global convergence in corporate governance and its implications. *Northwestern University Law Review* 93, 641-708.

Coffee. J., 2002. Racing towards the top? The impact of cross-listing and stock market competition on international corporate governance. *Columbia Law Review*, 102, 1757-1831.

Corwin, Shane, 2003. The determinants of underpricing for seasoned equity offers. *Journal of Finance* 58, 2249–2279.

Covrig, V.M., Defond, M.L., Hung, M., 2007. Home bias, foreign mutual fund holdings, and the voluntary adoption of International Accounting Standards. *Journal of Accounting Research* 45, 41-70.

Daske, H., Hail, L., Leuz, C., Verdi, R., 2008. Mandatory IFRS Reporting around the World: Early Evidence on the Economic Consequences. *Journal of Accounting Research* 46, 1085-1142.

Daske, H., Hail, L., Leuz, C., Verdi, R.S., 2011. Adopting a label: Heterogeneity in the economic consequences of IFRS adoptions. Unpublished working paper.

Diamond, D.W., Verrecchia, R.E., 1991. Disclosure, liquidity, and the cost of capital. *Journal of Finance* 46, 1325-1359.

Ding, Y., Hope, O.-K., Jeanjean, T., Stolowy, H., 2007. Differences between Domestic Accounting Standards and IAS: Measurement, Determinants and Implications. *Journal of Accounting & Public Policy* 26, 1-38.

Doidge, C., Karolyi, G.A., Stulz, R, 2004. Why Are Foreign Firms Listed in the U.S. Worth More? *Journal of Financial Economics* 71, 205-238.

Easley, D., O'Hara, M., 2004. Information and the cost of capital. *Journal of Finance* 59, 1553-1583.

Eckbo, B. E., Masulis, R.W., 1995. Seasoned equity offerings: A survey, in Robert A. Jarrow, Vojislav Maksimovic, and William T. Ziemba, ed.: Finance. chap. 31, pp. 1017–1072 (Elsevier/North-Holland, Handbooks in Operations Research and Management Science Series).

Ferreira, M. A., Laux, P. A., 2009. Corporate boards and SEOs: The effect of certification and monitoring. Unpublished working paper. Nova School of Business and Economics & University of Delaware.

Francis, B.B, Hasan, I., Lothian, J.R., Sun X., 2010. The signaling hypothesis revisited: Evidence from foreign IPOs. *Journal of Financial and Quantitative Analysis* 45, 81-106.

Frank, M.Z., Goyal, V.K., 2003. Testing the pecking order theory of capital structure. *Journal of Financial Economics* 67, 217.

Griffin, J.M., Kelly, P.J., Nardari, F., 2010. Do market efficiency measures yield correct inferences? A comparison of developed and emerging markets. *Review of Financial Studies* 23, 3225-3277.

Ince, O.S., Porter, R.B., 2006. Individual Equity Return Data from Thomson DataStream: Handle with Care! *Journal of Financial Research* 29, 463-479.

Kang, J., Stulz, R., 1997. Why is there a home bias? An analysis of foreign portfolio equity ownership in Japan. *Journal of Financial Economics* 46:3–28.

Karolyi, G.A, 2006. The world of cross-listings and cross-listings of the world: Challenging conventional wisdom. *Review of Finance* 10, 99-152.

Karolyi, G. A., 2012. Corporate governance, agency problems and international cross-listings: A defense of the bonding hypothesis, *Emerging Markets Review 13*, 516-547.

Karolyi, G. A., Stulz, R. Are assets priced locally or globally? In the Handbook of the Economics of Finance, edited by G. Constantinides, M. Harris, and R. Stulz. New York, NY: North-Holland Publishers, 2003: 975–1020.

Kho, B. C., R. Stulz, Warnock, F., 2009. Financial globalization, governance, and the evolution of the home bias. *Journal of Accounting Research* 47:597–635.

Leuz, C., Verrecchia, R.E., 2000. The economic consequences of increased disclosure. *Journal of Accounting Research* 38, 91-124.

Lewis, K. K., 1999. Trying to explain home bias in equities and consumption. J*ournal of Economic Literature* 37, 571–608.

Li, S., 2010. Does mandatory adoption of International Financial Reporting Standards in the European Union reduce the cost of equity capital? *The Accounting Review* 85, 607-636.

Masulis, R.W., Korwar, A.N. 1986. Seasoned equity offerings: An empirical investigation. *Journal of Financial Economics* 15, 91-117.

Mosakowski, E., Zaheer, S., 1997. The dynamics of the liability of foreignness: A global study of survival in financial services. *Strategic Management Journal* 18 (6), 439-464.

Myers, S.C., Majluf, N.S., 1984. Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics* 13, 187-221.

Naranjo, P., Saavedra, D., and Verdi, R., 2012. Information asymmetry and financing decisions around the world. Unpublished working paper. MIT.

Rajan, Raghuram G., and Luigi Zingales, 1998. Financial dependence and growth. *The American Economic Review* 88, 559-586.

Reese, W.A, Jr., Weisbach, M., 2002. Protection of minority shareholder interests, cross-listings in the United States, and subsequent equity offerings. *Journal of Financial Economics* 66, 65-104

Stulz, R., 1999. Globalization, corporate finance, and the cost of capital. *Journal of Applied Corporate Finance* 12, 8-25.

Tan, H., Wang, Welker, M, 2011. Analyst following and forecast accuracy after mandated IFRS adoption. *Journal of Accounting Research* 49 (5), 1307-1357.

Zaheer, S., 1995. Overcoming the liability of foreignness. Academy of Management Journal 38 (2), 341-363.

Table 1. Equity issues by country

The sample is comprised of firms from countries that adopted IFRS, or have committed to adopt IFRS and allow firms to report financial statements in accordance with IFRS. The table reports the total proceeds (in million US$, 2010 prices) raised by firms of a given country over the period 1991-2010. The number of domestic issues represents the fraction of shares issued in the domestic market, while the number of foreign issues represents the fraction of shares raised in foreign markets.

Country	Mandatory IFRS year	N_{obs}	Total Issues		Foreign Issues		Domestic Issues	
			N_{issues}	Proceeds (US $M)	N_{issues}	Proceeds (US $M)	N_{issues}	Proceeds (US $M)
Australia	2005	3,931	288	56,681	147	19,156	174	37,525
Austria	2005	323	20	7,758	15	6,129	13	1,629
Belgium	2005	660	22	5,970	15	2,042	14	3,928
Brazil	2010	140	20	9,794	10	4,135	15	5,659
Denmark	2005	986	42	16,002	20	12,022	30	3,980
Finland	2005	1,058	32	6,209	13	2,413	25	3,795
France	2005	4,416	142	91,100	77	54,624	108	36,476
Germany	2005	3,740	143	83,582	67	37,056	105	46,527
Greece	2005	321	13	7,201	9	4,602	10	2,599
Hungary	2005	114	5	1,045	4	972	2	73
India		922	66	12,753	52	11,322	16	1,431
Ireland	2005	395	18	1,337	12	873	13	464
Israel	2008	163	13	2,987	6	583	10	2,404
Italy	2005	1,549	46	27,691	20	7,318	38	20,374
Mexico	2012	80	5	903	4	740	3	163
Netherlands	2005	1,435	84	35,189	55	26,821	61	8,368
Norway	2005	1,110	88	19,434	47	10,407	63	9,027
Philippines	2005	279	7	678	5	658	3	19
Poland	2005	122	10	514	1	54	9	460
Portugal	2005	361	14	5,442	7	2,292	12	3,151
South Africa	2005	1,605	37	16,514	20	9,653	23	6,861
Spain	2005	1,078	46	15,436	24	5,007	37	10,429
Sweden	2005	1,338	69	12,201	34	5,048	53	7,153
Switzerland	2005	1,561	48	11,702	28	6,619	38	5,083
Thailand	2011	1,314	22	3,282	11	1,821	16	1,461
Turkey	2006	76	1	75	0	0	1	75
United Kingdom	2005	12,512	864	104,145	316	48,493	655	55,652
Venezuela	2005	10	0	0	0	0	0	0
Total		41,599	2,165	555,623	1,019	280,858	1,547	274,765
Before IFRS		24,724	839	254,613	437	155,001	699	99,612
After IFRS		16,875	1,326	301,011	582	125,857	848	175,153

Table 2. Descriptive statistics

The sample is comprised of firms from countries that adopted IFRS, or have committed to adopt IFRS and allow firms to report financial statements in accordance with IFRS. The time period ranges from 1991 to 2010. All variables are defined in **Appendix A**.

Variable	N	Mean	Median	Std. Dev.
Total Proceeds (domestic)	41,599	6.605	0.000	127.774
Total Proceeds (foreign)	41,599	6.752	0.000	104.742
Total Proceeds (foreign Non-U.S.)	41,599	6.384	0.000	98.936
Total Proceeds (total)	41,599	13.357	0.000	190.762
Proceeds/ Total assets (domestic)	41,599	0.005	0.000	0.048
Proceeds/ Total assets (foreign)	41,599	0.003	0.000	0.035
Proceeds/ Total assets (foreign Non-U.S.)	41,599	0.003	0.000	0.034
Proceeds/ Total assets (total)	41,599	0.008	0.000	0.060
Total Assets (log)	41,599	12.935	12.756	1.734
Leverage	41,599	0.218	0.202	0.166
ROE	41,599	0.075	0.113	0.313
MTB	41,599	2.694	1.830	3.489
Total Analysts	41,599	16.579	10.000	18.293
Closely Held	41,599	0.415	0.421	0.253
Foreign Sales	41,599	0.314	0.213	0.329
Capex	41,599	0.063	0.045	0.060
Need Ext. Finance.	41,599	-0.011	-0.005	0.118
Market return (domestic)	41,599	0.143	0.166	0.296
Smkt Cap.	41,599	0.994	0.895	0.559
GDP per capita	41,599	22,905.640	23,365.890	10,074.000
GDP growth	41,599	2.138	2.461	2.415
GGO	41,599	2.97981	2.958547	0.261

Table 3. Regressions of total proceeds

The sample is comprised of firms from countries that adopted IFRS, or have committed to adopt IFRS and allow firms to report financial statements in accordance with IFRS. The time period ranges from 1991 to 2010. The dependent variable is the total proceeds by firm-year divided by total assets. The proceeds from domestic issues are computed using the fraction of shares issued in the domestic market, while those from foreign issues use the fraction of shares issued in a foreign market. In Panel A, we present results for the total proceeds raised, as well as the fraction of proceeds related to the issue of primary shares of both mandatory and voluntary IFRS adopters. IFRS equals 1 for years after the adoption (either mandatory or voluntary) of IFRS by a given firm. In Panel B we present results for voluntary and mandatory IFRS adopters with interaction of IFRS and various firm-level characteristics: 1) need for external finance; 2) low analyst coverage- Analyst_p25, and 3) small firms- Small_p25. Panel C shows results excluding voluntary IFRS adopters. All variables are defined in **Appendix A**. The independent variables are lagged one year (except for the country-specific variables). All regressions include industry (2-digit SIC) and country fixed-effects. White-robust t-stats are shown in parentheses. *, **, *** stand for statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Both mandatory and voluntary IFRS adopters

Dependent variable:	Total Proceeds (% of assets)			Total Proceeds from primary shares (% of assets)		
	Total Issues	Foreign Issues	Domestic Issues	Total Issues	Foreign Issues	Domestic Issues
	(1)	(2)	(3)	(4)	(5)	(6)
IFRS	0.0073***	0.0033***	0.0040***	0.0047***	0.0026***	0.0020***
	(8.03)	(5.73)	(5.84)	(6.23)	(5.67)	(3.49)
Log total assets	-0.0022***	-0.0007***	-0.0015***	-0.0022***	-0.0007***	-0.0015***
	(-6.85)	(-3.53)	(-6.03)	(-7.71)	(-3.59)	(-7.28)
Leverage	-0.0095***	-0.0023*	-0.0072***	-0.0051***	-0.0005	-0.0046***
	(-4.36)	(-1.92)	(-4.09)	(-2.69)	(-0.48)	(-3.01)
ROE	-0.0116***	-0.0031***	-0.0084***	-0.0122***	-0.0039***	-0.0083***
	(-6.93)	(-2.91)	(-6.74)	(-7.99)	(-3.93)	(-7.17)
MTB	0.0011***	0.0004***	0.0007***	0.0007***	0.0002***	0.0005***
	(5.98)	(3.69)	(5.58)	(5.51)	(3.21)	(4.99)
Closely held	0.0026*	0.0002	0.0024**	-0.0009	-0.0007	-0.0002
	(1.83)	(0.28)	(2.01)	(-0.80)	(-1.21)	(-0.17)
Foreign sales	0.0018	0.0001	0.0018	0.0015	-0.0002	0.0017*
	(1.29)	(0.09)	(1.56)	(1.32)	(-0.25)	(1.80)
ADR	0.0065***	0.0041***	0.0024*	0.0029**	0.0016*	0.0013
	(3.48)	(3.38)	(1.76)	(2.07)	(1.78)	(1.20)
Capex	0.0054	0.0075	-0.0021	0.0074	0.0072	0.0002
	(0.81)	(1.53)	(-0.47)	(1.21)	(1.53)	(0.06)
Need ext. fin.	0.0180***	0.0073**	0.0107**	0.0198***	0.0083**	0.0115***
	(3.23)	(2.13)	(2.44)	(4.48)	(2.53)	(3.84)
Log total analysts	0.0008**	0.0007***	0.0001	0.0002	0.0004**	-0.0002
	(2.32)	(2.94)	(0.58)	(0.82)	(2.32)	(-1.04)
USGAAP	0.0032	0.0051**	-0.0020*	0.0012	0.0019*	-0.0006
	(1.25)	(2.36)	(-1.91)	(0.83)	(1.82)	(-0.71)
Crisis	-0.0025*	0.0014	-0.0039***	-0.0000	0.0016**	-0.0017*
	(-1.73)	(1.51)	(-3.58)	(-0.03)	(2.04)	(-1.87)
Market return	-0.0027**	-0.0001	-0.0026***	-0.0025***	0.0000	-0.0025***
	(-2.42)	(-0.09)	(-3.00)	(-2.73)	(0.04)	(-3.23)
Log GDP per capita	0.0108***	0.0048***	0.0060***	0.0095***	0.0035***	0.0060***
	(5.31)	(3.15)	(4.44)	(5.55)	(2.71)	(5.24)
Smkt Cap.	0.0027**	-0.0009	0.0037***	0.0000	-0.0014**	0.0014*
	(2.15)	(-1.20)	(3.76)	(0.00)	(-2.45)	(1.76)
GDP growth	0.0000	0.0001	-0.0001	0.0001	0.0001	0.0000
	(0.27)	(1.32)	(-0.88)	(0.83)	(0.97)	(0.24)
GGO	0.0023	0.0011	0.0013	0.0035**	0.0009	0.0025*
	(1.22)	(1.23)	(0.77)	(2.01)	(1.18)	(1.68)
Constant	-0.0905***	-0.0436***	-0.0468***	-0.0788***	-0.0294**	-0.0494***
	(-4.33)	(-2.81)	(-3.38)	(-4.59)	(-2.24)	(-4.43)
Observations	41,599	41,599	41,599	41,599	41,599	41,599
R-squared	0.030	0.015	0.023	0.032	0.013	0.025
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

Table 3. Regressions of Total Proceeds. Continued.

Panel B: Firm Characteristics (Voluntary and mandatory IFRS adopters)

	Dependent variable: Total Proceeds (% of assets)								
	Total Issues			Foreign Issues			Domestic Issues		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
IFRS	0.0075***	0.0074***	0.0068***	0.0034***	0.0028***	0.0029***	0.0041***	0.0046***	0.0039***
	(8.06)	(7.83)	(7.49)	(5.79)	(4.97)	(5.26)	(5.81)	(6.27)	(5.55)
IFRS * Need ext. fin.	0.0259**			0.0178***			0.0081		
	(2.54)			(2.83)			(1.01)		
Analysts_p25		-0.0017			-0.0013***			-0.0004	
		(-1.28)			(-3.54)			(-0.31)	
IFRS*Analysts_p25		-0.0003			0.0023**			-0.0026*	
		(-0.16)			(2.01)			(-1.68)	
Size_p25			-0.0053***			-0.0012			-0.0041***
			(-3.50)			(-1.45)			(-3.41)
IFRS*Size_p25			0.0064*			0.0042*			0.0022
			(1.95)			(1.77)			(0.96)
Log total assets	-0.0021***	-0.0022***	-0.0024***	-0.0007***	-0.0007***	-0.0007***	-0.0015***	-0.0015***	-0.0017***
	(-6.79)	(-6.66)	(-6.88)	(-3.47)	(-3.43)	(-3.51)	(-5.99)	(-5.86)	(-6.01)
Leverage	-0.0094***	-0.0096***	-0.0094***	-0.0023*	-0.0022*	-0.0022*	-0.0072***	-0.0073***	-0.0072***
	(-4.35)	(-4.40)	(-4.31)	(-1.90)	(-1.85)	(-1.83)	(-4.09)	(-4.18)	(-4.09)
ROE	-0.0116***	-0.0117***	-0.0117***	-0.0032***	-0.0031***	-0.0031***	-0.0085***	-0.0085***	-0.0086***
	(-6.95)	(-6.98)	(-7.02)	(-2.93)	(-2.93)	(-2.89)	(-6.75)	(-6.79)	(-6.88)
MTB	0.0011***	0.0011***	0.0011***	0.0004***	0.0004***	0.0004***	0.0007***	0.0007***	0.0007***
	(5.97)	(5.96)	(5.99)	(3.68)	(3.68)	(3.69)	(5.58)	(5.56)	(5.60)
Closely held	0.0027*	0.0027*	0.0025*	0.0002	0.0003	0.0002	0.0024**	0.0024**	0.0022*
	(1.87)	(1.86)	(1.72)	(0.32)	(0.34)	(0.30)	(2.03)	(2.01)	(1.86)
Foreign sales	0.0019	0.0019	0.0018	0.0001	0.0000	0.0001	0.0018	0.0018	0.0018
	(1.33)	(1.32)	(1.28)	(0.13)	(0.06)	(0.07)	(1.58)	(1.63)	(1.56)
ADR	0.0065***	0.0067***	0.0068***	0.0041***	0.0043***	0.0041***	0.0024*	0.0024*	0.0026*
	(3.47)	(3.56)	(3.59)	(3.36)	(3.46)	(3.34)	(1.75)	(1.79)	(1.94)
Capex	0.0064	0.0052	0.0052	0.0082*	0.0073	0.0078	-0.0018	-0.0021	-0.0025
	(0.97)	(0.78)	(0.79)	(1.69)	(1.50)	(1.60)	(-0.40)	(-0.48)	(-0.56)
Need ext. fin.	0.0032	0.0180***	0.0178***	-0.0029*	0.0073**	0.0070**	0.0061*	0.0107**	0.0108**
	(0.88)	(3.23)	(3.24)	(-1.79)	(2.12)	(2.11)	(1.92)	(2.45)	(2.46)
Log total analysts	0.0008**	0.0004	0.0007**	0.0006***	0.0006*	0.0006***	0.0001	-0.0002	0.0001
	(2.27)	(0.75)	(2.19)	(2.89)	(1.90)	(2.88)	(0.55)	(-0.56)	(0.45)
USGAAP	0.0034	0.0032	0.0034	0.0053**	0.0050**	0.0052**	-0.0019*	-0.0018*	-0.0019*
	(1.33)	(1.25)	(1.33)	(2.43)	(2.29)	(2.41)	(-1.85)	(-1.78)	(-1.82)
Crisis	-0.0025*	-0.0025*	-0.0024*	0.0014	0.0014	0.0014	-0.0039***	-0.0039***	-0.0039***
	(-1.75)	(-1.74)	(-1.70)	(1.50)	(1.47)	(1.54)	(-3.59)	(-3.54)	(-3.58)
Market return	-0.0026**	-0.0027**	-0.0027**	-0.0000	-0.0001	-0.0001	-0.0026***	-0.0026***	-0.0027***
	(-2.37)	(-2.46)	(-2.46)	(-0.04)	(-0.16)	(-0.08)	(-2.98)	(-3.03)	(-3.06)
Log GDP per capita	0.0112***	0.0109***	0.0108***	0.0050***	0.0048***	0.0048***	0.0061***	0.0061***	0.0060***
	(5.43)	(5.33)	(5.30)	(3.27)	(3.20)	(3.17)	(4.50)	(4.42)	(4.40)
Stock market cap.	0.0028**	0.0028**	0.0028**	-0.0009	-0.0009	-0.0009	0.0037***	0.0037***	0.0036***
	(2.22)	(2.18)	(2.21)	(-1.14)	(-1.16)	(-1.11)	(3.79)	(3.80)	(3.77)
GDP growth	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	-0.0001	-0.0001	-0.0001
	(0.26)	(0.22)	(0.23)	(1.31)	(1.22)	(1.30)	(-0.89)	(-0.84)	(-0.93)
GGO	0.0021	0.0024	0.0024	0.0009	0.0011	0.0010	0.0012	0.0013	0.0013
	(1.12)	(1.25)	(1.23)	(1.08)	(1.26)	(1.17)	(0.73)	(0.78)	(0.81)
Constant	-0.0947***	-0.0907***	-0.0880***	-0.0466***	-0.0442***	-0.0444***	-0.0482***	-0.0465***	-0.0436***
	(-4.48)	(-4.33)	(-4.19)	(-2.95)	(-2.83)	(-2.84)	(-3.46)	(-3.36)	(-3.14)
Observations	41,599	41,599	41,599	41,599	41,599	41,599	41,599	41,599	41,599
R-squared	0.031	0.030	0.031	0.016	0.015	0.015	0.023	0.023	0.023
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 3. Regressions of Total Proceeds. Continued.

Panel C: Mandatory IFRS adopters (excluding voluntary adopters)

	Dependent variable: Total Proceeds (% of assets)					
	Total Issues		Foreign Issues		Domestic Issues	
	(1)	(2)	(3)	(4)	(5)	(6)
IFRS	0.0084***	0.0071***	0.0034***	0.0027***	0.0049***	0.0043***
	(6.58)	(5.60)	(4.35)	(3.58)	(4.99)	(4.37)
Size_p25		-0.0063***		-0.0014		-0.0049***
		(-3.79)		(-1.52)		(-3.70)
IFRS*Size_p25		0.0174***		0.0097**		0.0077*
		(2.99)		(2.21)		(1.94)
Log total assets	-0.0027***	-0.0028***	-0.0009***	-0.0008***	-0.0019***	-0.0020***
	(-6.94)	(-6.74)	(-3.46)	(-3.31)	(-6.17)	(-5.96)
Leverage	-0.0091***	-0.0087***	-0.0020	-0.0018	-0.0071***	-0.0069***
	(-3.70)	(-3.54)	(-1.48)	(-1.30)	(-3.54)	(-3.46)
ROE	-0.0134***	-0.0133***	-0.0037***	-0.0035***	-0.0097***	-0.0098***
	(-7.20)	(-7.21)	(-3.08)	(-3.01)	(-6.93)	(-6.99)
MTB	0.0012***	0.0012***	0.0005***	0.0004***	0.0007***	0.0007***
	(5.60)	(5.59)	(3.45)	(3.42)	(5.27)	(5.27)
Closely held	0.0024	0.0022	-0.0006	-0.0006	0.0030**	0.0028**
	(1.44)	(1.31)	(-0.69)	(-0.72)	(2.13)	(1.98)
Foreign sales	0.0028*	0.0027	0.0006	0.0005	0.0022*	0.0022
	(1.66)	(1.61)	(0.57)	(0.52)	(1.66)	(1.64)
ADR	0.0083***	0.0085***	0.0043***	0.0043***	0.0040**	0.0042**
	(3.59)	(3.67)	(2.97)	(2.93)	(2.31)	(2.45)
Capex	0.0058	0.0063	0.0082	0.0088*	-0.0024	-0.0025
	(0.79)	(0.86)	(1.52)	(1.65)	(-0.48)	(-0.51)
Need ext. fin.	0.0201***	0.0190***	0.0086**	0.0078**	0.0115**	0.0111**
	(3.13)	(3.03)	(2.16)	(2.08)	(2.27)	(2.21)
Log total analysts	0.0008**	0.0007*	0.0006**	0.0006**	0.0002	0.0002
	(1.97)	(1.84)	(2.26)	(2.20)	(0.73)	(0.61)
USGAAP	0.0035	0.0037	0.0061**	0.0062**	-0.0026**	-0.0025**
	(1.10)	(1.16)	(2.19)	(2.22)	(-2.15)	(-2.05)
Crisis	-0.0020	-0.0020	0.0026**	0.0026**	-0.0045***	-0.0045***
	(-1.14)	(-1.14)	(2.29)	(2.29)	(-3.44)	(-3.43)
Mkt return	-0.0039***	-0.0040***	-0.0004	-0.0004	-0.0035***	-0.0035***
	(-3.07)	(-3.10)	(-0.63)	(-0.62)	(-3.38)	(-3.41)
Log GDP per capita	0.0110***	0.0110***	0.0046***	0.0047***	0.0064***	0.0063***
	(4.62)	(4.61)	(2.65)	(2.66)	(3.94)	(3.90)
Smkt Cap.	0.0021	0.0025	-0.0015	-0.0013	0.0037***	0.0038***
	(1.30)	(1.53)	(-1.52)	(-1.32)	(2.91)	(3.04)
GDP growth	0.0001	0.0001	0.0002*	0.0002*	-0.0001	-0.0001
	(0.64)	(0.57)	(1.90)	(1.86)	(-0.93)	(-1.00)
GGO	0.0044**	0.0042*	0.0019*	0.0018*	0.0025	0.0025
	(1.98)	(1.89)	(1.86)	(1.72)	(1.30)	(1.28)
Constant	-0.0924***	-0.0905***	-0.0429**	-0.0440**	-0.0495***	-0.0465***
	(-3.78)	(-3.68)	(-2.38)	(-2.43)	(-3.03)	(-2.82)
Observations	35,030	35,030	35,030	35,030	35,030	35,030
R-squared	0.033	0.034	0.016	0.017	0.025	0.025
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

Table 4. Probit regressions

The sample is comprised of firms from countries that adopted IFRS, or have committed to adopt IFRS and allow firms to report financial statements in accordance with IFRS. The time period ranges from 1991 to 2010. The dependent variable is an indicator variable that equals 1 if the firm issued equity in a given year (in the domestic or a foreign market, as labeled) and 0 otherwise. In models 1-3 of Panel A, IFRS equals 1 for years after the adoption (either mandatory or voluntary) of IFRS by a given firm. In models4-6 of Panel A we exclude voluntary IFRS adopters. In Panel B we present results for voluntary and mandatory IFRS adopters with interaction of IFRS and various firm-level characteristics: 1) need for external finance; 2) low analyst coverage-Analyst_p25, and 3) small firms- Small_p25. In Panel C we show results excluding voluntary adopters. All variables are defined in Appendix A. The independent variables are lagged one year (except for country-specific variables). The tables show marginal effects. All regressions include industry (2-digit SIC) and country fixed-effects. White-robust t-stats (absolute value) are shown in parentheses. *, **, *** stand for statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Mandatory and voluntary IFRS adopters

	Dependent variable: Equity Issue$_{it}$					
	Mandatory and voluntary adopters			Mandatory adopters only		
	Total Issues	Foreign Issues	Domestic Issues	Total Issues	Foreign Issues	Domestic Issues
	(1)	(2)	(3)	(4)	(5)	(6)
IFRS	0.0184***	0.0034*	0.0057**	0.0147***	-0.0002	0.0005
	(6.31)	(1.95)	(2.38)	(4.14)	(-0.12)	(0.16)
Log total assets	0.0042***	0.0030***	0.0031***	0.0036***	0.0031***	0.0025***
	(5.25)	(5.97)	(4.67)	(3.98)	(5.75)	(3.41)
Leverage	0.0241***	0.0126***	0.0113**	0.0288***	0.0142***	0.0144***
	(4.16)	(3.59)	(2.29)	(4.56)	(3.78)	(2.71)
ROE	-0.0203***	-0.0055***	-0.0147***	-0.0211***	-0.0052***	-0.0157***
	(-7.84)	(-3.25)	(-6.96)	(-7.63)	(-2.91)	(-7.09)
MTB	0.0013***	0.0007***	0.0010***	0.0012***	0.0007***	0.0008***
	(6.00)	(6.10)	(5.73)	(5.27)	(5.61)	(4.75)
Closely held	0.0006	0.0025	-0.0016	-0.0001	-0.0006	-0.0019
	(0.13)	(0.97)	(-0.46)	(-0.03)	(-0.21)	(-0.50)
Foreign sales	0.0050	0.0020	0.0033	0.0086***	0.0039*	0.0046*
	(1.63)	(1.03)	(1.26)	(2.58)	(1.91)	(1.65)
ADR	0.0219***	0.0120***	0.0159***	0.0275***	0.0135***	0.0218***
	(4.53)	(4.24)	(3.95)	(4.83)	(4.18)	(4.59)
Capex	0.0136	0.0123	-0.0025	0.0146	0.0127	-0.0023
	(0.89)	(1.34)	(-0.18)	(0.92)	(1.33)	(-0.16)
Need ext. fin.	0.0239***	0.0095*	0.0164***	0.0235***	0.0114**	0.0141**
	(3.25)	(1.87)	(2.63)	(2.93)	(2.13)	(2.10)
Log total analysts	0.0030***	0.0037***	0.0006	0.0018	0.0025***	-0.0004
	(2.73)	(5.20)	(0.69)	(1.43)	(3.30)	(-0.39)
USGAAP	0.0110	0.0101**	-0.0006	0.0178**	0.0149***	0.0024
	(1.50)	(2.25)	(-0.11)	(2.01)	(2.77)	(0.36)
Crisis	-0.0093***	0.0093***	-0.0222***	-0.0057	0.0161***	-0.0205***
	(-2.71)	(3.78)	(-8.20)	(-1.50)	(5.61)	(-6.88)
Mkt return	0.0031	-0.0008	-0.0091***	0.0025	-0.0000	-0.0100***
	(0.80)	(-0.36)	(-2.71)	(0.60)	(-0.02)	(-2.71)
Log GDP per capita	0.0386***	0.0069**	0.0427***	0.0384***	0.0045	0.0438***
	(7.06)	(2.20)	(8.57)	(6.50)	(1.37)	(8.25)
Smkt Cap.	0.0432***	0.0165***	0.0387***	0.0445***	0.0189***	0.0432***
	(10.30)	(6.89)	(10.88)	(8.88)	(6.86)	(9.95)
GDP growth	-0.0030***	-0.0011***	-0.0031***	-0.0029***	-0.0010***	-0.0031***
	(-4.84)	(-3.04)	(-5.57)	(-4.47)	(-2.61)	(-5.07)
GGO	-0.0338***	-0.0046	-0.0290***	-0.0364***	-0.0080**	-0.0361***
	(-5.73)	(-1.35)	(-5.79)	(-5.19)	(-2.02)	(-5.97)
Constant	41,500	41,379	41,242	34,948	34,668	34,614
	0.107	0.120	0.0929	0.112	0.129	0.0990
Observations	0.0522	0.0246	0.0375	0.0539	0.0250	0.0387
R-squared	41,500	41,379	41,242	34,948	34,668	34,614
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

Table 4. Probit regressions. Continued.

Panel B: Interactions with Firm Characteristics

	Dependent variable: Equity Issue$_{it}$								
	Total Issues			Foreign Issues			Domestic Issues		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
IFRS	0.0183***	0.0203***	0.0186***	0.0034*	0.0018	0.0029	0.0057**	0.0071***	0.0058**
	(6.28)	(6.64)	(6.26)	(1.94)	(1.04)	(1.64)	(2.37)	(2.81)	(2.37)
IFRS * Need ext. fin.	0.0082			0.0311***			0.0010		
	(0.54)			(3.21)			(0.08)		
Analysts_p25		-0.0005			-0.0109***			0.0003	
		(-0.13)			(-4.45)			(0.11)	
IFRS*Analysts_p25		-0.0085**			0.0189***			-0.0062*	
		(-2.11)			(3.88)			(-1.84)	
Size_p25			-0.0048			-0.0067*			-0.0053
			(-0.91)			(-1.80)			(-1.34)
IFRS*Size_p25			-0.0027			0.0147**			-0.0011
			(-0.39)			(1.99)			(-0.20)
Log total assets	0.0043***	0.0043***	0.0039***	0.0030***	0.0030***	0.0029***	0.0031***	0.0032***	0.0028***
	(5.26)	(5.29)	(4.66)	(6.07)	(6.27)	(5.67)	(4.66)	(4.68)	(3.99)
Leverage	0.0241***	0.0235***	0.0239***	0.0127***	0.0124***	0.0127***	0.0113**	0.0110**	0.0111**
	(4.16)	(4.05)	(4.12)	(3.62)	(3.65)	(3.64)	(2.29)	(2.22)	(2.25)
ROE	-0.0204***	-0.0206***	-0.0207***	-0.0055***	-0.0054***	-0.0055***	-0.0148***	-0.0149***	-0.0151***
	(-7.85)	(-7.95)	(-7.97)	(-3.26)	(-3.30)	(-3.25)	(-6.95)	(-7.03)	(-7.12)
MTB	0.0013***	0.0013***	0.0013***	0.0007***	0.0007***	0.0007***	0.0010***	0.0010***	0.0010***
	(5.99)	(5.98)	(6.05)	(6.00)	(6.06)	(6.11)	(5.73)	(5.72)	(5.78)
Closely held	0.0006	0.0006	0.0004	0.0026	0.0025	0.0025	-0.0016	-0.0016	-0.0018
	(0.14)	(0.14)	(0.10)	(1.01)	(1.01)	(0.97)	(-0.46)	(-0.47)	(-0.51)
Foreign sales	0.0050	0.0053*	0.0050	0.0020	0.0018	0.0019	0.0033	0.0034	0.0033
	(1.63)	(1.71)	(1.64)	(1.05)	(0.95)	(1.01)	(1.27)	(1.33)	(1.28)
ADR	0.0219***	0.0226***	0.0224***	0.0120***	0.0123***	0.0120***	0.0159***	0.0162***	0.0164***
	(4.53)	(4.62)	(4.61)	(4.22)	(4.43)	(4.25)	(3.96)	(4.00)	(4.06)
Capex	0.0137	0.0136	0.0128	0.0138	0.0110	0.0123	-0.0024	-0.0022	-0.0032
	(0.90)	(0.89)	(0.84)	(1.50)	(1.24)	(1.34)	(-0.18)	(-0.17)	(-0.24)
Need ext. fin.	0.0181	0.0243***	0.0248***	-0.0125	0.0090*	0.0089*	0.0157	0.0167***	0.0171***
	(1.37)	(3.30)	(3.36)	(-1.53)	(1.84)	(1.79)	(1.50)	(2.67)	(2.74)
Log total analysts	0.0030***	0.0018	0.0030***	0.0037***	0.0025***	0.0036***	0.0006	-0.0001	0.0006
	(2.73)	(1.35)	(2.72)	(5.17)	(3.07)	(5.14)	(0.69)	(-0.09)	(0.66)
USGAAP	0.0111	0.0117	0.0109	0.0103**	0.0091**	0.0103**	-0.0006	-0.0002	-0.0007
	(1.51)	(1.58)	(1.49)	(2.28)	(2.13)	(2.29)	(-0.11)	(-0.04)	(-0.12)
Crisis	-0.0093***	-0.0093***	-0.0093***	0.0092***	0.0088***	0.0093***	-0.0222***	-0.0222***	-0.0222***
	(-2.72)	(-2.70)	(-2.71)	(3.74)	(3.71)	(3.80)	(-8.21)	(-8.19)	(-8.20)
Mkt return	0.0031	0.0030	0.0030	-0.0008	-0.0009	-0.0008	-0.0091***	-0.0091***	-0.0092***
	(0.80)	(0.79)	(0.78)	(-0.36)	(-0.41)	(-0.35)	(-2.71)	(-2.71)	(-2.73)
Log GDP per capita	0.0388***	0.0387***	0.0385***	0.0071**	0.0070**	0.0068**	0.0427***	0.0427***	0.0425***
	(7.07)	(7.08)	(7.04)	(2.28)	(2.32)	(2.19)	(8.57)	(8.57)	(8.55)
Smkt Cap.	0.0433***	0.0430***	0.0430***	0.0166***	0.0161***	0.0165***	0.0388***	0.0386***	0.0385***
	(10.31)	(10.25)	(10.26)	(6.93)	(6.95)	(6.93)	(10.88)	(10.84)	(10.83)
GDP growth	-0.0030***	-0.0030***	-0.0030***	-0.0011***	-0.0011***	-0.0011***	-0.0031***	-0.0031***	-0.0031***
	(-4.84)	(-4.83)	(-4.84)	(-3.06)	(-3.12)	(-3.05)	(-5.57)	(-5.56)	(-5.58)
GGO	-0.0339***	-0.0335***	-0.0336***	-0.0049	-0.0044	-0.0047	-0.0290***	-0.0288***	-0.0289***
	(-5.74)	(-5.68)	(-5.71)	(-1.44)	(-1.31)	(-1.39)	(-5.78)	(-5.76)	(-5.77)
Observations	41,500	41,500	41,500	41,379	41,379	41,379	41,242	41,242	41,242
Pseudo R-squared	0.107	0.108	0.107	0.121	0.122	0.120	0.0929	0.0932	0.0931
Actual Prob.	0.0522	0.0522	0.0522	0.0246	0.0246	0.0246	0.0375	0.0375	0.0375
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 4. Probit regressions. Continued.

Panel C: Interactions with Firm Characteristics – Mandatory IFRS adopters (excluding voluntary adopters)

	Dependent variable: Equity Issue$_{it}$								
	Total Issues			Foreign Issues			Domestic Issues		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
IFRS	0.0146***	0.0163***	0.0140***	-0.0003	-0.0022	-0.0011	0.0004	0.0014	-0.0002
	(4.09)	(4.38)	(3.88)	(-0.17)	(-1.11)	(-0.52)	(0.14)	(0.46)	(-0.08)
IFRS * Need ext. fin.	0.0134			0.0389***			0.0041		
	(0.84)			(3.93)			(0.32)		
Analysts_p25		-0.0019			-0.0109***			-0.0014	
		(-0.51)			(-4.41)			(-0.47)	
IFRS*Analysts_p25		-0.0064			0.0217***			-0.0039	
		(-1.46)			(4.21)			(-1.07)	
Size_p25			-0.0055			-0.0065*			-0.0064
			(-1.01)			(-1.69)			(-1.60)
IFRS*Size_p25			0.0102			0.0280***			0.0105
			(1.19)			(2.94)			(1.43)
Log total assets	0.0036***	0.0036***	0.0035***	0.0032***	0.0032***	0.0032***	0.0025***	0.0026***	0.0024***
	(4.00)	(4.00)	(3.78)	(5.88)	(6.04)	(5.68)	(3.41)	(3.43)	(3.08)
Leverage	0.0288***	0.0283***	0.0290***	0.0144***	0.0141***	0.0146***	0.0144***	0.0141***	0.0145***
	(4.57)	(4.48)	(4.59)	(3.86)	(3.91)	(3.92)	(2.71)	(2.66)	(2.74)
ROE	-0.0213***	-0.0214***	-0.0212***	-0.0052***	-0.0051***	-0.0050***	-0.0158***	-0.0159***	-0.0159***
	(-7.66)	(-7.73)	(-7.63)	(-2.93)	(-2.91)	(-2.81)	(-7.10)	(-7.16)	(-7.14)
MTB	0.0012***	0.0012***	0.0012***	0.0007***	0.0006***	0.0007***	0.0008***	0.0008***	0.0008***
	(5.26)	(5.24)	(5.26)	(5.51)	(5.58)	(5.59)	(4.74)	(4.73)	(4.76)
Closely held	-0.0001	-0.0001	-0.0002	-0.0005	-0.0005	-0.0005	-0.0019	-0.0019	-0.0021
	(-0.02)	(-0.02)	(-0.05)	(-0.18)	(-0.18)	(-0.20)	(-0.50)	(-0.50)	(-0.54)
Foreign sales	0.0087***	0.0088***	0.0086**	0.0040*	0.0036*	0.0039*	0.0046*	0.0047*	0.0045
	(2.59)	(2.62)	(2.57)	(1.95)	(1.79)	(1.89)	(1.66)	(1.69)	(1.64)
ADR	0.0275***	0.0283***	0.0275***	0.0134***	0.0138***	0.0133***	0.0217***	0.0223***	0.0220***
	(4.82)	(4.92)	(4.84)	(4.16)	(4.36)	(4.16)	(4.59)	(4.66)	(4.64)
Capex	0.0149	0.0145	0.0146	0.0148	0.0111	0.0131	-0.0022	-0.0023	-0.0025
	(0.93)	(0.90)	(0.91)	(1.55)	(1.22)	(1.39)	(-0.16)	(-0.16)	(-0.18)
Need ext. fin.	0.0145	0.0240***	0.0230***	-0.0152*	0.0106**	0.0098*	0.0115	0.0144**	0.0137**
	(1.08)	(2.98)	(2.86)	(-1.87)	(2.08)	(1.88)	(1.10)	(2.14)	(2.04)
Log total analysts	0.0018	0.0005	0.0017	0.0025***	0.0014	0.0025***	-0.0004	-0.0012	-0.0004
	(1.43)	(0.34)	(1.40)	(3.26)	(1.59)	(3.26)	(-0.39)	(-1.01)	(-0.43)
USGAAP	0.0179**	0.0183**	0.0178**	0.0149***	0.0136***	0.0148***	0.0024	0.0026	0.0023
	(2.02)	(2.06)	(2.01)	(2.78)	(2.67)	(2.78)	(0.36)	(0.39)	(0.36)
Crisis	-0.0058	-0.0057	-0.0057	0.0159***	0.0154***	0.0160***	-0.0205***	-0.0205***	-0.0205***
	(-1.51)	(-1.50)	(-1.50)	(5.57)	(5.59)	(5.63)	(-6.89)	(-6.88)	(-6.89)
Mkt return	0.0026	0.0024	0.0025	-0.0000	-0.0001	-0.0000	-0.0100***	-0.0101***	-0.0100***
	(0.61)	(0.58)	(0.60)	(-0.01)	(-0.04)	(-0.01)	(-2.70)	(-2.72)	(-2.72)
Log GDP per capita	0.0386***	0.0385***	0.0383***	0.0049	0.0047	0.0044	0.0439***	0.0438***	0.0437***
	(6.52)	(6.53)	(6.50)	(1.49)	(1.49)	(1.37)	(8.25)	(8.26)	(8.25)
Smkt Cap.	0.0446***	0.0443***	0.0446***	0.0190***	0.0184***	0.0190***	0.0432***	0.0431***	0.0433***
	(8.90)	(8.84)	(8.91)	(6.91)	(6.96)	(6.96)	(9.96)	(9.92)	(9.98)
GDP growth	-0.0029***	-0.0029***	-0.0029***	-0.0010***	-0.0010***	-0.0009***	-0.0031***	-0.0031***	-0.0031***
	(-4.48)	(-4.46)	(-4.48)	(-2.63)	(-2.70)	(-2.62)	(-5.08)	(-5.07)	(-5.08)
GGO	-0.0366***	-0.0360***	-0.0365***	-0.0083**	-0.0078**	-0.0080**	-0.0361***	-0.0358***	-0.0362***
	(-5.22)	(-5.13)	(-5.21)	(-2.12)	(-2.06)	(-2.06)	(-5.98)	(-5.93)	(-5.99)
Observations	34,948	34,948	34,948	34,668	34,668	34,668	34,614	34,614	34,614
Pseudo R-squared	0.112	0.112	0.112	0.131	0.132	0.130	0.0991	0.0993	0.0993
Actual Prob.	0.0539	0.0539	0.0539	0.0250	0.0250	0.0250	0.0387	0.0387	0.0387
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 5. Cumulative Abnormal Returns

The sample is comprised of firms from countries that adopted IFRS, or have committed to adopt IFRS and allow firms to report financial statements in accordance with IFRS. The time period ranges from 1991 to 2010. The dependent variable is the cumulative abnormal return (-2, +2) or the buy-and-hold abnormal return (-2, +2), around the filing date of the equity issue. IFRS equals 1 for years after the adoption (either mandatory or voluntary) and zero otherwise. "Foreign" equals 1 if the issue is placed on a foreign market only or if the majority of the proceeds are raised in a foreign market, and zero otherwise. All variables are defined in **Appendix A**. The independent variables are lagged one year (except for country-specific variables). All regressions include industry (2-digit SIC) and country fixed-effects. White-robust t-stats (absolute value) are shown in parentheses. *, **, *** stand for statistical significance at the 10%, 5%, and 1% levels, respectively.

Dependent variable:	CAR (-2,+2)	BHCAR (-2,+2)
	(1)	(2)
IFRS	-0.0159	-0.0112
	(-1.55)	(-1.29)
Foreign	-0.0148	-0.0130
	(-1.60)	(-1.48)
IFRS*Foreign	0.0250**	0.0211*
	(1.98)	(1.86)
Log total assets	0.0004	0.0001
	(0.16)	(0.03)
Leverage	-0.0088	-0.0123
	(-0.38)	(-0.68)
ROE	-0.0064	-0.0052
	(-0.58)	(-0.49)
MTB	0.0011	0.0008
	(1.48)	(1.13)
Closely held	-0.0007	0.0012
	(-0.04)	(0.10)
Foreign sales	-0.0091	0.0004
	(-0.60)	(0.04)
ADR	0.0028	0.0026
	(0.33)	(0.32)
Capex	0.0139	0.0510
	(0.16)	(0.97)
Need ext. fin.	-0.0160	-0.0087
	(-0.59)	(-0.37)
Log total analysts	0.0012	-0.0002
	(0.22)	(-0.06)
USGAAP	0.0138	0.0184
	(1.01)	(1.47)
Time trend	0.0036	0.0019
	(0.90)	(0.70)
Crisis	-0.0433**	-0.0282**
	(-2.13)	(-2.30)
Mkt return	0.0183	0.0135
	(1.36)	(1.03)
Log GDP per capita	0.0029	0.0096
	(0.15)	(0.51)
Smkt Cap.	-0.0254	-0.0126
	(-1.27)	(-0.91)
GDP growth	-0.0018	-0.0009
	(-1.02)	(-0.65)
GGO	-0.0162	-0.0025
	(-0.69)	(-0.11)
Constant	-0.0021	-0.1035
	(-0.01)	(-0.53)
Observations	1,724	1,724
R-squared	0.045	0.050
Country fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes

Table 6. Robustness check – Regressions of total proceeds on a subsample of firms

The subsample used in these regressions is a subset of the main sample that includes firms that exist at least for 3 years before and 3 years after the IFRS adoption (either voluntary or mandatory). The main sample is comprised of firms from countries that adopted IFRS, or have committed to adopt IFRS and allow firms to report financial statements in accordance with IFRS. The time period ranges from 1991 to 2010. The dependent variable is the total proceeds by firm-year divided by total assets. Domestic issues are the fraction of shares issued in the domestic market and foreign issues are the fraction of shares issued in a foreign market. All variables are defined in **Appendix A.** The independent variables are lagged one year (except for country-specific variables). All regressions include industry (2-digit SIC) and country fixed-effects. White-robust t-stats (absolute value) are shown in parentheses. *, **, *** stand for statistical significance at the 10%, 5%, and 1% levels, respectively.

	Dependent variable: Total Proceeds (% of assets)		
	Total Issues	Foreign Issues	Domestic Issues
	(1)	(2)	(3)
IFRS	0.0086***	0.0042**	0.0085***
	(2.61)	(2.34)	(3.17)
Log total assets	-0.0017**	-0.0008*	-0.0009*
	(-2.54)	(-1.86)	(-1.95)
Leverage	-0.0212***	-0.0049**	-0.0055**
	(-4.68)	(-2.48)	(-2.51)
ROE	-0.0125***	-0.0003	-0.0005
	(-4.63)	(-0.24)	(-0.42)
MTB	0.0008***	0.0001*	0.0001*
	(3.03)	(1.75)	(1.75)
Closely held	0.0037	0.0016	0.0015
	(1.39)	(1.45)	(1.46)
Foreign sales	0.0035	0.0024	0.0027
	(1.12)	(1.12)	(1.23)
ADR	0.0098	0.0102*	0.0095
	(1.07)	(1.65)	(1.55)
Capex	-0.0031	-0.0029	-0.0040
	(-0.31)	(-0.71)	(-0.99)
Need ext. fin.	0.0177**	0.0039	0.0046
	(2.16)	(1.24)	(1.35)
Log total analysts	0.0005	0.0010**	0.0005
	(0.63)	(2.11)	(1.05)
USGAAP	-0.0041*	-0.0021**	-0.0017*
	(-1.91)	(-2.11)	(-1.81)
Crisis	0.0008	0.0065	0.0067
	(0.11)	(1.21)	(1.25)
Mkt return	-0.0113***	-0.0039*	-0.0038*
	(-3.19)	(-1.84)	(-1.81)
Log GDP per capita	0.0368***	0.0052	0.0053
	(4.56)	(1.07)	(1.05)
Smkt Cap.	-0.0068**	-0.0035*	-0.0033*
	(-2.01)	(-1.81)	(-1.72)
GDP growth	0.0005	0.0003	0.0003
	(1.25)	(1.28)	(1.25)
GGO	0.0042	-0.0009	-0.0014
	(1.26)	(-0.57)	(-0.84)
Constant	-0.3526***	-0.0396	-0.0372
	(-4.31)	(-0.79)	(-0.70)
Observations	9,762	9,762	9,762
R-squared	0.056	0.029	0.031
IFRS	0.0086***	0.0042**	0.0085***
	(2.61)	(2.34)	(3.17)
Log total assets	-0.0017**	-0.0008*	-0.0009*
	(-2.54)	(-1.86)	(-1.95)
Leverage	-0.0212***	-0.0049**	-0.0055**
Country fixed effects	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes

Table 7. European countries and capital raising activity after IFRS

The sample is comprised of firms from countries that adopted IFRS, or have committed to adopt IFRS and allow firms to report financial statements in accordance with IFRS. The time period ranges from 1991 to 2010. The dependent variable is the total proceeds by firm-year divided by total assets. Domestic issues are the fraction of shares issued in the domestic market and foreign issues are the fraction of shares issued in a foreign market. IFRS equals 1 for years after the adoption (either mandatory or voluntary) of IFRS by a given firm. All variables are defined in **Appendix A**. The independent variables are lagged one year (except for country-specific). All regressions include industry (2-digit SIC) and country fixed-effects. White-robust t-stats (absolute value) are shown in parentheses. *, **, *** stand for statistical significance at the 10%, 5%, and 1% levels, respectively.

	Dependent variable: Total Proceeds (% of assets)		
	Total Issues	Foreign Issues	Domestic Issues
	(1)	(2)	(3)
IFRS	0.0047***	0.0018***	0.0029***
	(3.64)	(2.68)	(2.74)
EU	-0.0019	-0.0010	-0.0009
	(-1.25)	(-1.18)	(-0.78)
IFRS * EU	0.0032**	0.0019**	0.0014
	(2.26)	(2.25)	(1.20)
Log total assets	-0.0022***	-0.0007***	-0.0015***
	(-6.81)	(-3.50)	(-6.01)
Leverage	-0.0095***	-0.0023*	-0.0072***
	(-4.37)	(-1.93)	(-4.09)
ROE	-0.0116***	-0.0031***	-0.0085***
	(-6.93)	(-2.92)	(-6.75)
MTB	0.0012***	0.0004***	0.0007***
	(6.01)	(3.71)	(5.60)
Closely held	0.0026*	0.0002	0.0024**
	(1.81)	(0.26)	(2.00)
Foreign sales	0.0018	0.0001	0.0018
	(1.28)	(0.08)	(1.55)
ADR	0.0065***	0.0041***	0.0024*
	(3.46)	(3.36)	(1.75)
Capex	0.0060	0.0078	-0.0019
	(0.89)	(1.60)	(-0.41)
Need ext. fin.	0.0179***	0.0073**	0.0106**
	(3.22)	(2.11)	(2.43)
Log total analysts	0.0007**	0.0006***	0.0001
	(2.18)	(2.83)	(0.50)
USGAAP	0.0031	0.0051**	-0.0020*
	(1.21)	(2.33)	(-1.96)
Crisis	-0.0023	0.0015	-0.0038***
	(-1.60)	(1.64)	(-3.51)
Mkt return	-0.0027**	-0.0001	-0.0026***
	(-2.45)	(-0.13)	(-3.02)
Log GDP per capita	0.0106***	0.0047***	0.0060***
	(5.27)	(3.11)	(4.42)
Smkt Cap.	0.0032***	-0.0006	0.0039***
	(2.58)	(-0.84)	(4.02)
GDP growth	0.0001	0.0001	-0.0001
	(0.39)	(1.42)	(-0.81)
GGO	0.0023	0.0010	0.0013
	(1.20)	(1.20)	(0.76)
Constant	-0.0888***	-0.0427***	-0.0461***
	(-4.27)	(-2.76)	(-3.35)
Observations	41,599	41,599	41,599
R-squared	0.030	0.015	0.023
Country fixed effects	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes

Appendix A. List of variables

- **ADR:** dummy variable that equals 1 if the firm is cross-listed in the U.S. in year t and zero otherwise. Sources: Citibank ADRs and data collected from the U.S. stock exchanges.
- **Analysts_p25:** indicator variable that equals one if the number of analysts following a firm is in the bottom 25th percentile of the distribution in its country and 0 otherwise.
- **Capex:** Capital expenditures (WorldScope item WC04601) divided by total assets.
- **Closely Held:** Closely-held shares divided by total shares outstanding; WorldScope item: WC08021.
- **Crisis:** dummy variable that identifies the recent financial crisis: it equals 1 from year 2007 on and zero otherwise.
- **EU:** Indicator variable that equals one if the country belongs to the European Union and 0 otherwise.
- **Financing deficit:** Following Frank and Goyal (2003), financing deficit is the sum of cash dividends (WC04551), investments, and net changes in working capital, less internal cash flows, scaled by total assets. As in Doidge et al. (2010), we compute investments as the sum of capital expenditures (WC04601), additions to other assets (WC04651), net assets from acquisitions (WC04355), increase in investments (WC04760), other uses for investing (WC04795), less disposal of fixed assets (WC04351). Net changes in working capital equals increases in cash and short-term investments (WC04851), less funds from operating activities (WC04831), less increase in short-term borrowings (WC04821). Finally, internal cash flows include net income (WC04001), depreciation (WC01151), deferred tax assets (WC03263), extraordinary items (WC04225), other cash flows (WC04151), effects of exchange rate on cash, and other sources of financing (WC04446).
- **Foreign sales:** Amount of international sales (WorldScope item WC07101) divided by total sales.
- **GDP per capita:** GDP per capita in US$ reflecting 2000 constant prices. Source: World Bank WDI Database.
- **GDP growth:** Annual GDP growth (%). Source: World Bank WDI Database.
- **GGO:** A measure of a country's exogenous growth opportunities following Bekaert et al. (2007). It is the log of the inner product of the vector of global industry PE ratios and the vector of country-specific industry weights. Source: DataStream.
- **Industry:** 2-digit SIC code for major segment (DataStream - SIC code 1).
- **IFRS:** Indicator variable that equals 1 for years after the adoption of IFRS and 0 otherwise (we identify whenever we include or exclude voluntary adopters in the analysis).
- **Leverage:** Total debt in US$ 000 (WC03255) divided by total assets in US$ 000 (WC02999). Source: WorldScope.
- **Market return:** Annual return on the domestic market. Source: DataStream.
- **MTB:** Market-to-book (item MTBV). Source: DataStream.
- **Need ext. fin.:** need for external equity financing as in Rajan and Zingales (1998): (capital expenditures – cash flow from operations)/ capital expenditures, where cash flow from operation = net income before extraordinary items - Accruals. Accruals: (Change in current assets – change in cash) – (change in current liabilities – change in short-term debt) – depreciation. The ratio is scaled by 100.
- **ROE:** Return on equity (item WC08301). Source: WorldScope.
- **Sales Growth:** Percent change in sales from year t-1 to t.

Appendix A. List of variables. Continued.

- **Size_p25:** Indicator variable that equals one if a firm's total assets are in the bottom 25th percentile of the distribution in its country and 0 otherwise.
- **Stmkt Cap.:** Country-level variable that measures the stock market capitalization to the GDP. Source: Beck and Demirgüç-Kunt (2009).
- **Time trend:** Equals the value year *t* minus 1990.
- **Total Analysts:** Total number of analysts following a firm by year. Source: I/B/E/S.
- **Total Assets:** Total assets (in US$ 000, reflecting 2010 prices). WorldScope item WC02999.
- **Total Proceeds (domestic, foreign, and total):** total proceeds from equity raisings by firm-year (in million US$, reflecting 2010 prices). "Domestic" refers to the fraction of shares issued in the domestic market and "Foreign" refers to the fraction of shares issued in foreign markets. Source: SDC Thomson Financial.
- **USGAAP:** Indicator variable that equals 1 if the firm's accounting standards follow the U.S. GAAP in a given year, and zero otherwise (item WC07536). Source: WorldScope.
- **Voluntary adopters:** Firms that adopt IFRS rules prior to the year of mandatory adoption in their country. These firms are identified as in Daske et al. (2011) using the WorldScope definition of "Accounting Standards Followed" (WC07536).

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